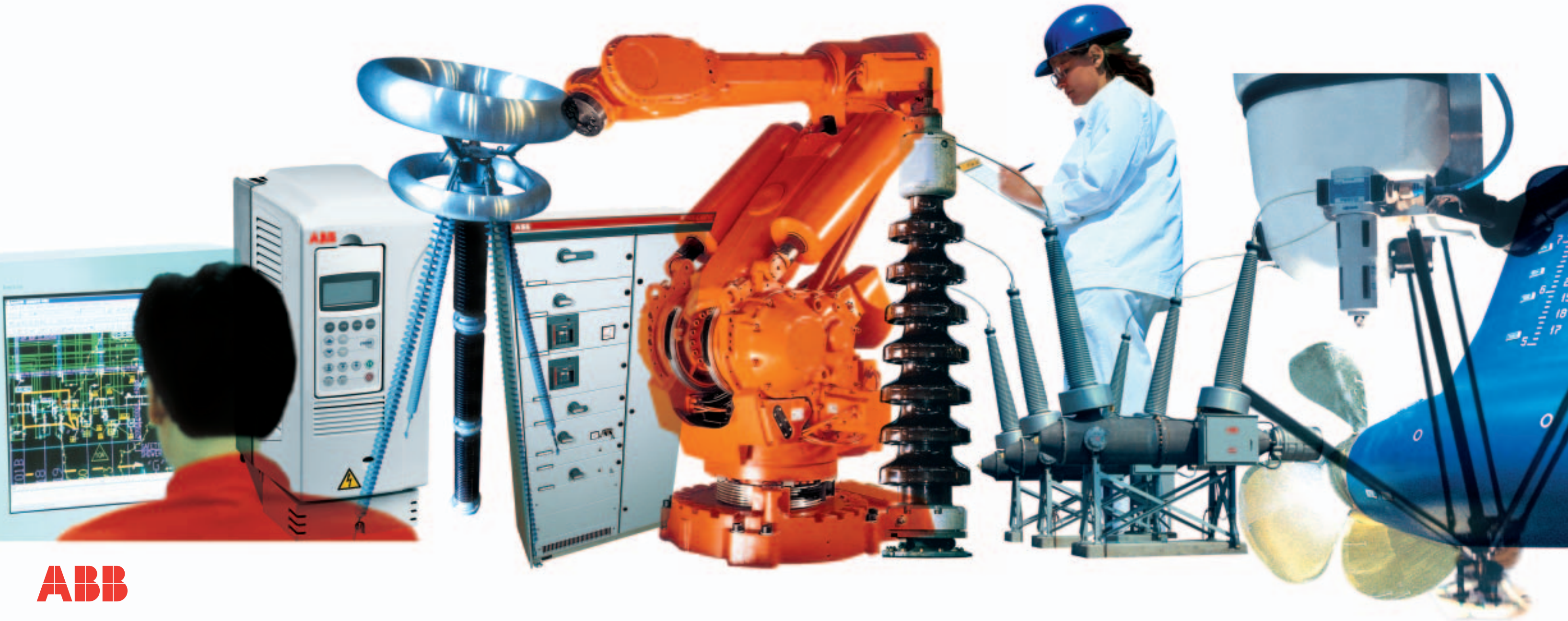


India

Asea Brown Boveri Limited

Annual Report 2001



ABB

Asea Brown Boveri Limited
Registered Office:
Plot No. 22-A, Shah Industrial Estate,
1st Floor, Off Veera Desai Road,
Andheri (West),
Mumbai 400 053
Tel: 022-6394254, 6394256
Fax: 022-6394255

Asea Brown Boveri Limited
Corporate Office:
Khanija Bhavan, 2nd Floor,
49, Race Course Road,
Bangalore 560 001
Tel: 080-2254546, 2250295
Fax: 080-2281103

www.abb.com/in

ABB

Contents

1	Board of Directors and Other Information
2	Five Year Highlights
12	Notice to Members
20	Directors' Report
40	Management's Discussion and Analysis
45	Auditors' Report
48	Balance Sheet, Profit and Loss Account and Schedules
59	Notes to the Accounts
71	Cash Flow Statement

Asea Brown Boveri Limited Report and Accounts – 2001

Board of Directors

K.N. Shenoy, Chairman
Ravi Uppal, Managing Director
Vijay Karan
Eric Drewery
A. Ramamurthy
K.K. Kaura
Peter Smits
N.S. Raghavan
Nasser Munjee
Dinesh Paliwal

Company Secretary

Aashay S. Khandwala

Corporate Management Committee

Ravi Uppal
I.K. Sadhu
Amresh Dhawan
Biplab Majumder
Bazmi Husain
V. Swamy
R.N. Baxi
K. Rajagopal
P.C. Rajiv

Bankers

ABN Amro Bank N.V.
Bank of Baroda
Canara Bank
Central Bank of India
Deutsche Bank
Hongkong & Shanghai Banking Corporation Limited
ICICI Bank Limited
Indian Overseas Bank
Punjab National Bank
Standard Chartered Bank
Standard Chartered Grindlays Bank Limited
Union Bank of India

Solicitors

Crawford Bayley & Co.

Auditors

Bharat S Raut & Co.

Registered Office

Plot No. 22-A, Shah Industrial Estate, 1st Floor
Off Veera Desai Road
Andheri (West)
Mumbai – 400 053

Corporate Office

Khanija Bhavan
2nd Floor, 49, Race Course Road
Bangalore – 560 001

Registrar & Share Transfer Agent

Tata Consultancy Services
Lotus House
6, New Marine Lines
Sir Vithaldas Thackersey Marg
Mumbai – 400 020

5 Year Highlights

	(Rs in Millions)				
Description	2001	2000	1999	1998	1997
Sources of Funds					
Share Capital	498.8	414.2	414.2	414.2	414.2
* Reserves	3,805.4	3,478.4	3,192.2	4,099.0	3,949.5
* Net Worth	4,304.2	3,892.6	3,606.4	4,513.2	4,363.7
Borrowings	108.8	165.6	416.3	175.0	456.7
* Funds Employed	4,413.0	4,058.2	4,022.7	4,688.2	4,820.4
Income and Profits					
Sales & Other Income	10,557.6	8,068.5	7,933.5	8,934.1	10,841.6
Operating Profit Before Interest and Depreciation	1,105.9	911.8	751.2	764.9	1,131.3
Profit Before Tax	850.8	705.1	532.0	492.3	863.5
Tax	197.5	165.0	160.0	115.0	215.0
Profit After Tax	653.3	540.1	372.0	377.3	648.5
Dividend / Dividend Tax	228.2	253.9	231.9	227.8	227.8
Retained Earnings	425.1	286.2	140.1	149.5	420.7
Other Data					
* Gross Fixed Assets	2,747.9	2,442.3	2,253.5	2,771.3	2,599.4
* Debt Equity Ratio	0.03:1	0.04:1	0.12:1	0.04:1	0.10:1
* Net Worth Per Equity Share - Rs	99.8	94.0	87.1	109.0	105.4
Earnings Per Equity Share - Rs	15.5	13.0	9.0	9.1	15.7
Dividend Per Equity Share - Rs	5.0	5.0	5.0	5.0	5.0
* Profit After Taxes as % to Average Net Worth	15.9	14.4	9.2	8.5	15.6

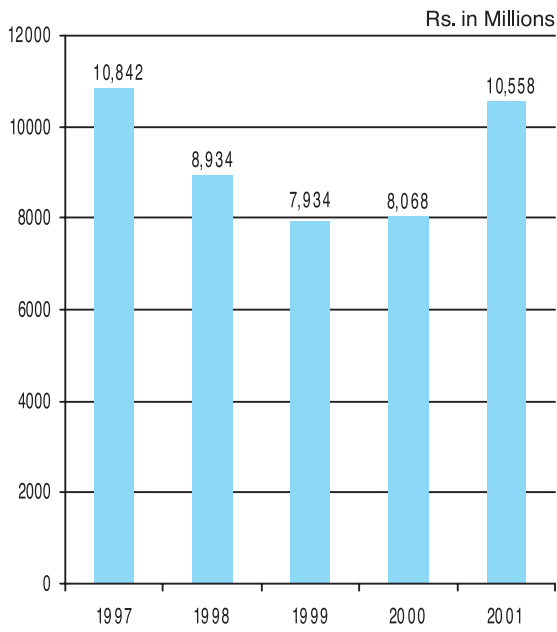
* Excludes revaluation of fixed assets/revaluation reserve

Note :

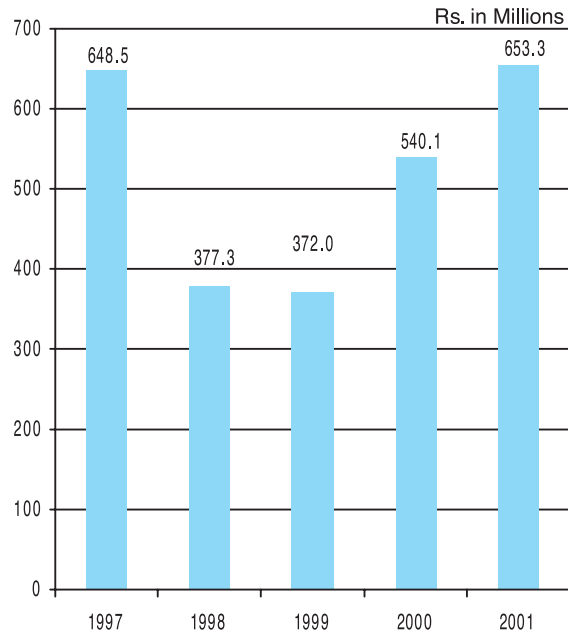
Above highlights includes figures till 31 March, 1999 of the demerged Power Generation business and four entities merged with the Company from 1 April, 2001.

5 Year Highlights

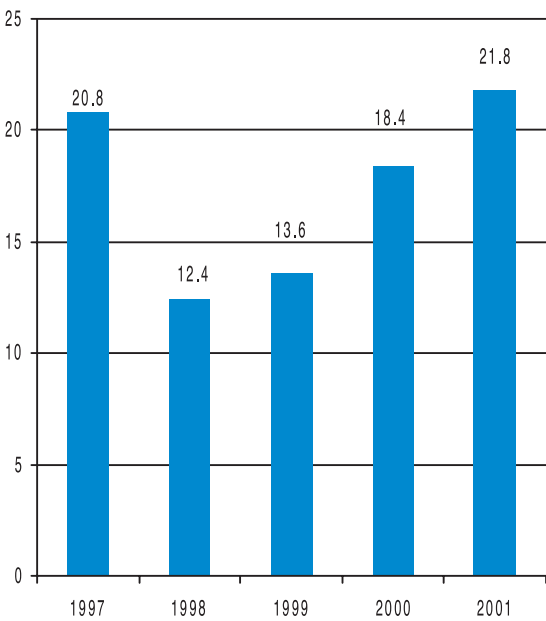
Revenues



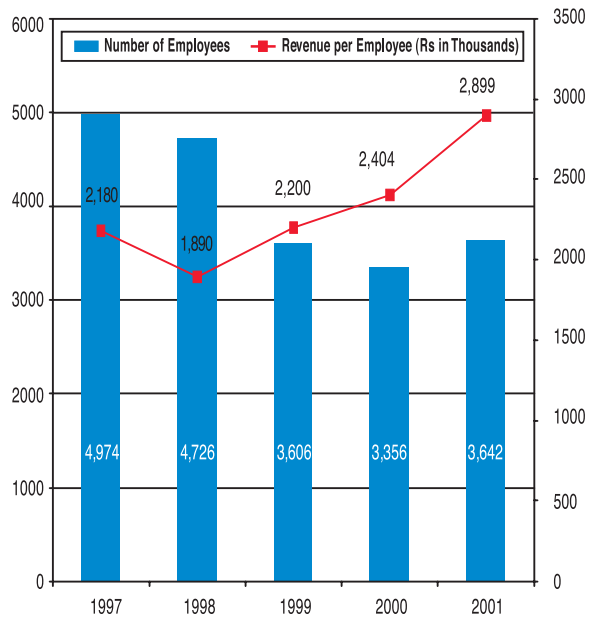
Profit After Tax



Return on Capital Employed (%)



Employees & Productivity



Note:

Above highlights includes figures till 31 March, 1999 of the demerged Power Generation business and four entities merged with the Company from 1 April, 2001.

About ABB

ABB is a global leader in power and automation technologies that enable utility and industry customers to improve performance while lowering environmental impact. ABB is present in more than 100 countries. We rank number one, two or three in almost all of our activities.

We are organized from the outside in to make sure our customers have quick and easy access to everything they need, where and when they need it – whether they buy from us directly or through distributors, wholesalers, system integrators or other partners.

ABB is moving all its offerings to a common systems integration architecture, to deliver Industrial IT-enabled products and services. Industrial IT allows our customers to optimize their operations and link up in real time with their suppliers and customers. The result is a leap in efficiency, quality and competitiveness.



Global Strengths, Local Roots

Managing for value

ABB's vision is to be 'The Value Creator'. Working closely with our customers, understanding their business needs and local market conditions, we are committed to ensuring their success through innovative products, systems, services and complete solutions, combining world class technologies, proven expertise and strong local insight. By ensuring our customers' success we in turn, create value for all our stakeholders i.e. shareholders, employees and the communities in which we operate.

Putting customers at the core of our company

Everybody knows the power of being close to customers. It makes us understand them better, see their needs clearer. It enables us to serve them better and create more value.

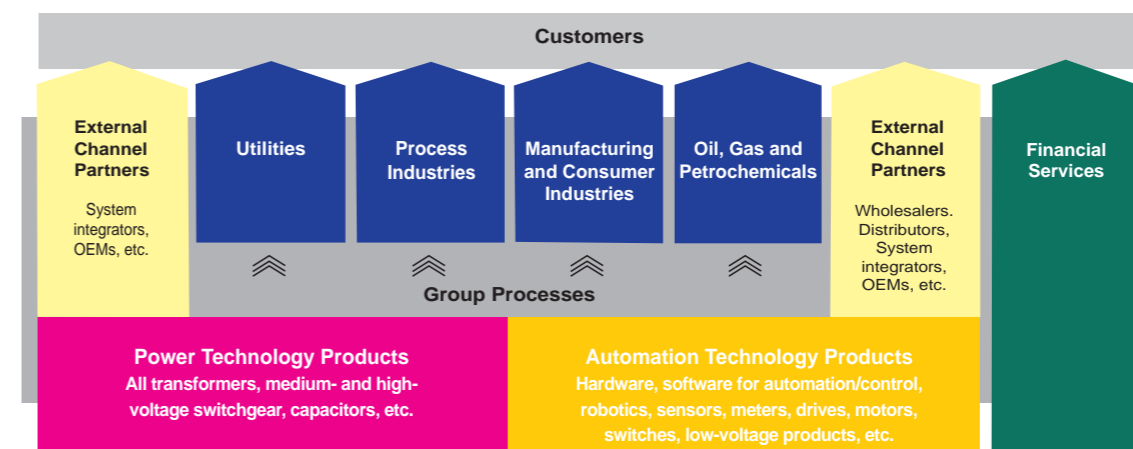
But few, if any, have made this well-known fact the core organizing principle for their companies. We at ABB believe we are the first in our industry

to take this step, transforming our enterprise around our main customer groups :

- Power, gas and water utilities
- Process Industries, like pulp and paper, metal and mining, chemicals and pharmaceuticals
- Manufacturing and consumer industries, like car makers, food and beverage companies
- Oil, gas and petrochemicals
- Channel partners, such as wholesalers, distributors, original equipment manufacturers and system integrators

This realignment makes it easier for customers to find and meet the right people in ABB. It makes it easier, faster and more efficient for them to tap into ABB's domain expertise and spectrum of offering.

By purposefully cutting away most of the need for coordination among product-based business units, the new organization creates an environment in which our people's energies flow naturally into meeting the needs of their customers, delivering more value faster, making them (and us) more competitive.





Serving Utilities and Industry



Creating value for customers

The challenge for our customers in today's fast changing, globalised and networked world is not only how to keep pace with advances in technology and the speed of information, but how to leverage those advances to become more competitive. This is where we create value for them. We combine our knowledge of their industry and their business processes – with world class products, systems and services. This domain competence has been gained through years of experience in every industry and all parts of the world.

ABB in India serves customers across the complete offering spectrum of the Group.



Utilities

Transmission equipment manufactured and supplied by the company over the past several decades has formed an integral part of the power systems spread across the country. ABB's solutions facilitate the flow of electrical power from generating stations, transmitted through cross-country power lines. ABB's distribution systems further help to bring electric power from high-voltage substations to end users. ABB delivers complete solutions and plays a key role in electrification and energy projects - both new and retrofit - for urban and rural utilities as well as industrial and commercial customers.

ABB has pioneered several technologies in India including the introduction of self blast SF6 technology, first HVDC back-to-back converter station, first SVC, first HVDC transmission line, first 400 kV switchyard, India's first IPP, turnkey substation for the first barge mounted IPP and many more.

ABB in India has delivered turnkey substation solutions upto 400 KV for central & state power utilities across the country and beyond. ABB offers a complete range of utility automation systems including substation automation, SCADA, C&I for power plants, communication systems (PLCC, fibre optics etc.) and power systems. We also offer global technologies for HVDC, HVDC light, AC Systems, RPC and SVC solutions.

The entire offering is supported by a strong countrywide after sales & service network.

Process Industries

In today's globally interconnected market place, improved efficiency is the key to competitiveness.

ABB helps its customers to become more competitive by enabling seamless integration of management and manufacturing processes in real time, making them more efficient, improving safety, minimising waste and reducing emissions.

ABB offers complete solutions, fully integrating industrial processes that are backed by world-class platforms. The offering includes complete electricals, process control & automation and a broad range of software applications.

With its single source capability, ABB provides a complete range of products, systems and services to industries as diverse as pulp and paper, metals, mining, cement, chemicals, petrochemicals and refineries to name a few.

ABB has also been a major supplier of turbochargers to the locomotive, power and marine sectors in India.

We are committed to harnessing the power of information technology, internet and eCommerce to deliver solutions faster and more effectively, as we move together into the knowledge based economies of the future.

Manufacturing and Consumer Industries

ABB offers products, solutions and services for manufacturing and consumer industries to improve productivity and competitiveness in sectors like automotive, telecom, consumer goods, electronics, airports etc. We offer turnkey solutions in terms of design, supply, installation, commissioning and service support for a wide range of infrastructure, industrial and commercial applications.

ABB's flexible automation systems incorporate the latest in precision, cutting and welding technologies through advanced robotics, offering an improved working environment, higher productivity, flexibility in production processes as well as consistent and superior quality.

Oil, Gas and Petrochemicals

The Oil, Gas and petrochemical sector, both upstream and downstream, is served through ABB Lummus, backed by global resources with a wealth of expertise and experience in exploration, extraction and refining.

ABB is a proven technology leader with strong project management capabilities and world class products, systems and service support.

As part of the overall value proposition, ABB offers financial solutions supported by a comprehensive range of services.



Automation and Power Technologies

Automation Technology Products

With its hub in Bangalore and manufacturing presence across the country ABB in India provides automation and optimisation technologies for discrete, process & batch manufacturing operations and business related aspects. Our time tested and state of the art automation products are installed across the entire spectrum of Indian industry.

The offering includes process analytics, PLCs, motors and machines, drives, power electronics, metering, robotics, instrumentation, control systems, transducers, distribution & protection relays and the complete range of low-voltage products. Using the industrial IT framework these products and solutions help enhance our customers' competitiveness in today's collaborative and networked business environment.

These products are served to customers through end user divisions, channel partner (OEMs, system integrators & business associates) and electronically over the internet.

Power Technology Products

With its hub at Vadodara and extensive state-of-the-art manufacturing facilities spread across the country, ABB in India offers the entire spectrum of power technology products and services for the transmission and distribution sectors as well as industry. This includes a complete range of HV & MV switchgear, live tank breakers, instrument transformers, disconnectors, capacitors, power & traction transformers, network & protection control and other substation equipment supported by a focused after sales and service network.

The increased use of information technology, including online product configurators, enables ABB Power Technology Products to deliver best-in-class performance & efficiency. India continues to develop its presence within the ABB group as a global sourcing base for HV and MV equipment.

Corporate Management Committee



Ravi Uppal
Managing Director



I.K. Sadhu
Utilities Division



Amresh Dhawan
*Power Technology Products
Division*



Bazmi Husain
*Automation Technology
Products Division*



Biplab Majumder
Process Industries Division



V. Swamy
*Manufacturing & Consumer
Industries Division*



R.N. Baxi
Group Service Centre



K. Rajagopal
Finance



P.C. Rajiv
Human Resources

Sustainability



As part of its mission, ABB creates value for the communities and countries it operates in, by *living* its commitment to sustainability. This is done in many ways - by supplying eco-efficient products and systems, abiding by environmental laws and regulations, contributing to social development efforts and by continuously improving the company's own sustainability performance.

Environmental Initiatives

The Instrumentation works at Faridabad obtained ISO14001 certification in 2001. The Analytical operations at Faridabad and the Service operation in Mumbai, two of the recently amalgamated group companies are in an advanced implementation stage and shall be certified in early 2002. All other units of ABB are now ISO 14001 certified.

The Company has put in place, a system for controlling and monitoring pollutants at its factories, which has resulted in all units complying with environmental standards and legislation.

With the help of various environmental management programmes initiated, the consumption of natural resources such as energy, water and paper has been reduced and ozone depleting substances have either been eliminated or reduced. During the year many improvement projects were undertaken including effluent treatment and incinerator plants, exhaust systems with scrubber and safe storage facilities for hazardous waste management. Regular training and awareness programs were organized on environment compliance and protection, ISO 14001 and environment laws and regulations.

Other Key Sustainability Initiatives and Achievements

- Immediate relief through corporate and employee initiatives to earthquake hit Gujarat followed up with power infrastructure rebuilding assistance (e.g. Anjar substation rehabilitation)
- ABB was rated amongst the top 10 "Greenest Corporates in India" in an independent survey conducted by Business Today and Tata Energy Research Institute (TERI)

- ABB sponsored the Quality Centre at Bangalore promoted by CII (Confederation of Indian Industry) inaugurated by the Union Power Minister to promote the long term competitiveness of industry.
- ABB co-sponsored an international seminar "Corporate Citizenship – Meeting the Challenges" organised by the Center of Social Markets (CSM) in Kolkata where ABB's global Head of Sustainability Affairs made a presentation on ABB's approach and implementation of sustainability initiatives. This was extremely well received by the participants, media and the business community.
- The company also participated in other community development projects such as adoption of needy schools, training and development of women, healthcare and mobile clinics in areas surrounding ABB's major facilities.
- In keeping with the Group philosophy and to ensure a holistic approach to sustainability, a Country Sustainability Controller was appointed to coordinate ABB's sustainability initiatives across the country.



Notice to Members

NOTICE is hereby given that the FIFTY-SECOND ANNUAL GENERAL MEETING of the Members of **Asea Brown Boveri Limited** will be held at Patkar Hall, S.N.D.T. Women's University, 1, Nathibai Thackersey Road, Mumbai 400 020 on Wednesday, the **24 April, 2002 at 3.00 p.m. (IST)** to transact the following business: -

1. To consider and adopt the Balance Sheet as at 31 December, 2001 and the Profit and Loss Account for the year ended on that date and Reports of the Directors and the Auditors thereon.
2. To declare dividend on equity shares.
3. To appoint a Director in place of Mr. Vijay Karan who retires by rotation and being eligible, offers himself for re-appointment.
4. To appoint M/s. Bharat S Raut & Co., Chartered Accountants, as Auditors of the Company, to hold office from the conclusion of this Annual General Meeting until the conclusion of next Annual General Meeting and to fix their remuneration.

Special Business

5. To consider and if thought fit, to pass, with or without modification(s), the following resolution as an Ordinary Resolution:

“Resolved that Mr. Peter Smits who was appointed as Director of the Company by the Board of Directors, pursuant to Article 151 of the Articles of Association of the Company, to fill in the casual vacancy on the Board, caused by the resignation of Mr. Sune Karlsson and who holds office up to the date of the ensuing Annual General Meeting, pursuant to Section 262 of the Companies Act, 1956 and in respect of whom the Company has received a notice in writing from a member proposing his candidature for the office of Director, be and is hereby appointed as a Director of the Company, liable to retire by rotation.”

6. To consider and if thought fit, to pass, with or without modification(s), the following resolution as an Ordinary Resolution:

“Resolved that Mr. N.S. Raghavan, who was appointed as an Additional Director by the

Board of Directors of the Company, pursuant to Article 152 of the Articles of Association of the Company and who holds office upto the date of the ensuing Annual General Meeting under Section 260 of the Companies Act, 1956, and in respect of whom the Company has received a notice in writing from a member proposing his candidature for the office of Director, be and is hereby appointed as a Director of the Company, liable to retire by rotation.”

7. To consider and if thought fit, to pass, with or without modification(s), the following resolution as an Ordinary Resolution:

“Resolved that Mr. Dinesh Paliwal, who was appointed as an Additional Director by the Board of Directors of the Company, pursuant to Article 152 of the Articles of Association of the Company and who holds office up to the date of the ensuing Annual General Meeting under Section 260 of the Companies Act, 1956, and in respect of whom the Company has received a notice in writing from a member proposing his candidature for the office of Director, be and is hereby appointed as a Director of the Company, liable to retire by rotation.”

8. To consider and if thought fit, to pass, with or without modification(s), the following resolution as an Ordinary Resolution:

“Resolved that Mr. Nasser Munjee, who was appointed as an Additional Director by the Board of Directors of the Company, pursuant to Article 152 of the Articles of Association of the Company and who holds office up to the date of the ensuing Annual General Meeting under Section 260 of the Companies Act, 1956, and in respect of whom the Company has received a notice in writing from a member proposing his candidature for the office of Director, be and is hereby appointed as a Director of the Company, liable to retire by rotation.”

9. To consider and if thought fit, to pass, with or without modification(s), the following resolution as an Ordinary Resolution:

“Resolved that Mr. Ravi Uppal, who was appointed as an Additional Director by the Board of Directors of the Company pursuant

to Article 152 of the Articles of Association of the Company and Section 260 of the Companies Act, 1956, and in respect of whom the Company has received a notice in writing from a member proposing his candidature for the office of Director, be and is hereby appointed as a Director of the Company”.

“Resolved further that pursuant to provisions of Sections 198, 269 and 309 and other applicable provisions, if any, of the Companies Act, 1956, read with Schedule XIII to the Companies Act, 1956, as amended up to date, consent of the Company, be and is hereby accorded to the appointment and payment of remuneration to Mr. Ravi Uppal as Managing Director of the Company, for a period of five years with effect from 1 October, 2001 to 30 September, 2006, on the terms and conditions as set out in the draft Agreement to be entered into between the Company and Mr. Ravi Uppal, a copy whereof initialed by the Chairman for the purpose of identification has been placed before the Meeting, which Agreement is hereby specifically approved with liberty to the Board of Directors to alter, vary and modify the terms and conditions of the said appointment and remuneration in such manner as may be agreed upon by the Board of Directors and Mr. Ravi Uppal and in accordance with the limits prescribed under Schedule XIII to the Companies Act, 1956 or any statutory amendment(s) and modification(s) thereto.”

“Resolved further that subject to the provisions of Sections 198, 309 and other applicable provisions, if any, of the Companies Act, 1956, remuneration payable to Mr. Ravi Uppal as Managing Director by way of salary, perquisites, commission and other allowances, shall not exceed 5% of the net profits of the Company and if there are more than one such director, 10% for all of them together in that financial year.”

“Resolved further that in the event of any loss or inadequacy of profits in any financial year of the Company during the tenure of Mr. Ravi Uppal as Managing Director of the Company, the remuneration, perquisites and

other allowances shall be governed by the limits prescribed in Section II of Part II of Schedule XIII to the Companies Act, 1956, as amended from time to time.”

“Resolved further that for the purpose of giving effect to this resolution, the Board of Directors of the Company, be and is hereby authorised to do all such acts, deeds, matters or things and they may take such steps necessary, expedient or desirable in the best interest of the Company.”

10. To consider and if thought fit, to pass with or without modification(s), the following resolution as a Special Resolution:

“Resolved that pursuant to Article 154A of the Articles of Association of the Company and provisions of Section 309(4) and other applicable provisions, if any, of the Companies Act, 1956, the consent of the Company, be and is hereby accorded to payment of remuneration by way of Commission, not exceeding 1% per annum of the net profits of the Company computed in the manner as laid down in the Act, for a period of five (5) financial years commencing from 1 January, 2002 to 31 December, 2006, to the Non - Executive Directors of the Company, (i.e. excluding the Managing Director or Whole Time Director, if any) in such manner and proportion as may be decided by the Board from time to time”.

By Order of the Board
For Asea Brown Boveri Limited

Aashay S. Khandwala
Assistant Vice President
& Company Secretary

Mumbai
20 February, 2002

Registered Office:
Plot No.22A,
Shah Industrial Estate, 1st Floor,
Off Veera Desai Road,
Andheri (West),
Mumbai 400 053

Notes:

1. The relative Explanatory Statement pursuant to Section 173(2) of the Companies Act, 1956, in respect of business under item Nos.5 to10 is annexed hereto.
2. A MEMBER ENTITLED TO ATTEND AND VOTE AT THE MEETING IS ENTITLED TO APPOINT ONE OR MORE PROXY TO ATTEND AND ON A POLL VOTE INSTEAD OF HIMSELF AND A PROXY NEED NOT BE A MEMBER.
3. The Register of Members and the Share Transfer Books of the Company will remain closed from **Wednesday, the 10 April, 2002 to Wednesday, the 24 April, 2002 (both days inclusive)** for the purpose of payment of dividend.
4. The dividend, as recommended by the Board, if sanctioned at the Annual General Meeting will be paid on or after Friday, the 26 April, 2002 to those members or their mandates whose names stand registered on the Company's Register of Members:-
 - a) as Beneficial Owners as at the end of business on Tuesday, the 9 April, 2002 as per the list to be furnished by National Securities Depository Ltd. (NSDL) and Central Depository Services (India) Ltd. (CDSL) in respect of shares held in demat form.
 - b) as Members in the Register of Members of the Company after giving effect to valid share transfers lodged with the Company, on or before Tuesday, the 9 April, 2002.
5. Pursuant to the provisions of Section 205A of the Companies Act, 1956, as amended, dividends for any financial year which remain unclaimed for a period of 7 years will be transferred to '*Investor Education and Protection Fund*' of the Central Government. Members, who have not yet encashed the dividend warrant(s), for the financial year ended 31st December, 1995 or any subsequent financial years are requested to forward their claims to the Company's Registrar and Share Transfer Agent.

It may be noted that once the unclaimed dividend is transferred to the Government, as above, no claim shall lie in respect of such amount.

6. Members are requested to intimate, indicating their folio number, *the changes, if any, of their registered addresses* to the Company or its Registrar and Share Transfer Agent, viz. **M/s. Tata Consultancy Services (Unit: Asea Brown Boveri Limited), Lotus House, Sir Vithaldas Thackersey Marg, Mumbai 400 020** or to their respective Depository Participant (DP) in case the shares are held in demat form.
7. As mandated by SEBI, the Company will be providing ECS facility to the shareholders whereby they will be able to receive their dividend by direct electronic credit to their bank account. In absence of availing of this option by the shareholders, the Company shall send warrants for disbursing dividend. Shareholders are requested to fill in the form provided alongwith the annual report and send it to the Company's Registrar and Share Transfer agent in case of shares held in physical form and to respective Depository Participant (DP) in case the shares are held in demat form.
8. Members holding shares in physical form can avail of the *Nomination facility* by filing Form 2B (in duplicate) with the Company or its Registrar (TCS). In case of shares held in demat form, the nomination has to be lodged with your Depository Participant (DP).
9. The particulars of Director retiring by Rotation and/or eligible for Re-appointment are given in the Corporate Governance Section, which forms part of this Annual Report.
- 10. A notice for passing of Ordinary Resolution under Section 293(1) (a) of the Companies Act, 1956, by means of Postal Ballot for sale of air handling equipment business, is sent to the shareholders separately. Depending on the result of the postal ballot, the said resolution will be deemed to be passed on the date of the Annual General Meeting.**

Annexure to Notice

Explanatory Statement under Section 173(2) of the Companies Act, 1956.

Item No. 5

Mr. Peter Smits was appointed as a Director by the Board in its meeting held on 20 February, 2002, pursuant to Article 151 of the Articles of Association of the Company, to fill in the casual vacancy caused by the resignation of Mr. Sune Karlsson. Since Mr. Karlsson was to retire by rotation at the ensuing Annual General Meeting, Mr. Smits would also cease to hold office at this meeting, pursuant to Section 262 of the Companies Act, 1956.

The Company has received notice under Section 257 of the Companies Act, 1956, alongwith the deposit of Rs.500/- from a member, proposing the candidature of Mr. Smits for the office of Director.

The Board considers his association as a Director will be beneficial and in the interest of the Company.

The Directors recommend the ordinary resolution for your approval.

Except Mr. Peter Smits, none of the other Directors is, in any way, concerned or interested in the said resolution.

Item No. 6

Mr. N.S.Raghavan was appointed as an Additional Director with effect from 20 February, 2002, by the Board of Directors of the Company.

In terms of Section 260 of the Companies Act, 1956 and Article 152 of the Articles of Association of the Company, Mr. Raghavan holds office as a Director upto the date of the ensuing Annual General Meeting of the Company and is eligible for re-appointment as a Director.

The Company has received notice under Section 257 of the Companies Act, 1956, alongwith the deposit of Rs.500/- from a member proposing the candidature of Mr. Raghavan for the office of Director.

The Board considers his association as a Director will be beneficial and in the interest of the Company.

The Directors recommend the ordinary resolution for your approval.

Except Mr. N.S.Raghavan, none of the other Directors is, in any way, concerned or interested in the said resolution.

Item No. 7

Mr. Dinesh Paliwal was appointed as an Additional Director with effect from 20 February, 2002 by the Board of Directors of the Company.

In terms of Section 260 of the Companies Act, 1956 and Article 152 of the Articles of Association of the Company, Mr. Paliwal holds office as a Director upto the date of the ensuing Annual General Meeting of the Company and is eligible for re-appointment as a Director.

The Company has received notice under Section 257 of the Companies Act, 1956, along with the deposit of Rs.500/- from a member proposing the candidature of Mr. Paliwal for the office of Director.

The Board considers his association as a Director will be beneficial and in the interest of the Company.

The Directors recommend the ordinary resolution for your approval.

Except Mr. Dinesh Paliwal, none of the other Directors is, in any way, concerned or interested in the said resolution.

Item No. 8

Mr. Nasser Munjee was appointed as an Additional Director with effect from 20 February, 2002 by the Board of Directors of the Company.

In terms of Section 260 of the Companies Act, 1956 and Article 152 of the Articles of Association of the Company, Mr. Munjee holds office as a Director upto the date of the ensuing Annual General Meeting of the Company and is eligible for re-appointment as a Director.

The Company has received notice under Section 257 of the Companies Act, 1956, along with the deposit of Rs.500/- from a member proposing the candidature of Mr. Munjee for the office of Director.

The Board considers his association as a Director will be beneficial and in the interest of the Company.

The Directors recommend the ordinary resolution for your approval.

Except Mr. Nasser Munjee, none of the other Directors is, in any way, concerned or interested in the said resolution.

Item No. 9

At the Meeting of the Board of Directors of the Company held on 14 September, 2001, the Board of Directors co-opted Mr. Ravi Uppal as an Additional Director to the Board of Directors of the Company.

By virtue of the provisions of Section 260 of the Companies Act, 1956 and Article 152 of the Articles of Association of the Company, he holds office as a Director upto the date of ensuing Annual General Meeting of the Company.

A Notice pursuant to Section 257 of the Companies Act, 1956, has been received from a member in writing, proposing the candidature of Mr. Ravi Uppal as a Director.

At the said meeting, Mr. Ravi Uppal was also appointed as Managing Director of the Company for a period of 5 (five) years with effect from 1 October, 2001 to 30 September, 2006.

The terms and conditions and remuneration relating to his appointment as Managing Director of the Company are set out in the draft agreement, a copy whereof duly initialed by the Chairman is placed in the Meeting for the purpose of identification and is subject to the approval of the Members of the Company, as required under Section 269, read with Schedule XIII to the Companies Act, 1956.

The principal terms and conditions as contained in the draft agreement are as under:

1) **Period of Appointment:**

5 (Five) years with effect from 1 October, 2001 to 30 September, 2006.

2) **Remuneration:**

(a) Salary: Rs.1,65,000 (Rupees one lakh, sixty five thousand only) per month, with such annual increment as may be decided by the Board.

(b) Commission: Mr. Uppal shall be entitled to an annual performance related bonus based on comparing annual targets with the results achieved and determined by the Board of Directors.

Under best performance targets, the bonus amount shall not exceed the total annual salary for the year.

(c) Perquisites/Allowances:

In addition to salary and commission, the following perquisites shall be paid to Mr. Uppal.

(i) Housing:

Mr. Uppal shall be paid a Housing Allowance of Rs.1,10,000 (Rupees one lakh, ten thousand only) per month, inclusive of expenses for gas, electricity, water charges and furnishings.

The Company shall also reimburse expenses of services of two domestic servants.

(ii) Medical Expenses:

Reimbursement of medical expenses including hospitalisation and surgical charges incurred in India and abroad for Mr. Uppal and his family, as may be approved by the Board of Directors or as per rules of the Company.

(iii) Leave Travel Concession:

Leave travel concession for Mr. Uppal and family once in a year incurred in accordance with the rules specified by the Company.

(iv) Club Fees:

Reimbursement of membership fees upto 2 (two) clubs, including admission and life membership fee.

(v) Personal Accident Insurance:

Personal Accident Insurance Policy as per the rules of the Company.

(Explanation: Family means spouse, dependent children and

dependent parents of the Managing Director).

- (vi) **Leave:**
Leave with full pay or encashment, as per rules of the Company.
- (vii) **Provident Fund, Superannuation Fund and Annuity Fund:**
Company's contribution to Provident Fund, Superannuation Fund and Annuity Fund, as per the Schemes of the Company to the extent, these either singly or put together are not taxable under the Income-tax Act, 1961.
- (viii) **Gratuity:**
Gratuity payable at the rate not exceeding half a month's salary for each completed year of service.
- (ix) **Other perquisites:**
Subject to overall ceiling on remuneration mentioned hereinbelow, the Managing Director may be given other allowances, benefits and perquisites, as the Board of Directors may from time to time decide.

(d) Amenities

- (i) **Provision of Car:**
The Company shall provide car(s) with chauffeur, for official as well as personal purposes.
- (ii) **Communication facilities:**
Telephone/Telefax and other suitable communication facilities at the residence.

(e) Overall Remuneration:

The aggregate of salary and perquisites in any financial year shall not exceed the limits prescribed from time to time under Section 198, 309 and other

applicable provisions of the Companies Act, 1956, read with Schedule XIII to the said Act, as may for the time being be in force.

(f) Minimum Remuneration:

In case of loss or inadequacy of profits in any financial year during the currency of tenure of his service, the payment of salary and perquisites and other allowances shall be governed by the limits prescribed under Section II of Part II of Schedule XIII to the Companies Act, 1956, or any amendment thereof.

3) Other Terms and Conditions:

- i. As long as Mr. Uppal functions as Managing Director of the Company, no sitting fees will be paid to him for attending the Meetings of the Board of Directors or Committee thereof.
- ii. Mr. Uppal shall be entitled to the reimbursement of entertainment expenses actually and properly incurred by him, in the course of the legitimate business of the Company and travelling, hotel and other expenses incurred by him in India and abroad, exclusively on the business of the Company, as per the rules and regulations of the Company or as approved by the Board of Directors.
- iii. Mr. Uppal shall not retire by rotation whilst he continues to hold that office. However upon termination of the Agreement, he shall cease to be the Director of the Company.
- iv. Mr. Uppal shall not engage himself, either directly or indirectly or be interested in any capacity whatsoever or render assistance during the term of his Agreement with the Company to any firm, company or persons whether a manufacturer, dealer or trader in goods or products which are of the same or similar kind and nature as those of the Company.
- v. As long as Mr. Uppal functions as Managing Director, he shall not be interested or otherwise concerned directly or through his wife/or minor

children, in any selling agency of the Company in future, without the prior approval of the Central Government.

- vi. Mr. Uppal shall not during the continuance of his employment with the Company or at any time thereafter divulge or disclose to any person whomsoever or to make any use whatsoever for his own purpose or for any purpose other than that of the Company, any information or knowledge obtained by him during his employment as to the business or affairs of the Company or its methods or as to any trade secrets or secret processes of the Company and shall use his best endeavours to prevent any other person from doing so. However such divulgence or disclosure by him to officers and employees of the Company for the purpose of business of the Company shall not be deemed to be a contravention of this clause.
- vii. The Company shall be entitled to terminate employment of Mr. Uppal forthwith, if he is unable to perform his duties by reason of ill health, accident or disability for a period of 180 days, in any period of twelve consecutive calendar months.
- viii. The Company or Mr. Uppal shall be entitled to terminate the Agreement, by giving to the other party 180 days notice in writing.
- ix. The terms and conditions of the said appointment and/or agreement may be altered and varied from time to time by the Board as it may be permissible and if deem fit, so as not to exceed the limits specified in Schedule XIII to the Companies Act, 1956 or any amendments made thereto.

In compliance with the provisions of Section 269, 309 and other applicable provisions of the Companies Act, 1956, the terms and conditions relating to his appointment and remuneration specified above are placed before the members in the general meeting for their approval.

The Directors commend the passing of the Resolution set out at item no. 9 of the accompanying Notice.

Mr. Ravi Uppal is also Managing Director of ABB Holdings (South Asia) Ltd, a 100% Indian subsidiary of ABB Asea Brown Boveri Ltd., Zurich. No remuneration is paid to him for holding this office in the aforesaid Company.

The draft Agreement referred to in the Resolution at item no. 9 of the accompanying Notice is open for inspection by the members at the Registered Office of the Company between 11.00 a.m. and 1.00 p.m. on any working day of the Company, up to the date of the Annual General Meeting.

This explanatory statement together with the accompanying Notice is to be regarded as an abstract of the terms of the agreement and memorandum of concern or interest, under Section 302 of the Companies Act, 1956.

Mr. Ravi Uppal is concerned or interested in the Resolution at this item as also in the draft Agreement, since it relates to his own appointment and remuneration. Save as aforesaid, none of the other Directors is, in any way concerned or interested in the said resolution.

Item No.10

The shareholders at the Annual General Meeting held on 23 April, 1997 had approved payment of Commission to Non Executive Directors for each of the 5 (five) financial years of the Company, commencing from 1 January, 1997 till 31 December, 2001. However no commission was paid to Non Executive Directors during the said period, except sitting fees for attending meetings of the Board or Committee thereof.

Keeping into consideration the increased role of Directors in the emerging competitive environment and the added responsibilities under the Companies Act, 1956 and Corporate Governance regulations, their useful interactions and advice at the Board and Committee Meetings, it is felt appropriate to renew the earlier proposal and suitably compensate the Non Executive Directors. It is therefore proposed that Non Executive Directors, be paid remuneration by way of commission of an amount, not exceeding 1% per annum of the net profit of the Company, computed in accordance with the Companies Act, 1956, for a period of 5 (five) financial years with effect from 1 January, 2002 to 31 December, 2006.

The quantum of remuneration payable to the Non Executive Directors will be decided by the Board of Directors from time to time.

The payment of Commission requires to be sanctioned by a special resolution pursuant to Section 309 of the Companies Act, 1956.

The Directors recommend the resolution at item no.10 for acceptance by the members.

All the Non-Executive Directors, may be deemed to be concerned or interested in the said resolution to the extent of the Commission that may be received by them.

By Order of the Board
For Asea Brown Boveri Limited

Aashay S. Khandwala
Assistant Vice President
& Company Secretary

Mumbai
20 February, 2002

Registered Office:
Plot No.22A,
Shah Industrial Estate, 1st Floor,
Off Veera Desai Road,
Andheri (West),
Mumbai 400 053

Directors' Report

The Directors have pleasure in presenting their Fifty-second Annual Report and Accounts for the year ended 31 December, 2001.

Financial Results

	(Rs. in Thousands)	
	For the year ended 31 December, 2001	For the year ended 31 December, 2000
Profit Before Tax	850,789	705,115
Less: Provision for Tax		
- Current Tax	200,000	165,000
- Deferred Tax	(2,470)	—
Profit After Tax	653,259	540,115
Less: Transfer to Foreign Projects Reserve Account	5,000	22,000
Add : Reversal of excess Corporate Dividend Tax provided (2000 Dividend)	25,680	—
Balance Brought Forward from last year	249,906	245,686
Amount available for Appropriation	923,845	763,801

Appropriations

General Reserve	450,000	260,000
Proposed Dividend	207,092	207,092
Corporate Dividend Tax thereon	21,123	46,803
Balance Carried Forward	245,630	249,906
	923,845	763,801

Dividend

The Directors recommend payment of a dividend at the rate of Rs 5.00 per share for the year ended 31 December, 2001 on 41,418,356 equity shares of Rs 10 each (Previous year at the rate of Rs 5.00 per share).

	207,092	207,092
Corporate Dividend Tax thereon	21,123	46,803

Amalgamation

The Scheme of Amalgamation ("the Scheme") of the erstwhile Introl (India) Limited, ABB Instrumentation Limited, ABB Lenzohm Service Limited and ABB Analytical Limited, the transferor companies, with the Company was sanctioned by Honbl'e High Courts of Judicature of Bombay and Chandigarh on 9 November, 2001 and 22 November, 2001 respectively. On complying with the requisite formalities, the Scheme became effective on 24 December, 2001 operative retrospectively from the appointed date of 1 April, 2001 as per the Scheme. In the accompanying financial statements, results of operation for the period 1 April, 2001 to 31 December, 2001 and assets and liabilities as of 31 December, 2001 of the transferor companies have been incorporated.

In consideration of the transfer of and vesting of the undertakings of the transferor companies, 963,319 equity shares of Rs 10 each and 750,000 11% redeemable 10 year cumulative preference shares of Rs 100 each fully paid up of the Company were issued and allotted to the shareholders of the transferor companies on 31 December, 2001. The new equity shares allotted rank pari passu with the existing equity shares except they are not entitled to dividend declared for the year 2001. The redemption period for the preference shares is remaining period at the date of allotment till completion of 10 years from the date that the shares were originally issued by ABB Instrumentation Limited. The shareholder of these preference shares has waived its right to receive dividend upto the period 31 December, 2001.

The paid up share capital of the Company has consequently increased to Rs 498.8 million from Rs 414.2 million at the end of previous year.

For further details on amalgamation, please refer to note 2 of Schedule 17 – Notes to the Accounts.

Performance Review

Total orders received during the year were Rs 10,920 million compared to Rs 11,277 million in the previous year. Considering current economic environment and certain large value project orders booked in the previous year, order booking performance is considered satisfactory.

Order backlog at the end of 2001 increased to Rs 7,750 million compared to Rs 7,034 million at the end of previous year.

Sales and other income for the year was 31% higher at Rs 10,558 million compared to Rs 8,068 million in the previous year.

Profit before tax for the year was Rs 851 million compared to Rs 705 million in the previous year. Growth in the profit was mainly attributable to volume growth, despite pressure on the margins. Profit after tax was Rs 653 million compared to Rs 540 million in the previous year.

The Company's future prospects are closely linked to investments in the power and industrial sector. Though current level of investments in these sectors is low, the Company believes that in the medium and long term, significant investments will take place in these sectors. The Company is confident to secure an important share of this business.

For detailed analysis of the performance, please refer to management's discussion and analysis section of the annual report.

Divestment of Air Handling Equipment Business

Pursuant to the ABB Group's decision to sell worldwide air handling equipment business to Global Air Movement (Luxembourg) SARL, the Board of Directors of the Company in its meeting held on 20 February, 2002 has decided to divest the Company's air handling equipment business. This is subject to approval of the shareholders by postal ballot for which a Notice is being sent to the shareholders.

Redemption of Preference Shares

The Board of Directors of the Company in its meeting held on 20 February, 2002 has decided to redeem the 750,000 11% redeemable preference shares of Rs 100 each, aggregating to Rs 75,000,000 during the year 2002.

Fixed Deposits

Fixed deposits totalling Rs 857,000 due for repayment on or before 31.12.2001 were not claimed by the depositors as on that date. As on the date of this report, no claims have been received for the payment of these deposits. The Company has stopped accepting fixed deposits in 1998.

Conservation of Energy, Technology Absorption, Foreign Exchange Earnings and Outgo

The particulars as prescribed under sub-section (1)(e) of Section 217 of the Companies Act, 1956, read with the Companies (Disclosure of Particulars in the Report of Board of Directors) Rules, 1988, are given in Annexure – A, forming part of this report.

Environment Compliance

The Company has in place, a system for controlling and monitoring pollutants at all factories, which has resulted in all of our units complying with environmental standards and legislation. All the manufacturing units of the Company had received certificate for ISO 14001 (EMS). Of the four manufacturing units amalgamated during the year, Control Valve and Instrumentation units are already ISO 14001 (EMS) certified and balance two units are planned for certification during the year 2002.

Particulars of Employees

The statement under sub-section (2A) of Section 217 of the Companies Act, 1956, read with the Companies (Particulars of Employees) Rules, 1975, as amended, and forming part of this report is given in the Annexure - B.

Directors' Responsibility Statement

Pursuant to Section 217 (2AA) of the Companies Act, 1956, the Directors to the best of their knowledge and belief confirm that:

- (i) in the preparation of the annual accounts, the applicable accounting standards have been followed by the Company;
- (ii) appropriate accounting policies have been selected and applied consistently and such judgements and estimates have been made that are reasonable and prudent so as to give a true and fair view of the state of affairs of the Company as at 31 December, 2001 and of the profit of the Company for the year ended on that date;
- (iii) proper and sufficient care has been taken for the maintenance of adequate accounting records in accordance with the provisions of the Companies Act, 1956, for safeguarding the assets of the Company and for preventing and detecting fraud and other irregularities; and
- (iv) the annual accounts have been prepared on a going concern basis.

Corporate Governance

Pursuant to clause 49 of the listing agreement, a report on corporate governance and a certificate from the auditors of the Company is given in the Annexure – C and Annexure – D respectively, which forms part of this report.

Board of Directors

Mr. Ravi Uppal was appointed as Managing Director of the Company for a period of five years with effect from 1 October, 2001 in place of Mr. K.K.Kaura who had expressed his desire to relinquish the office of Managing Director on completion of his term. Mr. Ravi Uppal's appointment is placed before the shareholders for their approval at the ensuing Annual General Meeting.

Mr. Sune Karlsson resigned as a Director with effect from 18 January, 2002. The Board places on record its appreciation of the services rendered by Mr. Karlsson during his tenure on the Board. Mr. Peter Smits was appointed at the Board Meeting held on 20 February, 2002 in the casual vacancy caused by resignation of Mr. Karlsson.

Mr. N.S. Raghavan, Mr. Dinesh Paliwal and Mr. Nasser Munjee were appointed as Additional Directors at the Board Meeting held on 20 February, 2002. They hold office upto the date of ensuing Annual General Meeting but eligible for re-appointment.

Mr. K.K. Kaura was reappointed as an Additional Director at the Board Meeting held on 23 October, 2001 and will hold office upto the date of ensuing Annual General Meeting. He has however requested not to be reappointed as a Director, in view of his other commitments. The Board express their appreciation for the services rendered by him during his tenure on the Board.

Auditors

The Company's Auditors M/s. Bharat S Raut & Co. hold office upto the conclusion of the ensuing Annual General Meeting. The Company has received a requisite certificate pursuant to Section 224(1B) of the Companies Act, 1956, regarding their eligibility for re-appointment as Auditors of the Company.

For and on behalf of the
Board of Directors

K. N. Shenoy
Chairman

Mumbai
20 February, 2002

Annexure - A to Directors' Report

Conservation of Energy, Technology Absorption, Foreign Exchange Earnings and Outgo - Companies (Disclosure of particulars in the Report of Board of Directors) Rules, 1988.

(A) Conservation of energy

(a) Energy conservation measures taken during the year

Area of work during the year were installation of timers for water coolers and split air conditioning systems and improvement in compressed air system to reduce energy consumption. Training programmes were conducted to increase awareness on energy saving.

(b) Proposals being implemented for reduction of energy consumption

Proposed areas of work included energy audits, air conditioning system, air cooling plants, electrical motors, solar heating system, manufacturing processes, illumination systems and compressed air system.

(c) Impact of measures (a) and (b) above for reduction of energy consumption and consequent impact on cost of production of goods

Total energy saving is estimated at around 150,000 kWh per annum. This saving, however, has no appreciable impact on cost of goods, as the Company's production processes are not energy intensive.

(B) Technology Absorption

(a) Research and Development (R&D)

(1) *Specific areas in which R&D is carried out by the Company*

R&D effort is carried out in almost all the products and processes, specifically, in the major areas given below:

Development of SF6 breaker type EDI, development of low cost VCBS,

turbochargers and turbocharging, protocol converters for relay communication, high-speed trip relay, embedded controllers using DSPs, single phase STATCON for welding applications, timer for railway application, studies for LV distribution quality and efficiency improvements. AF protection coupler, energy meters (three phase), software for energy meters, HV capacitors (higher ratings) and HV capacitor components, surface cooled motors with encoder for VSD application, brake motors, roller table motors, flame proof motors frame 132, auxiliary motors for Indian Railways, motors with SPM nipple and encoders.

(2) *Benefits derived as a result of above R&D*

The benefits to the Company resulting from R&D activities is manifold. The Company absorbed new and upcoming global technologies, which resulted in increased technical base.

Benefits have also been reflected in terms of

- Improved product reliability
- Reduction in foreign exchange outgo
- Adaptation of the design to suit local markets helping in business growth and opening of new markets
- Lower cycle time for manufacturing

(3) *Future plan of action*

Efforts will be made by integrating R&D with business needs for offering better value added products and services for our customers.

Upgradation of systems and equipment in the areas of transmission line, trip circuit supervision relays, communication solution for single mode fiber optic cable, NDT techniques, introduction of new turbocharger model for Railways, development of tool for earthing in high resistivity area, system study, development of higher rating STATCONs and LV distribution quality and efficiency improvement solutions, wider range of

metering solutions, portable disturbance recorder, sequential event recorders, standalone modem, development of high efficiency motors and development of different ratings of indoor/outdoor CBs.

(4) Expenditure on R&D

(Rs. in Thousands)

i. Capital	2,308
ii. Revenue	20,274
iii. Total	22,582
iv. Total R&D expenditure as a percentage of turnover	0.21

(b) Technology absorption, adaptation and innovation

(1) Efforts made towards technology absorption, adaptation and innovation

Extensive training and skill building exercises were conducted in-house and at collaborators' end to improve design, development, production, commissioning and servicing. Some of them are:

Development of the components for circuit breakers, testing and proving of local manufacturing of spring operated mechanism for CBs, development of 420kV, 50kA breakers and testing as per IEC standards. Technology absorption, adaptation and innovation on developed designs for auto-regulating transformers with special connections for aluminum smelters and design of high efficiency generator transformers with directed oil flow and water cooling, development of indigenous components for electromechanical relays, localisation of components and monitoring field operation of turbochargers.

(2) Benefits derived as a result of above efforts

(i) Product improvement

As a result of the above efforts, product quality, performance and reliability have improved.

(ii) Cost reduction

Substantial cost reduction was achieved through design changes, standardisation and indigenisation of components and development of Alpha meters.

(iii) Product development

Important products developed were indoor version of 72.5kV CB, spring type BLK222 drive and FSA, high speed trip relay, protocol converters, VTC304 turbocharger, new version of Alpha energy meter, new insulation system in capacitors, bird caps on capacitor terminals and surface cooled motors with encoders and brake motors.

(iv) Import substitution

Import substitution was carried out for electromechanical relays and components of VTC304 turbocharger.

(3) Imported technology (imported during last five years)

(i) Technology imported

– Power and traction transformers	1998
– SF6 CB Types ELF-SP, SP 4-1, ELF SP 6-21 and ELF SP 6-22	1998
– Relays	1998
– EDF SK1 36 to 72.5kV	1999
– Switch fuses 200 Amps. To 800 Amps	1999
– Magnetic actuator Type A2 for circuit breakers up to 36kV	2000
– Medium voltage air insulated switchboard type UNISAFE	2000

(ii) Has technology been fully absorbed ?

Yes.

(C) Foreign exchange earning and outgo

(a) Activities related to exports; initiatives taken to increase exports, development of new export markets for products and services, export plans

As a result of various initiatives taken by the Company, orders received for physical exports were higher by 150% and revenues

were up by 85%. Major orders booked during the year included 3 sub-station order for 230/66/20 kV from Syria valuing Rs. 781 million. There has been significant growth in export of high voltage apparatus. A dedicated cell has been recently formed to monitor and realise export opportunities from South Asian countries.

(b) Total foreign exchange earned and used

(Rs. in Thousands)

a. Foreign exchange earned (including deemed exports)	2,300,926
b. Foreign exchange used	2,192,039
c. Net foreign exchange earned	<u>108,887</u>

For and on behalf of the
Board of Directors

K. N. Shenoy
Chairman

Mumbai
20 February, 2002

Annexure - B to Directors' Report

Statement under Sub-section (2A) of Section 217 of the Companies Act, 1956, read with the Companies (Particulars of Employees) Rules, 1975, as amended, and forming part of the Directors' Report for the Year ended 31 December, 2001

Name of the Employee	Designation/Nature of Duties	Remuneration Received (Rs.)	Qualification	Experience (Years)	Date of Commencement of Employment	Age (Years)	Previous Employment	
							Name of the Company	Designation
Anders Bergdahl	Commissioning Manager	4,501,720	Electrical Engineer	22	14/10/98	46	ABB Power Systems AB	System Engineer
Baxi R.N.	Vice President - Group Services	1,308,241	B.E. (Mech. & Elec.)	36	06/02/83	59	Khatau Jhunkar Ltd.	Plant Manager
Bhatia G.H.	Asst. Vice President - Transformers	1,277,783	B.E. (Elec.)	33	01/08/79	54	General Electric Co. Ltd.	Sales Executive
Bhardwaj R. **	Sr. Manager - Marketing	694,627	B. Sc. (Mech. Engg.) M.B.A.	27	16/02/81	48	Flakt India Ltd.	Branch Manager
Bhattacharya J.K.	Vice President - WBSEB Project	1,903,090	B.E. (Elec.)	38	01/11/68	58	Jessop & Co. Ltd.	Foreman
Carlsson Carl Gote	General Manager	3,061,641	B. Sc. (Engg.), LLM	34	01/07/99	56	ABB Power Systems AB	Project Manager
Clarke John A. *	Chief Financial Officer	2,916,165	FAICD	23	01/09/98	45	ABB Ltd., China	Chief Financial Officer
Das Asoke Ranjan **	Manager - Industrial Engineering	546,221	B.Sc., AMIE (Mech.), ICWAI	30	25/10/76	54	ACC-Vickers-Babcock Ltd.	Jr. Industrial Engineer
Dave K.D. *	Asst. Vice President - Mfg.	648,874	B.E. (Elec.)	38	08/09/76	60	Jyoti Ltd.	Asst. Manager
Dhawan A.	Sr. Vice President - Sales Organisation	2,100,607	B.Sc. Engg. (Elec.)	29	15/12/73	53	—	—
Dhar Sujit **	Planning Officer	518,234	PU	30	17/08/70	51	SFIND Employees Co-op. Credit Society Ltd.	Clerk
Dhoot B.B. *	Dy. General Manager - Retrofit	247,406	B.E. (Elec.)	37	01/08/70	60	Tata Merlin	Sr. Design Engineer
Dullu A.K.	Vice President - Modular Substation	1,617,030	B.Sc. Engg. (Elec.)	28	12/08/99	52	Alstom Ltd.	Chief Unit Head
D'Silva B.F.	Vice President - Instrumentation & Control Products	1,356,193	B.E. (Telecommunication)	29	02/02/74	52	Semiconductors Pvt. Ltd.	Trainee Engineer
Gururaj Koppam	Vice President - Utility Automation	1,261,115	B.E.	35	01/10/84	57	English Electric Company of India Ltd.	Sales Manager
Harikumar E. **	Supervisor - Accounts	564,813	B. Com.	12	03/09/90	30	Ultra Business Machines Ltd.	Office Assistant
Husain Bazmi R.	Sr. Vice President - Automation Technology Products Division	1,444,637	B.E. (Hons.), E.E.M.S. (Physics) Hons.	22	01/09/97	43	ABB Industrial Systems	Vice President - Industry Segment
Jha B.N. **	Sr. Manager - Technical	936,683	M. Tech., M.B.A.	21	21/03/94	45	B.H.E.L.	Dy. Manager (Quality Assurance)
Kashyap Arun Kumar	Asst. Vice President - Motors	1,236,526	B.E. (Elec.), M.B.A.	32	16/04/94	54	Crompton Greaves Ltd.	Plant Manager
Kaura K.K. *	Managing Director	3,797,003	B.E. (Hons.) Mech. Engg.	34	16/04/83	55	Hindustan Aeronautics Ltd.	Sr. Manager
Mali P.R. **	Workman	509,693	5th Std.	34	27/02/67	54	—	—
Majumder Biplab	Sr. Vice President - Process Industries Division	1,537,138	M.Tech. (Chem.)	32	10/02/78	53	Chemical & Metallurgical Co. Pvt. Ltd.	Process Engineer
Mathur Alok *	Sr. Vice President - Financial Services Division	1,777,661	B.Sc. (Chem. Engg.), M.S. (Chem. Engg.), M.B.A.	27	01/07/98	52	ABB Structured Finance	Sr. Vice President
Rajagopal K.	Vice President - Finance	1,374,498	B.Com., A.C.A.	21	07/02/91	45	Gujarat Communications & Electronics Ltd.	Dy. Manager
Ray S.K. *	General Manager (Eastern Region)	645,158	B.E. (Elec.)	36	12/07/79	58	N.G.E.F. Ltd.	Tech. Supdt.
Sadhu I.K.	Sr. Vice President - Utilities & Power Technology Products Divisions	1,838,457	B.Sc. (Engg.)	37	01/02/70	57	B.H.E.L.	Commercial Engineer
Satyanarayana P. (Dr.)*	Asst. Vice President - R&D	1,009,390	B.E. (Hons.), ME (IISC), Ph.D. (Liverpool)	33	13/06/81	60	Crompton Greaves Ltd.	Dy. General Manager
Shah Sharad *	Vice President - Breakers & Modules and HV Components	1,127,752	B.E. (Elec.)	29	04/11/76	52	Jyoti Ltd.	Asst. Project Manager
Talataam Srinagesh	Asst. Vice President - Structured Finance	1,580,392	B. Tech. (Chem. Engg.), PGDBM (Fin.)	23	16/08/95	46	N.T.P.C. Ltd.	Sr. Manager
Uppal Ravi *	Managing Director	988,866	B.Tech. (Electrical & Electronics), M.B.A.	27	01/10/01	49	Volvo India Pvt. Ltd.	Managing Director

* Employed for a part of the Year

** Voluntary Retirement Cases

Notes :

- (1) Nature of employment is contractual for all employees. Other terms and conditions are as per Company's Rules.
- (2) None of the above employee is related to any of the Directors of the Company.
- (3) Remuneration received includes Salary, Bonus, House Rent Allowance, Privilege Leave encashment, Personal Allowance, Overtime, Value of rent free accommodation, Contribution to Provident Fund, Superannuation, Health Insurance Premium, Personal Accident Insurance, Voluntary Retirement Compensation, Leave Travel Assistance, Medical Assistance, Company's car perquisites evaluated in accordance with the Income-tax Rules as applicable and Income-tax liabilities borne by the Company in respect of foreign technicians.

For and on behalf of the Board of Directors

Mumbai
20 February, 2002

K.N. Shenoy
Chairman

Annexure - C to Directors' Report

Report on Corporate Governance

(A) Corporate Governance Philosophy

The Company is committed to good Corporate Governance. The Company fully understands the rights of its shareholders to information on the performance of the Company and considers itself a trustee of its shareholders. The Company provides detailed information on various issues concerning the Company's business and financial performance to its shareholders.

The basic philosophy of Corporate Governance in the Company is to achieve business excellence and dedicate itself to increasing long-term shareholder value, keeping in view the needs and interests of all its stakeholders. The Company is committed to transparency in all its dealings and places emphasis on business ethics.

(B) Board of Directors

(a) The composition of the Board of Directors as at 31 December, 2001 is as follows:

Sr. No.	Name of Director	Executive/ Non-Executive	No. of other	
			Directorships	Committee memberships
1	Mr. K.N. Shenoy (Chairman)	Non-Executive & Independent	8	-
2	Mr. Ravi Uppal (Managing Director)	Executive	5	-
3	Mr. Vijay Karan	Non-Executive & Independent	7	-
4	Mr. A. Ramamurthy	Non-Executive & Independent	6	2
5	Mr. Eric Drewery	Non-Executive	-	-
6	Mr. K.K. Kaura	Non-Executive & Independent	-	-
7	Mr. Sune Karlsson (since resigned)	Non-Executive	-	-

(b) Changes in the composition of the Board of Directors since last Annual General Meeting

- Mr. K.K. Kaura relinquished the office of Managing Director on the completion of his tenure, i.e. with effect from 16 October, 2001. He was appointed as an Additional Director of the Company with effect from 23 October, 2001 and holds office as Director upto the date of Annual General Meeting. In view of his other commitments, he has opted not to be reappointed as a Director at the ensuing Annual General Meeting.
- The Board of Directors appointed Mr. Ravi Uppal as an Additional Director and Managing Director of the Company with effect from 1 October, 2001, subject to the approval of the shareholders in the General Meeting. As per terms of contract, the Company or Mr. Uppal are entitled to terminate the contract by giving 180 days prior notice to the other party in writing. As per contract, no severance fee is payable to Mr. Uppal.
- Mr. Sune Karlsson resigned on 18 January, 2002 and Mr. Peter Smits was appointed as Director with effect from 20 February, 2002 to fill in the casual vacancy caused on the Board.
- Mr. N.S. Raghavan, Mr. Dinesh Paliwal and Mr. Nasser Munjee were appointed as Additional Directors with effect from 20 February, 2002.

(c) Meetings held in financial year 2001 and Attendance of Directors

The Board meets at least once in a quarter to consider amongst other business, the quarterly performance of the Company and financial results. The Board held seven meetings during the financial year 2001 on 21 February, 2001; 24 April, 2001; 27 June, 2001; 24 July, 2001; 14 September, 2001; 23 October, 2001 and 19 December, 2001.

The attendance of each Director at these meetings was as follows:

Sr. No.	Name of Director	No. of Board Meetings attended	Attendance at last AGM
1	Mr. K.N. Shenoy (Chairman)	7	Present
2	Mr. Ravi Uppal (Managing Director w.e.f. 1.10.2001)	2	N.A.
3	Mr. Vijay Karan	5	Present
4	Mr. Sune Karlsson (since resigned)	Nil	Not Present
5	Mr. A. Ramamurthy (appointed w.e.f 24.4.2001)	4	Present
6	Mr. Eric Drewery (appointed w.e.f 24.4.2001)	3	Present
7	Mr. K.K. Kaura	6	Present
8	Mr. J.S. Zala (resigned w.e.f 24.4.2001)	Nil	N.A.
9	Mr. Tommie Bergman (resigned w.e.f. 24.4.2001)	Nil	N.A.

(C) Committees of Directors

(a) Audit Committee

The Audit Committee consists of three independent Directors. The Board of Directors appointed Mr.A.Ramamurthy as a Member of the Audit Committee with effect from 24 April, 2001, in place of Mr. J. S. Zala, who resigned on the same date.

Three Audit Committee meetings were held during the financial year 2001 on 21 February, 2001; 24 July, 2001 and 23 October, 2001.

The composition of the Audit Committee and the attendance of each Director at these meetings was as follows:

Sr. No.	Members of Audit Committee	No. of meetings attended
1	Mr. K.N. Shenoy (Chairman)	3
2	Mr. Vijay Karan	3
3	Mr. J.S. Zala (resigned w.e.f. 24.4.2001)	Nil
4	Mr. A. Ramamurthy (appointed w.e.f 24.4.2001)	1

The Audit Committee is responsible for overseeing the Company's financial reporting process, reviewing with the management the financial statements and adequacy of internal audit function and discuss significant internal audit findings. The Committee acts as a link between the management, external and internal auditors and the Board of Directors of the Company.

The Committee discussed with the external auditors their audit methodology, audit planning and significant observations/suggestions made by them. The Audit Committee also discussed major issues related to risk management and compliances.

(b) Remuneration Committee

The Remuneration Committee of the Board was constituted in the previous financial year to recommend to the Board the remuneration package for executive directors. Remuneration of the executive directors is governed by the external competitive environment, track record, potential and performance of the executive and performance of the Company. The Company does not have a scheme for stock options either for the Directors or its employees.

The committee held two meetings during the financial year 2001 on 21 February, 2001 and 14 September, 2001. The committee reviewed and recommended the remuneration of the Whole-time Directors for consideration by the Board of Directors. The Committee also discussed and recommended performance based incentive system for payment of commission to the Managing Director.

The composition of the Remuneration Committee and the attendance of each Director at these meetings was as follows:

Sr. No.	Members of Remuneration Committee	No. of meetings attended
1	Mr. K.N. Shenoy (Chairman)	2
2	Mr. Eric Drewery	1
3	Mr. Vijay Karan	2

Remuneration paid to Directors for the financial year 2001

(Rs. in Thousands)

Sr. No.	Name	Sitting Fees	Salary & other Perquisites	Commission	Total
1	Mr. K.N. Shenoy	65	N.A.	N.A.	65
2	Mr. Ravi Uppal	Nil	1,009	495	1,504
3	Mr. Vijay Karan	75	N.A.	N.A.	75
4	Mr. A. Ramamurthy	25	N.A.	N.A.	25
5	Mr. K.K.Kaura	10	3,244	610	3,864
	Total	175	4,253	1,105	5,533

(c) Transfer and Investors Grievance Committee

The scope of the 'Share Transfer Committee' had been enlarged to look into investor grievances and suggest remedial and improvement measures. The committee has been renamed as 'Transfer and Investors Grievance Committee.'

On recommendation of this committee, the Board of Directors had delegated the authority to approve the share transfers to the Managing Director of the Company, to expedite the process.

The committee held seven meetings during the financial year 2001 on 2 January, 2001; 11 January, 2001; 20 January 2001; 2 February, 2001; 9 February 2001; 30 August, 2001 and 23 October, 2001.

As required by the listing agreement executed with Stock Exchanges, Mr. Aashay S. Khandwala, Company Secretary was appointed as 'Compliance Officer' to monitor the share transfer process and liaise with regulatory authorities.

The composition of Transfer and Investors Grievance Committee and attendance of the directors at these meetings was as follows:

Sr. No.	Members of Transfer and Investors Grievance Committee	No. of meetings attended
1	Mr. K. N. Shenoy (Chairman)	3
2	Mr. Ravi Uppal (appointed w.e.f. 1.10.2001)	1
3	Mr. Vijay Karan	6
4	Mr. K. K. Kaura (resigned w.e.f. 16.10.2001)	6

The status of investor queries/complaints is as under:

No. of investor queries/complaints received in the year 2001	Pending at the end of the year	No. of pending share transfers
1,018	131*	Nil

* since resolved

The Company during the year took further initiative to send individual reminder letters to the investors to claim unclaimed dividends and other dues of the past years.

(d) Share Allotment Committee

The Share Allotment Committee of the Board was constituted specifically for allotment of shares of the Company to the members of transferor companies - Introl (India) Limited, ABB Instrumentation Limited, ABB Lenzoilm Service Limited and ABB Analytical Limited on their amalgamation with the Company.

The committee held its meeting on 31 December, 2001 to allot 963,319 equity shares and 750,000 11% redeemable preference shares of the Company, to the members of the aforesaid transferor companies.

The composition of the Share Allotment Committee was as follows:

Sr. No.	Members of Share Allotment Committee
1	Mr. Vijay Karan (Chairman)
2	Mr. K.K. Kaura
3	Mr. Ravi Uppal

(D) Annual General Meetings

The Annual General Meetings of the Company (AGMs) have been held at the following places in the last three years.

For the year	Venue	Day and date	Time
2000	Y.B. Chavan Centre General Jagannath Bhosale Marg, (Near Mantralaya) Mumbai 400 021	Wednesday, 27 June, 2001	3.00 p.m. (IST)
1999	Patkar Hall, SNDT Women's University, 1, Nathibai Thackersey Road, Mumbai 400 020	Tuesday, 2 May, 2000	3.00 p.m. (IST)
1998	Patkar Hall, SNDT Women's University, 1, Nathibai Thackersey Road, Mumbai 400 020	Wednesday, 21 April, 1999	4.00 p.m. (IST)

(E) Disclosures

(a) Disclosures on materially significant related party transactions

There were no materially significant related party transactions during the year having conflict with the interests of the Company.

(b) Details of Non-Compliance by the Company, penalties, stricture imposed on the Company by the Stock Exchanges, SEBI or any statutory authorities or any matter related to capital markets

The Company has complied with all the requirements of the listing agreement with the stock exchanges as well as regulations and guidelines of SEBI. No penalties or strictures have been imposed by SEBI, stock exchanges or any statutory authorities on matters relating to capital markets during the last three years.

(F) Means of Communication

(a) Financial Results

The quarterly and half-yearly unaudited financial results and the annual audited financial results are published in leading national newspapers, i.e. The Economic Times (English), Maharashtra Times (Marathi) and Mumbai Samachar (Gujarati). These results are also placed on Company's web site.

(b) Other information

The Company has its own web site www.abb.com/in wherein other related information is available. The Company has a dedicated email: investor.helpdesk@in.abb.com in the Corporate Secretarial department, to have electronic interface with its investors. The Company also holds press meets / analysts meets to apprise and make public, the information relating to the Company's working.

(G) Management's Discussion and Analysis Report

The Management's Discussion and Analysis report forms part of the Annual Report.

(H) General Shareholder's Information

(a) Annual General Meeting

Day, date and time	Wednesday, 24 April, 2002 At 3.00 p.m. (IST)
Venue	Patkar Hall, SNDT Women's University, 1, Nathibai Thackersey Road, Mumbai - 400 020
Agenda	1. Adoption of Audited Accounts, Directors' and Auditors' Report. 2. Declaration of Dividend. 3. Re-appointment of Director. 4. Re-appointment of Auditors. 5. Appointment of Directors. 6. Appointment of Mr. Ravi Uppal as Managing Director. 7. Payment of Commission to Non-Executive Directors.

(b) The profile of Directors retiring by rotation/Additional Directors eligible for Re-appointment.

Director Retiring by Rotation

● Mr. Vijay Karan

Mr. Vijay Karan, 67, B.A. (Hons), retired as the Director of the Central Bureau of Investigation. He also served in the Ministry of Finance, Government of India, for few years, dealing with matters like India's foreign investment policy, joint ventures in India and abroad, NRI investments in India, etc.

Directorships held in other companies are:

1. Dabur India Limited
2. Raunaq International Limited
3. Numero Uno International Limited
4. World Resorts Limited
5. ASIL Industries Limited
6. Lakeland Hotels Limited
7. Knight Watch Securities Limited

Re-appointment of Additional Directors

● Mr. Ravi Uppal

Mr. Ravi Uppal, 49, is B-Tech from IIT, Delhi and did his Post Graduation Diploma in Business Administration from IIM, Ahmedabad. He started his career with BHEL in 1975. He joined Asea Limited in 1980. In the merged entity Asea Brown Boveri Limited he held the position of Vice President (Power Projects) and then of (Industrial Electronics and Systems Segment). After putting 16 years in ABB Group, in 1996 he took over as Managing Director of Volvo India Pvt. Limited. Currently he is holding the position of Managing Director in the Company.

Directorships held in other Companies are:

1. ABB Holdings (South Asia) Limited
2. Transport Corporation of India Limited
3. ABB Industrial IT Development Center Limited
4. Universal ABB Power Cables Limited
5. Infrastructure Equipment Limited

● **Mr. N.S. Raghavan**

Mr. N.S. Raghavan, 58, is a graduate in Electrical Engineering. He served in the Ministry of Defence, Govt. of India for 9 years handling various responsibilities in the Corps of Electrical and Mechanical Engineers.

He worked as an Engineer in Andhra Pradesh State Electricity Board and as Head, Electrical Department in Kothari Sugars and Chemicals Limited, Trichy. He was the Joint Managing Director of Infosys Technologies Limited for 19 years.

Directorships in other Companies are:

1. Corporate Board, Murugappa Group (Non-Executive Chairman)
2. N. S. Raghavan Centre for Entrepreneurial Learning, Institute of Management (Chairman)
3. Nadathur Holdings and Investments Pvt. Limited
4. Syndicated Research Worldwide Pvt. Limited

● **Mr. Peter Smits**

Mr. Peter Smits, 50, was educated at the University of Brussels, Belgium. He began his career in 1978 with KPMG, Brussels, Belgium. He joined Asea Brown Boveri SA, Brussels, Belgium in 1994 as President and Country Manager and was appointed Senior Vice-President, Business Area Manager Distribution Transformers of ABB Transmission and Distribution Management Ltd., Zurich, Switzerland. From January, 2001 he has been appointed as Head of Power Technology Products and Member of the Group Executive Committee of ABB Ltd., Zurich, Switzerland.

● **Mr. Nasser Munjee**

Mr. Nasser Munjee, 49, has done his post graduation in Economics from The London School of Economics. He also studied at The University of Chicago. He began his career in 1978 as an Executive Director in Housing Development Finance Corporation Limited. In 1997, he joined Infrastructure Development Finance Company Limited as its Deputy Managing Director. At present he is the Managing Director and CEO of the aforesaid Company.

Directorships held in other companies are:

1. HDFC Limited
2. HDFC Investments Limited
3. Gruh Finance Limited
4. Repro India Limited
5. Cummins India Limited
6. Voltas Limited
7. IDFC Limited
8. I-Deck Limited
9. Gujarat Ambuja Cement Limited
10. KPIT Infosystems Limited

● **Mr. Dinesh Paliwal**

Mr. Dinesh Paliwal, 44, holds a master's in paper science and engineering from Roorkee University and master's degree in applied science and engineering and business administration from Miami University, Ohio, USA. He serves as ABB Group Executive Vice President, a Member of ABB's Group Executive Committee and Head of ABB's Process Industries Division worldwide.

Mr. Paliwal has more than 24 years of experience in process industries. He began his career with Ballarpur Industries Limited and before heading ABB's Pulp, Paper, Metals and Minerals business in 1998, he was Head of ABB's multi-industry business, including several joint ventures in China. Mr. Paliwal has served in Australia, China, Singapore, Switzerland and United States in various engineering, marketing, sales and management functions for ABB. He is a board member of Skyva International (USA), Paperloop (USA) and number of ABB Group companies in Singapore, Spain, Sweden and USA.

(c) Financial Calendar

Indicative calendar of events for the year 2002 (January – December), excluding Extra Ordinary General Meetings, if any, is as under:

Fourth Quarter (Year 2001) results	20 February, 2002
First Quarter results	April, 2002
Annual General Meeting	24 April, 2002
Second Quarter results	July 2002
Third Quarter results	October 2002

(d) Book Closure

The Company's Register of Members and Share Transfer books will remain closed for the purpose of dividend from:	Wednesday, the 10 April, 2002 to Wednesday, the 24 April, 2002. (both days inclusive)
---	---

(e) Dividend

The dividend recommended by Directors, after the same is approved at the Annual General Meeting will be paid to those shareholders whose names appear on the Company's Register of Members as on 24 April, 2002.

(f) Listing on Stock Exchanges

The Company's equity shares are listed on the stock exchanges located at: <ul style="list-style-type: none">• Mumbai (BSE and NSE)• Ahmedabad• New Delhi• Kolkata (Listing fees have been paid till date on all the above Stock Exchanges)	Address of the Stock Exchanges: The Stock Exchange, Mumbai (BSE) P.J. Towers Dalal Street Mumbai 400 001 The National Stock Exchange of India Ltd., (NSE) Exchange Plaza, 5 th floor Plot No. C/1, G Block Bandra-Kurla Complex, Bandra (East) Mumbai 400 051 The Stock Exchange - Ahmedabad Kamdhenu Complex Near Polytechnic, Panjara Pole, Ahmedabad 380 015 Delhi Stock Exchange Association Ltd., DSE House 3/1, Asaf Ali Road New Delhi 110 002 The Calcutta Stock Exchange Association Ltd., 7, Lyons Range Kolkata 700 001
Stock Code of the Company	BSE 002 NSE ABB
ISIN Nos. for the Company's equity shares in Demat form	INE 117A 01014
Depositories Connectivity	NSDL and CDSL

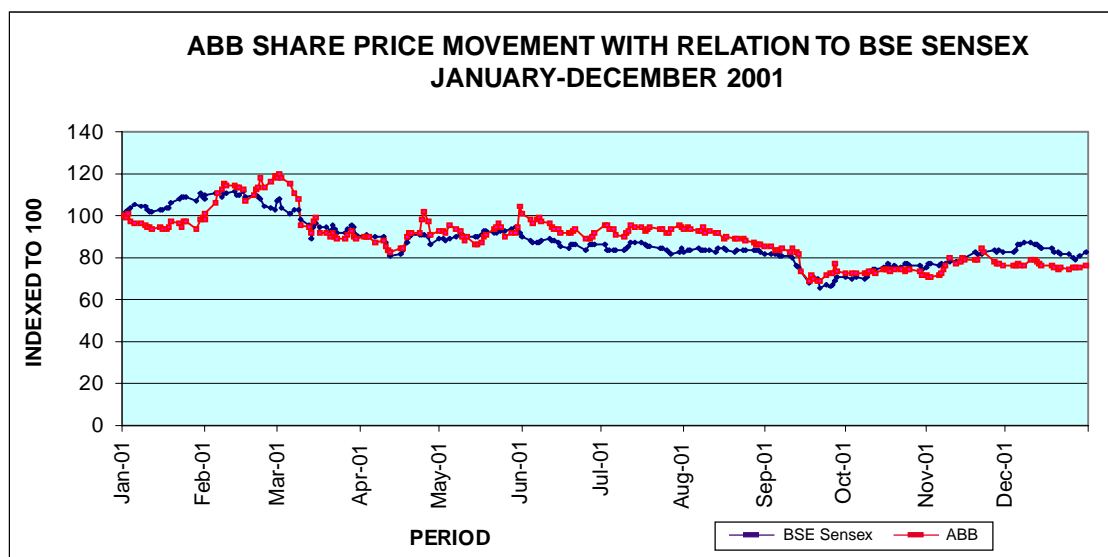
(g) Market Price Data

(1) The market price and volume of the Company's shares traded in major stock exchange(s) during the year 2001 was as follows:

Year 2001	BSE		NSE		Volume	
	High	Low	High	Low	BSE	NSE
Month	(Rs.)	(Rs.)	(Rs.)	(Rs.)	(Nos.)	(Nos.)
January	276.00	248.05	275.00	240.00	684612	572362
February	334.00	257.50	333.70	256.50	3685567	3562996
March	330.00	215.00	328.90	225.35	975502	911052
April	278.00	219.00	276.00	216.10	566524	469634
May	282.80	215.00	282.45	230.10	735739	910427
June	271.90	237.45	281.00	230.00	600301	705744
July	268.85	236.00	263.80	235.10	271900	138961
August	252.00	228.10	260.00	225.00	47817	64180
September	227.90	178.00	234.70	173.00	85336	149046
October	204.75	188.05	205.00	185.00	83057	227977
November	229.90	189.55	229.00	188.00	1500930	1172968
December	218.50	199.00	217.35	195.55	410011	444986

(2) The market capitalisation of the Company's shares as on 31 December, 2001, was Rs. 8688 million on The Stock Exchange, Mumbai (BSE) and Rs. 8625 million on National Stock Exchange (NSE).

(3) Performance in comparison with Broad Indices



(h) Shareholding Pattern

(1) Equity Shares of Rs. 10 each

Sr. No.	Shareholders	As on 31 December, 2001		As on 31 December, 2000		Variation	
		No. of shares	%	No. of shares	%	No. of shares	%
1	ABB Asea Brown Boveri Ltd. Zurich & ABB Flakt AB, Sweden	22,084,057	52.11	21,120,738	50.99	963,319	1.12
2	Non-Resident Individuals /OCBs	40,498	0.09	45,174	0.11	-4676	-0.02
3	Directors and their relatives	4,457	0.01	5,323	0.01	-866	0.00
4	LIC / UTI/ Other Insurance Cos.	9,458,156	22.32	9,321,647	22.51	136,509	-0.19
5	Nationalised Banks / Other Banks	37,400	0.09	58,632	0.14	-21,232	-0.05
6	Mutual Funds	877,074	2.07	1,381,878	3.34	-504,804	-1.27
7	Foreign Institutional Investors	1,621,284	3.82	1,154,938	2.79	466,346	1.03
8	General Public	8,258,749	19.49	8,330,026	20.11	-71,277	-0.62
	Total	42,381,675	100.00	41,418,356	100.00	963,319	-

(2) Preference Shares of Rs.100 each

Sr. No.	Shareholders	As on 31 December, 2001		As on 31 December, 2000		Variation	
		No. of shares	%	No. of shares	%	No. of shares	%
1.	ABB Holdings (South Asia) Limited	750,000	100.00	NIL	N.A.	750,000	100.00
	Total	750,000	100.00	NIL	N.A.	750,000	100.00

(i) Distribution of Shareholding (as on 31 December, 2001)

No. of Equity shares held	No. of shareholders holding shares in		No. of shares held		% age of equity capital held in	
	Physical Form	Demat Form	Physical Form	Demat Form	Physical Form	Demat Form
1-1,000	24,589	24,293	2,458,822	3,369,441	5.80	7.96
1,001-5,000	213	572	370,236	1,057,485	0.87	2.50
5,001-10,000	14	35	95,779	243,289	0.24	0.57
10,001-50,000	5	34	124,138	908,211	0.29	2.14
50,001-100,000	1	7	97,216	479,823	0.23	1.13
100,001-1,000,000	1	11	963,319	4,810,304	2.27	11.35
1,000,001 and above	6	2	21,120,738	6,282,874	49.83	14.82
Total	24,829	24,954	25,230,248	17,151,427	59.53	40.47
Total	49,783		42,381,675		100%	

(j) Share Transfer Process

The Company's shares being in compulsory demat list are transferable through the depository system. Shares in physical form are processed by the Tata Consultancy Services (TCS), Registrar and Transfer Agent of the Company. The share transfer process is reviewed by the Transfer and Investors Grievance Committee and their suggestions are implemented.

(k) Dematerialisation of Shares

The Company had signed a tripartite agreement with National Securities Depository Limited (NSDL) on 5 November, 1997 and with Central Depository Services (India) Ltd., (CDSL) on 22 October, 1999 to provide trading of shares in dematerialised form.

As per SEBI's instructions w.e.f. 15 February, 1999 trading of the Company's shares for all investors is compulsorily carried out only in dematerialised form.

As on 31 December, 2001, 17,151,427 shares were in dematerialised form representing 40.47% of the total shares (As on 31 December, 2000, 16,479,925 shares were in dematerialised form representing 39.79% of the total shares)

(l) Outstanding GDR/ADR or Warrants

There are no GDR, ADR or any convertible instruments pending conversion or any other instrument likely to impact the equity share capital of the Company.

(m) Plant Locations

The Company's plants are located at Bangalore, Chennai, Faridabad, Kolkata, Mumbai, Nashik and Vadodara.

(n) Address for Correspondence:

**(i) Registrar and Transfer Agent:
(For share transfer, dividend related queries)**

Tata Consultancy Services,
(Unit: Asea Brown Boveri Limited)
Lotus House, 6, New Marine Lines,
Sir Vithaldas Thackersey Marg,
Mumbai 400 020.
Phone: 022 - 203 9136
Fax: 022 - 201 6689
E-Mail: tcs_corpoffice@mumbai.tcs.co.in

**(ii) Company :
(For any other matter, unresolved complaints)**

Asea Brown Boveri Limited
Regd. Office: Plot No. 22A,
Shah Industrial Estate, 1st Floor
Off Veera Desai Road, Andheri (West)
Mumbai – 400 053.
Contact person: Mr. Aashay S. Khandwala
Company Secretary
(Compliance Officer)
Phone: 022 - 639 4254 / 6394256
Fax: 022 - 639 4255
E-Mail: investor.helpdesk@in.abb.com
(Corporate Secretarial)

(iii) Corporate Website: www.abb.com/in

(o) Non Mandatory Requirements.

- (i) The Company reimburses the expenses of the Non-Executive Chairman incurred in performance of his duties.
- (ii) The Company has a Remuneration Committee to determine the remuneration package of Executive Directors.
- (iii) The Company will comply with the requirements of Postal Ballot as and when such matter arises which requires approval of the shareholders by such process.
- (iv) Sending of financial results to individual household of shareholders will be reviewed by the Board.

For and on behalf of the Board of Directors

K. N. Shenoy
Chairman

Mumbai
20 February, 2002

Annexure - D to Directors' Report

Auditors' Certificate on compliance of conditions of corporate governance per clause 49 of the Listing Agreement with the stock exchanges.

To the Members of Asea Brown Boveri Limited

We have examined the compliance of conditions of corporate governance by Asea Brown Boveri Limited ("the Company") for the year ended on 31 December 2001, as stipulated in clause 49 of the Listing Agreement of the Company with the stock exchanges.

The compliance of conditions of corporate governance is the responsibility of the management. Our examination was limited to procedures and implementation thereof, adopted by the Company for ensuring the compliance of the conditions of Corporate Governance. It is neither an audit nor an expression of opinion on the financial statements of the Company.

We certify that the Company has complied with the conditions of Corporate Governance as stipulated in the above mentioned Listing Agreements.

We have been explained that no investor grievances are pending for a period exceeding one month against the Company as per the records maintained by the Company.

We further state that such compliance is neither an assurance as to the future viability of the Company nor the efficiency or effectiveness with which the management has conducted the affairs of the Company.

Bangalore
20 February, 2002

For Bharat S Raut & Co.
Chartered Accountants

Pradip Kanakia
Partner

Management's Discussion and Analysis

Operating Results of the Company

During the year, the Company secured orders worth Rs 10,920 million. Although the economic and investment environment continued to be sluggish, restricting the opportunities for the growth, the Company was able to register significant growth in orders in exports, standard products and services.

The order backlog at the end of the year has increased to Rs 7,750 million from Rs 7,034 million at the end of the previous year.

Sales and other income for the year at Rs 10,558 million was significantly higher by 31% compared to the previous year. This was mainly due to higher sales of standard products and exports. Revenues were higher for all the segments except manufacturing & consumer industries segment.

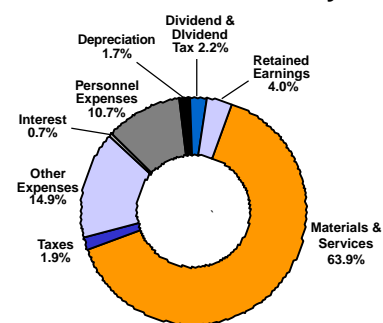
Profit before tax was Rs 851 million (previous year Rs 705 million). While overheads were lower as a percentage of sales compared to previous year, material costs were marginally higher due to the product mix and competitive pricing.

Due to increased level of borrowings in the first half of the year to finance working capital needs to support the growth in revenues during the year, the interest cost was higher compared to the previous year.

Profit after tax was Rs 653 million as compared to Rs 540 million in the previous year. Provision for current tax remained at 23% of the profit before tax.

Earnings per equity share was Rs 15.50 as compared to Rs 13.04 in the previous year.

Revenue Distribution Analysis - %



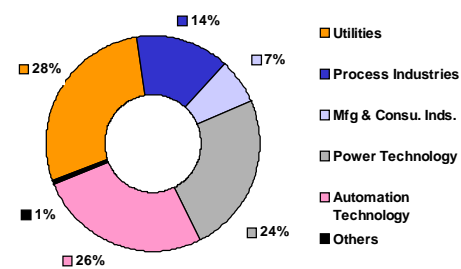
Outlook for the Company

Despite the current sluggishness in the power and industrial sectors, the Company believes that in the medium and long term significant investments should flow in these important sectors of the economy. The Government's thrust on the infrastructure sector, power sector reforms focused on transmission and distribution and funding by multilateral agencies will give opportunity to the Company for the growth. The Company's growth strategy will be focussed on following:

1. Volume increase in standard products by increasing market share and introduction of new products.
2. Continued thrust to exports and service business
3. Broadening of industrial IT offering
4. Competitive cost structure

Business Segment Analysis

The Company's business segments are organised around customers on industry and product lines. End user customer segments are utilities, process industries and manufacturing and consumer industries. The product segments are power technology and automation technology which supply the products to the customer segments as also sell directly to channel partners. The relative revenue distribution is as under:



Utilities

The summarised performance of the segment is as under.

		(Rs. in Millions)
	2001	2000
Orders Received	3,754	4,651
Order Backlog	4,070	3,511
Revenues	3,214	2,638

The segment covers manufacturing, engineering and providing solutions for high and medium voltage sub-stations, power line carrier communication equipment, relay control panels, networking management and services to utilities.

During the year, the segment focused on retrofitting, renovation, augmentation of the transmission and distribution network and secured significant orders. The Accelerated Power Development Programme (APDP), driven by the Government of India, helped utilities to fund investments in power transmission and distribution based on reform milestones and the segment was able to secure substantial orders by participating in projects under this programme. During the year, the segment received a major export order from Syria worth Rs 781 million for setting up three sub-stations. This order has given the segment an opportunity to widen its export base beyond the traditional territory of the South Asian market. Despite tough economic conditions, the segment was able to strengthen its market share in its traditional markets.

Overall orders received by the segment were lower than last year due to shift in the investment pattern by SEBs towards small and medium sized projects. In the previous year the segment had received a large value order from WBSEB.

Revenues during the year increased by 22% compared to the previous year.

The growth of this business segment is linked with power sector reforms in the country. The tenth plan target for addition of 36,500 MW in the power generation capacity as well as outlays for transmission and distribution at Rs 2,140 billion indicate growth in the power industry of over 50% compared to the previous plan. Outlook for the segment in the areas of new sub-station projects as well as retrofitting/renovation/ augmentation projects is promising.



Process Industries

The summarised performance of the segment is as under.

		(Rs. in Millions)
	2001	2000
Orders Received	1,459	1,531
Order Backlog	727	842
Revenues	1,644	1,376



This segment serves the chemical, pharmaceutical, petroleum, gas, marine, metal, minerals, mining, cement, pulp, paper and printing industries with a variety of power, automation and process industry technology solutions.

The market for the segment remained sluggish during the year and with no major investments in greenfield projects. Some of the strategic orders booked during the year include electrics for

tension leveling, cleaning and oiling line from TISCO, Industrial IT solutions for the eco-friendly pulp mill from ITC BPL and revamp of terminal automation system from IOCL, Kanpur. The segment also secured export orders from Bangladesh, which includes drives and automation of steel mills.

The major projects commissioned during the year include Chettinad Cements, automation system for Hindustan Paper Corporation Limited, DCS and Control system for ONGC LPG plant at Uran and commissioning for field trials of new generation turbochargers for Central Railways.

Due to the good opening order backlog, the revenues were higher by 19% compared to the previous year.

The future of the segment depends largely upon the investments in process industries. The segment is currently pursuing export opportunities in South Asian countries and provision of engineering services for projects in other countries and certain domestic SCADA and oil and gas pipeline projects.

Manufacturing & Consumer Industries

The summarised performance of the segment is as under.

	(Rs. in Millions)	
	2001	2000
Orders Received	840	846
Order Backlog	464	475
Revenues	812	935

The segment sells air handling equipment and provides solutions for industrial and environmental processes.

Due to the sluggish economic environment and lack of industrial projects, overall orders received by the segment remained at the same level as in the previous year. The building system and electrical installation group have shown positive growth due to successful market penetration in the hospitality, entertainment and health care sectors and new market segments such as ports and infocom. Business in these areas is expected to show further growth with an introduction of integrated building management systems, communication systems, security systems and other facilities along with the existing HVAC and electrical installations.



The segment has supplied and commissioned modern radio controlled cranes for one of the leading steel makers in the country and this is expected to become a benchmark for other steel plants and process industries.

Revenues of the segment were lower compared to previous year, mainly due to a drop in sales of air handling equipment.

The outlook for cranes and harbor systems is promising with goliath cranes for the ship building industry and level luffing cranes and ship unloads at various ports for material handling. The newly introduced digital ASTAT controls solution is well established in the market.

Power Technology Products

The summarised performance of the segment is as under.

	(Rs. in Millions)	
	2001	2000
Orders Received	3,040	2,740
Order Backlog	1,817	1,545
Revenues	2,770	1,996

The segment manufactures and sells power transformers, switchgears, breakers, capacitors as well as other products and technologies for high and medium voltage applications.

Despite difficult market conditions, due to fund constraints of most utilities, the segment was able to increase its orders received to Rs 3,040 million compared to Rs 2,740 million in the previous year. The growth in orders primarily came from export orders. The order booking for the power transformers plant has improved to Rs 500 million. The segment also exported transformers to USA and supplied autoregulating transformers for aluminium smelters. The segment also developed 11 kV outdoor vacuum circuit breakers during the year and has received orders for the same.



The Segment registered a 35% growth in revenues from both domestic and export orders.

The future of the segment is driven by investments in power transmission and distribution alongwith power sector reforms being undertaken by the utilities. Due to the competitive environment, prices are continuously under pressure and the segment is focusing on cost rationalisation to maintain its margins.

Automation Technology Products

The summarised performance of the segment is as under.

	(Rs. in Millions)	
	2001	2000
Orders Received	2,729	2,594
Order Backlog	1,029	1,102
Revenues	3,026	1,964

The segment provides products, systems, software and services for the automation and optimisation of discrete, process and batch manufacturing operations and related business aspects. Key technologies include measurement, control, instrumentation, process analysis, drives, motors, power electronics and low voltage products, all geared towards a common industrial IT architecture.



With the slow economic environment and lack of significant investments in new capacity creation/upgradation in most of the industrial sectors, the market conditions remain challenging. However the segment was able to increase its market share by increasing orders received in standard products primarily due

to enhanced focus on channel partners. Introduction of new products in low voltage switchgear also helped in improving orders received for standard products. The order booking for electric metering increased significantly.

During the year the first 70kA rectifier unit for HINDALCO was commissioned and the segment launched e-Service and a full-featured e-Commerce web site for its entire range of products.

The segment registered significant growth in revenues due to a good opening order backlog position and faster conversion of standard products orders into revenues.

For the year 2002 the segment has planned growth primarily from increase in market share in standard products, introduction of new product lines and market expansion. Market share growth is planned through greater penetration with increase in number of channel partners, greater geographical coverage and business through e-channels.

Finance

During the year a focussed cash flow improvement project was initiated. The project mainly focussed on receivables management, inventory management and payables. Due to these initiatives there has been significant improvement in the cash flow. Net increase in cash and cash equivalent was Rs 1,246 million compared to net decrease of Rs 5 million in the previous year. Net cash position (cash and bank balances less loan funds) also increased significantly to Rs 1,316 million compared to Rs 128 million in the previous year. The Company continued to enjoy P1+ rating for its commercial paper programme.

Human Resources

The Company believes that human resources are a vital resource in giving the company a competitive edge in the current business environment. The Company's philosophy is to provide congenial work environment, performance oriented work culture, knowledge acquisition/ dissemination, skill building, creativity and responsibility and performance based compensation. Several new policies were put in place to achieve these goals.

During the year focus was to realign the organisation to a customer-centric organisation. This involved extensive communication to employees directed towards changing the mind-set and getting used to the new way of truly customer-centric working. In addition, actions were also devoted towards stabilising the new performance management system. The linkage of variable pay to the performance was also introduced.

The Company had 3,642 employees at the end of 2001. As in the past, industrial relations continued to remain cordial at all the locations of the Company.

Internal Control System

The Company has an intricate system of internal controls to ensure optimal use of Company's resources and protection thereof, accurate and speedy compilation of accounts and management information reports and to compliance with laws and regulations. The Company has an exhaustive budgetary control system and actual performance is reviewed with reference to budgets by the management on a monthly basis. The Company has a well defined organisation structure, authority levels and internal guidelines and rules for conducting business transactions. The Company's internal audit department conducts regular audits to ensure adequacy of internal control systems, adherence to management instructions and policies and compliance with laws and regulations of the country and to suggest improvements thereof.

Audit plans, internal audit reports, significant risk area assessment and adequacy of internal controls are also periodically reviewed by the Audit Committee of the Board of Directors.

Auditors' Report to the Members of Asea Brown Boveri Limited

We have audited the attached balance sheet of Asea Brown Boveri Limited (the Company) as at 31 December 2001 and the profit and loss account of the Company for the year ended on that date, annexed thereto (in which are incorporated the results of the erstwhile ABB Instrumentation Limited, ABB Analytical Limited, Introl (India) Limited and ABB Lenzhom Service Limited with effect from 1 April 2001 on their amalgamation with the Company), and report that:

1. As required by the Manufacturing and Other Companies (Auditor's Report) Order, 1988 issued by the Company Law Board in terms of Section 227(4A) of the Companies Act, 1956, we enclose in the Annexure, a statement on the matters specified in paragraphs 4 and 5 of the said Order.
2. Further to our comments in the Annexure referred to in paragraph 1 above:
 - a) we have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;
 - b) in our opinion, proper books of account as required by law have been kept by the Company so far as appears from our examination of the books;
 - c) the balance sheet and profit and loss account dealt with by this report are in agreement with the books of account;
 - d) in our opinion, the balance sheet and profit and loss account dealt with by this report have been prepared in compliance with the accounting

standards referred to in subsection (3C) of Section 211 of the Companies Act, 1956, to the extent applicable;

- e) on the basis of written representations received from the directors of the Company as at 31 December 2001 and taken on record by the Board of Directors, we report that no director is disqualified from being appointed as a director of the Company under clause (g) of sub-section (1) of Section 274 of the Companies Act, 1956; and
- f) in our opinion and to the best of our information and according to the explanations given to us, the said accounts, give the information required by the Companies Act, 1956 in the manner so required and give a true and fair view:
 - i. in the case of the balance sheet, of the state of affairs of the Company at 31 December 2001; and
 - ii. in the case of the profit and loss account, of the profit for the year ended on that date.

For Bharat S Raut & Co.
Chartered Accountants

Pradip Kanakia
Partner

Bangalore
20 February, 2002

Annexure referred to in paragraph 1 of our report of even date to the members of Asea Brown Boveri Limited (the Company).

Internal controls

1. In our opinion, and according to the information and explanations given to us, there are adequate internal control procedures commensurate with the size of the Company and the nature of its business for the purchase of stores, spares, raw materials including components, plant and machinery, equipment, other assets and for the sale of goods.
2. In our opinion, the Company has an internal audit system commensurate with the size and nature of its business.
3. In our opinion, for its service activities, the Company has, commensurate with the size and nature of its business, a reasonable system of:
 - a) recording receipts, issues and consumption of materials and stores and allocating materials consumed to each project :
 - b) allocating man-hours utilised to each project: and
 - c) authorisation and control over the issue of stores and allocating stores and labour costs to each project.

Fixed assets

4. The Company has maintained proper records of fixed assets showing full particulars including quantitative details and location. The Company has a regular programme of physical verification of its fixed assets which, in our opinion, is reasonable having regard to the size of the Company and the nature of its assets. In accordance with this programme, certain fixed assets were physically verified by Management during the year and no material discrepancies were noticed on such verification.
5. None of the fixed assets have been revalued during the year.

Inventories

6. The stocks of finished goods, stores and maintenance spares, components and raw

materials have been physically verified by Management during the year. In respect of stocks lying with third parties, confirmation for most of the stocks held has been received. In our opinion, the frequency of such verification is reasonable.

7. The procedures for the physical verification of stocks followed by Management are reasonable and adequate in relation to the size of the Company and the nature of its business.
8. The discrepancies identified on such verification between physical stocks and the book records were not material and were properly dealt with in the books of account.
9. On the basis of our examination of the stock records, we are of the opinion that the valuation of stocks is fair and proper in accordance with normally accepted accounting principles and is on the same basis as in the previous year.
10. The Company has a regular procedure for the determination of unserviceable or damaged stores, raw materials, finished goods and traded goods and adequate provision has been made in the accounts for the loss arising on the items so determined.
11. In our opinion, reasonable records are maintained by the Company for the sale and disposal of realisable scrap. The Company has no realisable by-products.
12. We have carried out a limited review of the books of account and cost records maintained by the Company, pursuant to the Rules made by the Central Government for the maintenance of cost records under Section 209 (1) (d) of the Companies Act, 1956, in respect of electric motors and power transformers and are of the opinion that, prima facie, the prescribed accounts and records have been maintained. We have, not, however, made a detailed examination of the said records with a view to determine whether they are accurate or complete.

Loans and advances

13. We are informed that the Company has not taken/ granted any loans, secured or unsecured, from/ to companies, firms or other parties listed in the register maintained under Section 301 of the Companies Act, 1956, or companies under the same management as defined under Section 370 (1-B) of the Companies Act, 1956.
14. The parties to whom loans or advances in the nature of loans were given by the Company are regular in repaying the principal amounts as stipulated and interest where applicable.

Related parties

15. In our opinion, and according to the information and explanations given to us and having regard to the fact that some of the items purchased are of a special nature and suitable alternative sources do not exist for obtaining comparative quotations, the transactions of purchase of goods and materials and sale of goods, materials and services, made in pursuance of contracts or arrangements entered in the register maintained under Section 301 of the Companies Act, 1956 and aggregating during the year to Rs 50,000 or more in respect of each party, were made at prices which are reasonable having regard to prevailing market prices as available with the Company for such goods, materials or services or the prices at which transactions for similar goods or services were made with other parties.

Fixed deposits

16. In our opinion, and according to the information and explanations given to us, the Company has complied with the provisions of Section 58A of the Companies Act, 1956 and the Companies (Acceptance

of Deposits) Rules, 1975 with regard to the deposits accepted from the public.

Staff welfare

17. Provident Fund and Employees' State Insurance dues were generally regularly deposited, during the year, with the appropriate authorities.
18. According to the information and explanations given to us and the records of the Company examined by us, no personal expenses have been charged to the revenue account, other than those payable under contractual obligations or in accordance with generally accepted business practice.

Taxation

19. According to the information and explanations given to us, there are no undisputed amounts payable in respect of income tax, wealth tax, sales tax, customs duty and excise duty which are outstanding as at 31 December 2001 for a period of more than six months from the date they became payable.

Others

20. The Company is not a sick industrial company within meaning of Section 3 (1) (o) of the Sick Industrial Companies (Special Provisions) Act, 1985.

For Bharat S Raut & Co.
Chartered Accountants

Pradip Kanakia
Partner

Bangalore
20 February, 2002

Auditors' Report to the Members of Asea Brown Boveri Limited

We have audited the attached balance sheet of Asea Brown Boveri Limited (the Company) as at 31 December 2001 and the profit and loss account of the Company for the year ended on that date, annexed thereto (in which are incorporated the results of the erstwhile ABB Instrumentation Limited, ABB Analytical Limited, Introl (India) Limited and ABB Lenzhom Service Limited with effect from 1 April 2001 on their amalgamation with the Company), and report that:

1. As required by the Manufacturing and Other Companies (Auditor's Report) Order, 1988 issued by the Company Law Board in terms of Section 227(4A) of the Companies Act, 1956, we enclose in the Annexure, a statement on the matters specified in paragraphs 4 and 5 of the said Order.
2. Further to our comments in the Annexure referred to in paragraph 1 above:
 - a) we have obtained all the information and explanations which to the best of our knowledge and belief were necessary for the purpose of our audit;
 - b) in our opinion, proper books of account as required by law have been kept by the Company so far as appears from our examination of the books;
 - c) the balance sheet and profit and loss account dealt with by this report are in agreement with the books of account;
 - d) in our opinion, the balance sheet and profit and loss account dealt with by this report have been prepared in compliance with the accounting

standards referred to in subsection (3C) of Section 211 of the Companies Act, 1956, to the extent applicable;

- e) on the basis of written representations received from the directors of the Company as at 31 December 2001 and taken on record by the Board of Directors, we report that no director is disqualified from being appointed as a director of the Company under clause (g) of sub-section (1) of Section 274 of the Companies Act, 1956; and
- f) in our opinion and to the best of our information and according to the explanations given to us, the said accounts, give the information required by the Companies Act, 1956 in the manner so required and give a true and fair view:
 - i. in the case of the balance sheet, of the state of affairs of the Company at 31 December 2001; and
 - ii. in the case of the profit and loss account, of the profit for the year ended on that date.

For Bharat S Raut & Co.
Chartered Accountants

Pradip Kanakia
Partner

Bangalore
20 February, 2002

Annexure referred to in paragraph 1 of our report of even date to the members of Asea Brown Boveri Limited (the Company).

Internal controls

1. In our opinion, and according to the information and explanations given to us, there are adequate internal control procedures commensurate with the size of the Company and the nature of its business for the purchase of stores, spares, raw materials including components, plant and machinery, equipment, other assets and for the sale of goods.
2. In our opinion, the Company has an internal audit system commensurate with the size and nature of its business.
3. In our opinion, for its service activities, the Company has, commensurate with the size and nature of its business, a reasonable system of:
 - a) recording receipts, issues and consumption of materials and stores and allocating materials consumed to each project :
 - b) allocating man-hours utilised to each project: and
 - c) authorisation and control over the issue of stores and allocating stores and labour costs to each project.

Fixed assets

4. The Company has maintained proper records of fixed assets showing full particulars including quantitative details and location. The Company has a regular programme of physical verification of its fixed assets which, in our opinion, is reasonable having regard to the size of the Company and the nature of its assets. In accordance with this programme, certain fixed assets were physically verified by Management during the year and no material discrepancies were noticed on such verification.
5. None of the fixed assets have been revalued during the year.

Inventories

6. The stocks of finished goods, stores and maintenance spares, components and raw

materials have been physically verified by Management during the year. In respect of stocks lying with third parties, confirmation for most of the stocks held has been received. In our opinion, the frequency of such verification is reasonable.

7. The procedures for the physical verification of stocks followed by Management are reasonable and adequate in relation to the size of the Company and the nature of its business.
8. The discrepancies identified on such verification between physical stocks and the book records were not material and were properly dealt with in the books of account.
9. On the basis of our examination of the stock records, we are of the opinion that the valuation of stocks is fair and proper in accordance with normally accepted accounting principles and is on the same basis as in the previous year.
10. The Company has a regular procedure for the determination of unserviceable or damaged stores, raw materials, finished goods and traded goods and adequate provision has been made in the accounts for the loss arising on the items so determined.
11. In our opinion, reasonable records are maintained by the Company for the sale and disposal of realisable scrap. The Company has no realisable by-products.
12. We have carried out a limited review of the books of account and cost records maintained by the Company, pursuant to the Rules made by the Central Government for the maintenance of cost records under Section 209 (1) (d) of the Companies Act, 1956, in respect of electric motors and power transformers and are of the opinion that, prima facie, the prescribed accounts and records have been maintained. We have, not, however, made a detailed examination of the said records with a view to determine whether they are accurate or complete.

Loans and advances

13. We are informed that the Company has not taken/ granted any loans, secured or unsecured, from/ to companies, firms or other parties listed in the register maintained under Section 301 of the Companies Act, 1956, or companies under the same management as defined under Section 370 (1-B) of the Companies Act, 1956.
14. The parties to whom loans or advances in the nature of loans were given by the Company are regular in repaying the principal amounts as stipulated and interest where applicable.

Related parties

15. In our opinion, and according to the information and explanations given to us and having regard to the fact that some of the items purchased are of a special nature and suitable alternative sources do not exist for obtaining comparative quotations, the transactions of purchase of goods and materials and sale of goods, materials and services, made in pursuance of contracts or arrangements entered in the register maintained under Section 301 of the Companies Act, 1956 and aggregating during the year to Rs 50,000 or more in respect of each party, were made at prices which are reasonable having regard to prevailing market prices as available with the Company for such goods, materials or services or the prices at which transactions for similar goods or services were made with other parties.

Fixed deposits

16. In our opinion, and according to the information and explanations given to us, the Company has complied with the provisions of Section 58A of the Companies Act, 1956 and the Companies (Acceptance

of Deposits) Rules, 1975 with regard to the deposits accepted from the public.

Staff welfare

17. Provident Fund and Employees' State Insurance dues were generally regularly deposited, during the year, with the appropriate authorities.
18. According to the information and explanations given to us and the records of the Company examined by us, no personal expenses have been charged to the revenue account, other than those payable under contractual obligations or in accordance with generally accepted business practice.

Taxation

19. According to the information and explanations given to us, there are no undisputed amounts payable in respect of income tax, wealth tax, sales tax, customs duty and excise duty which are outstanding as at 31 December 2001 for a period of more than six months from the date they became payable.

Others

20. The Company is not a sick industrial company within meaning of Section 3 (1) (o) of the Sick Industrial Companies (Special Provisions) Act, 1985.

For Bharat S Raut & Co.
Chartered Accountants

Pradip Kanakia
Partner

Bangalore
20 February, 2002

Balance Sheet

As at 31 December 2001	Schedule	(Rs in Thousands)	
		2001	2000
Sources of Funds			
Shareholders' Funds			
Share Capital	1	498,817	414,184
Reserves and Surplus	2	<u>3,978,658</u>	<u>3,555,349</u>
		4,477,475	3,969,533
Loan Funds			
Secured Loans	3	—	114,972
Finance Lease Obligations	17(10)	32,882	—
Unsecured Loans	4	<u>75,942</u>	<u>50,631</u>
		108,824	165,603
		<u>4,586,299</u>	<u>4,135,136</u>
Application of Funds			
Fixed Assets			
Gross Block	5	2,962,630	2,554,438
Less: Depreciation		<u>1,400,417</u>	<u>1,137,993</u>
Net Block		1,562,213	1,416,445
Capital work in progress and Advances on Capital Account		<u>11,624</u>	<u>11,930</u>
		1,573,837	1,428,375
Investments	6	127,778	99,576
Current Assets, Loans and Advances			
Inventories	7	1,204,458	1,128,826
Sundry Debtors	8	4,207,560	4,190,031
Cash and Bank Balances	9	1,425,155	293,654
Loans and Advances	10	<u>908,190</u>	<u>760,709</u>
		7,745,363	6,373,220
Less: Current Liabilities and Provisions			
Current Liabilities	11	4,493,393	3,512,140
Provisions	12	<u>228,215</u>	<u>253,895</u>
		4,721,608	3,766,035
Net Current Assets		3,023,755	2,607,185
Net Deferred Tax Liability	17(11)	<u>(139,071)</u>	—
		<u>4,586,299</u>	<u>4,135,136</u>
Notes to the Accounts			
Refer Note 2 to the Accounts on Amalgamation			
17			

Per our report attached
For Bharat S Raut & Co.
Chartered Accountants

Pradip Kanakia
Partner

Bangalore, 20 February, 2002

For and on behalf of the Board

K.N. Shenoy
Ravi Uppal
Vijay Karan
Eric Drewery
Peter Smits
Nasser Munjee
N.S. Raghavan

Chairman
Managing Director
Director
Director
Director
Director
Director

K. Rajagopal
Aashay S. Khandwala

Vice President - Finance
Company Secretary

Mumbai, 20 February, 2002

Profit and Loss Account

For the year ended 31 December 2001	Schedule	(Rs in Thousands)	
		2001	2000
Income			
Sales and Services	13	10,415,990	7,932,778
Other Income	14	<u>141,589</u>	<u>135,712</u>
		10,557,579	8,068,490
Expenditure			
Cost of Materials and Erection Services		6,745,606	4,886,758
Personnel Expenses	15	1,130,397	1,019,397
Other Expenses	16	1,575,742	1,250,526
Depreciation		185,521	169,803
Less: Transfer from Revaluation Reserve		<u>3,038</u>	<u>2,195</u>
		182,483	167,608
Interest		<u>72,562</u>	<u>39,086</u>
		9,706,790	7,363,375
Profit Before Tax		850,789	705,115
Provision for Tax:			
Current Tax			
(after adjusting Rs 4,797 thousand for short provision in respect of earlier years, Previous Year - Rs Nil)		200,000	165,000
Deferred Tax		<u>(2,470)</u>	<u>—</u>
Profit After Tax		653,259	540,115
Less: Transfer to Foreign Projects Reserve Account		5,000	22,000
Add: Balance Brought Forward		249,906	245,686
Reversal of excess Corporate Dividend Tax provided (2000 Dividend)		<u>25,680</u>	<u>—</u>
Amount available for appropriation		923,845	763,801
Appropriations			
General Reserve		450,000	260,000
Proposed Dividend		207,092	207,092
Corporate Dividend Tax thereon		21,123	46,803
Balance Carried Forward		<u>245,630</u>	<u>249,906</u>
		923,845	763,801
Basic and Diluted Earnings per Equity Share (in Rs)			
	17(3)	15.50	13.04
Notes to the Accounts			
Refer Note 2 to the Accounts on Amalgamation			

Per our report attached
For Bharat S Raut & Co.
Chartered Accountants

Pradip Kanakia
Partner

Bangalore, 20 February, 2002

For and on behalf of the Board

K.N. Shenoy
Ravi Uppal
Vijay Karan
Eric Drewery
Peter Smits
Nasser Munjee
N.S. Raghavan

Chairman
Managing Director
Director
Director
Director
Director
Director
Vice President - Finance
Company Secretary

K. Rajagopal
Aashay S. Khandwala
Mumbai, 20 February, 2002

As at 31 December 2001	2001	2000
(Rs in Thousands)		
Schedule 1 - Share Capital		
Authorised		
42,500,000 (Previous Year - 50,000,000) Equity Shares of Rs 10 each	425,000	500,000
750,000 (Previous Year - Nil) 11% Redeemable 10 year, Cumulative Preference Shares of Rs 100 each	75,000	—
	500,000	500,000
Issued, Subscribed and Paid Up		
42,381,675 (Previous Year - 41,418,356) Equity Shares of Rs 10 each	423,817	414,184
750,000 (Previous Year - Nil) 11% Redeemable 10 year, Cumulative Preference Shares of Rs 100 each	75,000	—
	498,817	414,184

Notes:

1. Share Capital includes:
 - a) Shares issued at par to the shareholders of the following erstwhile amalgamating companies:

Company	Number of Shares	Year of Issue
i) Equity shares of Rs 10 each		
Asea Limited	4,585,590	1989
Flakt India Limited	3,688,196	1994
Introl (India) Limited (INTRO)	234,000	2001
ABB Instrumentation Limited (ININS)	172,271	2001
ABB Lenzoim Service Limited (INSER)	249,356	2001
ABB Analytical Limited (INEBA)	307,692	2001
ii) Preference Shares of Rs 100 each		
ABB Instrumentation Limited (ININS)	750,000	2001
 - b) 8,443,893 and 10,354,589 equity shares of Rs 10 each issued as fully paid up bonus shares by capitalisation of the General Reserve Account and Share Premium Account respectively.
 - c) 200,000 equity shares of Rs 10 each issued at a premium of Rs 10 each to the holders of 40,000 - 8.57% cumulative preference shares of Rs 100 each on cancellation of the preference shares in terms of a Scheme of Compromise between the Company and its preference/equity shareholders.
 - d) 19,575,991 (Previous Year 18,612,672) equity shares held by ABB Asea Brown Boveri Limited, Zurich, (Switzerland), the holding company and 2,508,066 (Previous Year 2,508,066) equity shares by ABB Flakt AB, Sweden, a subsidiary of the holding company.
2. 350,000 preference shares are redeemable at par on 14 December 2007 and 400,000 preference shares are redeemable at par on 26 December 2008. The Board of Directors in its meeting held on 20 February 2002 has decided to redeem these shares during the year 2002.

Schedule 2 - Reserves and Surplus

Capital Reserve Account :

Per last Balance Sheet	9,171	9,171
Transferred from Capital Reserve Account (ININS) on amalgamation	1,800	—
	10,971	9,171

Revaluation Reserve Account :

Per last Balance Sheet	76,958	79,153
Transferred from Revaluation Reserve Account (ININS) on amalgamation	100,858	—
Transferred to Profit and Loss Account	(3,038)	(2,195)
Adjustment on account of assets sold	(1,514)	—
	173,264	76,958
Carried Forward	184,235	86,129

As at 31 December 2001	(Rs in Thousands)	
	2001	2000
Schedule 2 - Reserves and Surplus (Contd.)		
Brought Forward	184,235	86,129
Share Premium Account :		
Per last Balance Sheet	552,174	552,174
Transferred from Share Premium Account (ININS) on amalgamation	<u>41,816</u>	<u>—</u>
	593,990	552,174
Foreign Projects Reserve Account :		
Per last Balance Sheet	76,500	58,000
Transferred from Profit and Loss Account	5,000	22,000
Transferred to General Reserve Account	<u>(3,000)</u>	<u>(3,500)</u>
	78,500	76,500
Debenture Redemption Reserve Account :		
Per last Balance Sheet	—	21,012
Transferred to General Reserve Account	<u>—</u>	<u>(21,012)</u>
	—	—
General Reserve Account :		
Per last Balance Sheet	2,590,640	2,306,128
Adjustments on account of the amalgamation of INTRO, ININS, INSEB and INEBA with the Company:		
Transfer from General Reserve Account :		
INTRO	76,183	—
ININS	2,100	—
INSEB	<u>2,562</u>	<u>—</u>
	80,845	—
Transfer from Profit and Loss Account :		
ININS	(153,320)	—
INSEB	19,556	—
INEBA	<u>(1,945)</u>	<u>—</u>
	(135,709)	—
Surplus/(deficit) arising on amalgamation :		
INTRO	1,260	—
ININS	34,454	—
INSEB	(1,181)	—
INEBA	<u>36,923</u>	<u>—</u>
	71,456	—
Adjustments for differences in accounting policies of INTRO, ININS, INSEB and INEBA with the Company		
	<u>(31,236)</u>	<u>—</u>
	(14,644)	—
Adjustment on account of accumulated Net Deferred Tax Liability as on 1 January 2001		
	(152,693)	—
Transferred from Debenture Redemption Reserve Account	—	21,012
Transferred from Foreign Projects Reserve Account	3,000	3,500
Transferred from Profit and Loss Account	<u>450,000</u>	<u>260,000</u>
	2,876,303	2,590,640
Profit and Loss Account :		
Balance Carried Forward	<u>245,630</u>	<u>249,906</u>
	<u>3,978,658</u>	<u>3,555,349</u>

As at 31 December 2001

(Rs in Thousands)
2001 2000

Schedule 3 - Secured Loans

From Banks :

Cash Credit/Overdraft (against hypothecation of stocks, stores and book debts)	—	114,972
---	---	---------

Schedule 4 - Unsecured Loans

Fixed Deposits	857	2,517
Less: Liability to the account of transferee company on demerger of the power generation business	—	602
	857	1,915
Other Loans		
- Sales tax deferral	75,085	43,827
- Others	—	5,447
(Due within one year Rs 798 thousand - Previous Year Rs 1,269 thousand)		
Less: Liability to the account of transferee company on demerger of the power generation business	—	558
	75,085	48,716
	75,942	50,631

Schedule 5 - Fixed Assets

(Figures in brackets are in respect of the previous year)

Description	Cost/ Revaluation as at 1 January 2001	Additions on Amalgama- tion	Other Additions/ Adjust- ments	Deductions/ Adjust- ments	Cost/ Revaluation as at 31 December 2001	Addition to Accumulated Depreciation on Amalgamation	Deprecia- tion for the year	Total Deprecia- tion upto 31 December 2001	Net Block As at 31 December 2001
Freehold Land	69,861 (69,861)	71,570 (—)	— (—)	— (—)	141,431 (69,861)	— (—)	— (—)	— (—)	141,431 (69,861)
Leasehold Land	2,005 (2,005)	227 (—)	— (—)	— (—)	2,232 (2,005)	— (—)	7 (7)	180 (173)	2,052 (1,832)
Leasehold Improvements	35,258 (33,444)	— (—)	359 (1,814)	— (—)	35,617 (35,258)	— (—)	5,680 (5,434)	13,960 (8,280)	21,657 (26,978)
Factory Buildings	276,116 (286,703)	32,112 (—)	1,465 (3,841)	— (14,428)	309,693 (276,116)	7,940 (—)	10,070 (9,024)	103,814 (85,804)	205,879 (190,312)
Other Buildings	64,610 (50,178)	31,422 (—)	2,728 (15,634)	2,391 (1,202)	96,369 (64,610)	7,330 (—)	1,857 (1,169)	25,010 (16,355)	71,359 (48,255)
Residential Quarters	13,565 (8,016)	— (—)	— (5,549)	— (—)	13,565 (13,565)	— (—)	225 (199)	3,308 (3,083)	10,257 (10,482)
Plant and Machinery	1,703,911 (1,555,524)	145,081 (—)	77,846 (164,843)	28,767 (16,456)	1,898,071 (1,703,911)	78,664 (—)	126,047 (114,486)	955,508 (776,195)	942,563 (927,716)
Furniture and Fixtures	88,982 (90,676)	12,662 (—)	5,814 (1,757)	2,682 (3,451)	104,776 (88,982)	8,235 (—)	2,812 (2,997)	68,927 (59,326)	35,849 (29,656)
Vehicles	7,396 (8,883)	7,088 (—)	1,409 (315)	2,934 (1,802)	12,959 (7,396)	3,376 (—)	966 (628)	7,548 (4,472)	5,411 (2,924)
Technical Know- How Fees	222,371 (207,974)	— (—)	9,191 (20,274)	— (5,877)	231,562 (222,371)	— (—)	20,612 (23,542)	183,467 (162,855)	48,095 (59,516)
Capitalised Software	70,363 (52,364)	— (—)	6,792 (18,799)	— (800)	77,155 (70,363)	— (—)	14,791 (12,317)	36,241 (21,450)	40,914 (48,913)
	2,554,438 (2,365,628)	300,162 (—)	105,604 (232,826)	36,774 (44,016)	2,923,430 (2,554,438)	105,545 (—)	183,067 (169,803)	1,397,963 (1,137,993)	1,525,467 (1,416,445)
Assets Acquired Under Finance Lease									
Plant and Machinery	— (—)	— (—)	31,360 (—)	— (—)	31,360 (—)	— (—)	2,167 (—)	2,167 (—)	29,193 (—)
Vehicles	— (—)	— (—)	7,840 (—)	— (—)	7,840 (—)	— (—)	287 (—)	287 (—)	7,553 (—)
	2,554,438 (2,365,628)	300,162 (—)	144,804 (232,826)	36,774 (44,016)	2,962,630 (2,554,438)	105,545 (—)	185,521 (169,803)	1,400,417 (1,137,993)	1,562,213 (1,416,445)
Capital Work in Progress and Advances on Capital Account									11,624 (11,930)
									1,573,837 (1,428,375)

Notes:

- 1 Certain freehold and leasehold land, factory and other buildings and residential quarters were revalued during 1985, 1986 and 1996.
- 2 Residential Quarters include cost of shares in Lotus Court Private Limited Rs 56 thousand.

As at 31 December 2001	(Rs in Thousands)	
	2001	2000
Schedule 6 - Investments (Long term)		
At Cost :		
Trade –		
Quoted :		
249,997 Equity Shares of Rs 10 each fully paid in National Switchgears Limited	2,500	2,500
280,500 Equity Shares of Rs 10 each fully paid in Integra Hindustan Control Limited	2,805	2,805
Unquoted :		
286,428 Equity Shares of Rs 10 each fully paid in Seshasayee Industries Limited	—	2,745
10,000 (Previous year - Nil) Equity Shares of Rs 10 each fully paid up in Haryana Oxygen Limited	100	—
Non Trade –		
Government Securities:		
Quoted :		
6.5% Central Government Loan 2005	26	26
Unquoted :		
12 Year National Savings Certificates	11	11
12 Year National Defence Certificates	2	3
7 Year National Savings Certificates	7	7
5½ Year Indira Vikas Patras	16	19
8.7% 5 Year Cumulative Non-Convertible Redeemable Bond of Rural Electrification Corporation Limited	<u>52,894</u>	—
	52,956	66
Others :		
Unquoted:		
496,320 units of Rs 10 each fully paid up in Unit Trust of India	6,678	6,678
1,000 Shares of Rs 25 each fully paid up in Co-operative Bank of Baroda	25	25
14% Secured Redeemable Non-Convertible Debentures - 2001 of Wachovia Investments Private Limited	67,000	90,000
2,500 (Previous Year - Nil) Equity Shares of Rs 10 each fully paid up in Citizen Co-operative Bank Limited	25	—
6.5% Non-Redeemable Debentures of Bengal Chamber of Commerce and Industry	<u>2</u>	<u>2</u>
	132,091	104,821
Less: Provison for diminution in the value of Investments	<u>4,313</u>	<u>5,245</u>
	<u>127,778</u>	<u>99,576</u>
Notes :		
Quoted Investments aggregate (Market value Rs 10,369 thousand; Previous Year - Rs 10,020 thousand)	5,331	5,331
Unquoted Investments aggregate	126,760	99,490

(Rs in Thousands)

As at 31 December 2001 2001 2000

Schedule 7 - Inventories

Stores and Maintenance Spares	7,031	3,284
Raw Materials	62,009	70,087
Components	607,511	518,409
Finished Goods	65,049	65,549
Work and Contracts-in-progress	462,858	471,497
	1,204,458	1,128,826
	1,204,458	1,128,826

Schedule 8 - Sundry Debtors

Unsecured :		
Debts outstanding for a period exceeding six months		
- Considered Good	1,190,485	1,241,800
- Considered Doubtful	201,799	162,565
	1,392,284	1,404,365
Other Debts - Considered Good	3,017,075	2,948,231
	4,409,359	4,352,596
Less: Provision for Doubtful Debts	201,799	162,565
	4,207,560	4,190,031
	4,207,560	4,190,031

Schedule 9 - Cash and Bank Balances

Cash and Cheques on hand	22,099	10,611
Balances with Scheduled Banks		
- On Current Account	830,817	279,147
- On Deposit Account	567,498	3,227
- On Margin Account	4,741	669
	1,403,056	283,043
	1,425,155	293,654

(Rs in Thousands)

As at 31 December 2001 2001 2000

Schedule 10 - Loans and Advances

Loans, Considered Good :			
Secured	985		724
Unsecured	478		2,251
		<u>1,463</u>	<u>2,975</u>
Advances recoverable in cash or in kind or for value to be received :			
Unsecured - Considered Good	661,632		521,411
- Considered Doubtful	14,980		25,550
	<u>676,612</u>		<u>546,961</u>
Less: Provision for Doubtful Advances	14,980		25,550
		<u>661,632</u>	<u>521,411</u>
Interest Accrued on Investments and Fixed Deposits		12,212	8,717
Advance Tax (net of provision)		188,314	126,625
Balances with Customs, Port Trusts and Excise authorities on Current Account		44,569	100,981
		<u>908,190</u>	<u>760,709</u>

Schedule 11 - Current Liabilities

Acceptances		574,728	49,690
Sundry Creditors			
Due to Small Scale Industrial Undertakings	132,395		129,098
Others	3,418,892		2,853,069
		<u>3,551,287</u>	<u>2,982,167</u>
Advance Payments from Customers		361,621	473,963
Unclaimed Dividends		4,527	4,219
Unclaimed Debentures		1,230	1,747
Interest Accrued but not due on Loans		—	354
		<u>4,493,393</u>	<u>3,512,140</u>

Schedule 12 - Provisions

Proposed Dividend		207,092	207,092
Corporate Dividend Tax thereon		21,123	46,803
		<u>228,215</u>	<u>253,895</u>

For the year ended 31 December 2001

Schedule 13 – Capacities, Production, Stock and Turnover (Refer Note 12 to the Accounts)

(Figures in brackets are in respect of previous year)

Class of goods	Annual Capacities		Opening Stock of Finished Goods		Production of Finished Goods		Closing Stock of Finished Goods		Turnover of Finished Goods	
	Quant. Denom.	Installed	Quantity	Rupees in Thousands	Quantity	Quantity	Rupees in Thousands	Quantity	Rupees in Thousands	
Motors/Alternators/Generators upto 20 MW	HP	450,000 (450,000)	44,891 (44,845)	31,681 (28,481)	486,694 (452,767)	62,517 (44,891)	43,389 (31,681)	437,160 (419,802)	380,432 (359,052)	
Switchgear of all types	Nos.	642,333 (642,333)	13,302 (20,329)	7,330 (13,786)	415,990 (580,636)	10,216 (13,302)	3,852 (7,330)	409,062 (576,908)	2,614,930 (2,336,970)	
PLCC Equipment	Nos.	2,850 (2,850)	— (—)	— (—)	998 (1,297)	— (—)	— (—)	983 (1,087)	193,475 (161,067)	
Measurand Convertors	Nos.	90,000 (90,000)	620 (—)	4,183 (—)	53,959 (26,765)	— (620)	— (4,183)	52,058 (24,201)	348,717 (163,597)	
Multiplexures	Nos.	50 (—)	— (—)	— (—)	5 (—)	— (—)	— (—)	5 (—)	7,156 (—)	
Telemetry Equipment	Nos.	150 (150)	— (—)	— (—)	9 (20)	— (—)	— (—)	9 (20)	5,164 (8,159)	
Turbochargers	Nos.	150 (150)	— (—)	— (—)	150 (134)	— (—)	— (—)	150 (134)	177,659 (163,858)	
Power Transformers	MVA	4,000 (4,000)	— (—)	— (—)	1,215 (255)	— (—)	— (—)	1,215 (255)	277,470 (39,492)	
Traction Transformers	Nos.	15 (15)	— (—)	— (—)	4 (3)	— (—)	— (—)	4 (3)	39,265 (28,150)	
Electronic Control and Supply Units for Variable Speed Drives and other applications	Nos.	10,000 (5,000)	— (—)	— (—)	6,276 (2,586)	— (—)	— (—)	6,276 (2,586)	520,998 (356,500)	
Mini Computer/Microprocessor based Systems	Value Rs. in Thousands	500,000 (200,000)	— (—)	— (—)	338,513 (168,831)	— (—)	— (—)	— (—)	338,513 (168,831)	
Non-Microprocessor Based Electronics (Analog and Digital) for Weighing, Batching and Force Measuring Systems and Sub-Systems	Value Rs. in Thousands	70,000 (70,000)	— (—)	— (—)	— (12,792)	— (—)	— (—)	— (—)	— (12,792)	
Power Capacitors of all types	MVAR	2,700 (1,500)	— (—)	— (—)	2,722 (1,081)	— (—)	— (—)	2,722 (1,081)	201,056 (75,250)	
Pollution and Environment Control Equipment	Nos.	10,562 (10,562)	244 (284)	2,226 (530)	3,414 (3,663)	162 (244)	2,596 (2,226)	3,496 (3,703)	242,922 (364,793)	
Robotics	Nos.	15 (15)	— (—)	— (—)	6 (9)	— (—)	— (—)	6 (9)	12,982 (46,591)	
Control Valves	Nos.	2,750 (—)	— (—)	— (—)	284 (—)	— (—)	— (—)	284 (—)	14,294 (—)	
Gas Analysers and Systems	Nos.	300 (—)	— (—)	— (—)	64 (—)	— (—)	— (—)	64 (—)	62,509 (—)	
Process Control Instruments	Nos.	24,975 (—)	— (—)	— (—)	9,796 (—)	450 (—)	6,085 (—)	9,616 (—)	217,141 (—)	
Others				766 (735)			— (766)		639,210 (866,127)	
Project Items				19,363 (20,376)			9,127 (19,363)		3,589,967 (2,405,278)	
Erection and Other Services									532,130 (376,271)	
				65,549 (63,908)			65,049 (65,549)		10,415,990 (7,932,778)	

Note: The Company's products are exempt from licensing requirement under the industrial policy by virtue of notification No. 477 (E) of 25.07.91

	(Rs in Thousands)	
For the year ended 31 December 2001	2001	2000
Schedule 14 - Other Income		
Income from Trade Investments		
Dividend	505	—
Income from Non-Trade Investments		
Dividend	515	686
Interest (Tax deducted at source Rs Nil, - Previous year Rs 792 thousand)	2,724	9,504
	3,239	10,190
Interest		
On Deposits with Banks (Tax deducted at source Rs 783 thousand, Previous year Rs 186 thousand)	5,143	2,672
Others	1,895	1,977
	7,038	4,649
Profit on Sale of Fixed Assets (net)	52,715	5,481
Miscellaneous Income	78,092	115,392
	141,589	135,712
Schedule 15 - Personnel Expenses		
Salaries, Wages and Bonus	780,762	696,435
Contribution to Gratuity Fund	54,502	21,771
Contribution to Provident and Other Funds	64,898	59,159
Workmen and Staff Welfare Expenses	200,130	199,779
Other Personnel Expenses	30,105	42,253
	1,130,397	1,019,397
Schedule 16 - Other Expenses		
Tools and Stores	148,005	117,366
Royalty	36,944	25,091
Freight and Forwarding	54,767	22,498
Postage, Telephone and Telex	117,359	121,985
Commission and Discount	90,225	79,076
Power, Fuel and Water	93,438	86,558
Travelling and Conveyance	256,734	228,269
Insurance	39,098	41,796
Rates and Taxes	34,347	21,857
Rent	95,591	104,795
Repairs : Buildings	8,609	19,136
Plant and Machinery	42,123	42,856
Others	13,261	10,022
Provision for Doubtful Debts and Advances	1,670	(52,859)
Bad Debts / Advances Written Off	87,915	84,282
Provision for Diminution in the Value of Investments	(4,256)	—
Investments Written Off	5,970	—
Printing and Stationery	28,496	28,690
Bank Charges	49,712	43,452
Legal and Professional	27,516	20,828
Miscellaneous	348,218	204,828
	1,575,742	1,250,526

Schedule 17 - Notes to the Accounts

1. Significant Accounting Policies

1.1 Basis of Preparation of Financial Statements

These financial statements have been prepared on the accrual basis of accounting, under the historical cost convention, except for revaluation of certain fixed assets, and in accordance with the Companies Act, 1956 and the applicable accounting standards issued by the Institute of Chartered Accountants of India.

In preparing and presenting these financial statements the Company has, for the first time, adopted the following Accounting Standards recently issued by the Institute of Chartered Accountants of India:

- Accounting Standard 17 – Segment Reporting;
- Accounting Standard 18 – Related Party Disclosures;
- Accounting Standard 19 – Leases;
- Accounting Standard 20 – Earnings Per Share; and
- Accounting Standard 22 – Accounting for Taxes on Income

Accounting Standards 17, 18, 20 and 22 have been adopted with effect from 1 January 2001, whereas Accounting Standard 19 has been adopted with effect from 1 April 2001.

1.2 Fixed Assets

Cost of fixed assets comprises purchase price, duties, levies and any directly attributable cost of bringing the asset to its working condition for the intended use. Borrowing costs related to the acquisition or construction of the qualifying fixed assets for the period up to the completion of their acquisition or construction are included in the book value of the assets.

Capitalised software includes costs on Enterprise Resource Planning (ERP) Project and other costs relating to software, which provide significant future economic benefits. ERP Project costs comprise licence fees and cost of system integration services.

All costs relating to upgradations/enhancements are generally charged off as revenue expenditure unless they bring significant additional benefits of lasting nature.

Assets acquired under finance lease from 1 April 2001 are capitalised at the lower of their fair value and the present value of the minimum lease payments.

1.3 Depreciation/Amortisation

Depreciation on assets (except those described below) is provided on the straight line method at the rates and in the manner prescribed in Schedule XIV to the Companies Act, 1956.

The following assets are amortised on the straight line method over a period of their estimated useful lives:

- Leasehold assets over the period of the lease.
- Technical know-how fees over a period of six years from the year in which they become payable.
- Capitalised software costs over a period of five years.

1.4 Investments

Long term investments are valued at cost. Provision is made for any permanent diminution in the value of investments.

1.5 Inventories

Inventories are stated at the lower of cost and net realisable value. The cost of various categories of inventories is arrived at as follows:

- Stores, spares, raw materials and components - at rates determined on the weighted average method.
- Work-in-progress and finished goods - at full absorption cost method based on annual average cost of production. Excise duty is included in the value of finished goods inventory.
- Packing materials, loose tools and consumables are charged off at the point of purchase.

Provision for obsolescence is made wherever necessary.

1.6 Retirement Benefits

Contributions to Provident Fund/Superannuation Fund are made at pre-determined rates to the Provident Fund Trust/Superannuation Fund Trust and charged to the profit and loss account.

Contributions to the Gratuity Fund and provision for leave encashment are made on the basis of actuarial valuations and charged to the profit and loss account.

1.7 Revenue Recognition

- Sales of products and services are recognised on despatch of goods or when the services are rendered. Sales are stated at contractual realisable values, net of excise duty, sales tax and trade discounts.
- Revenues from long term contracts are recognised on the percentage of completion method. Corresponding contract costs are recognised in a manner such that the profit recognised is the lower of the actual cumulative profit realised and overall expected contract margin, based on technical and other estimates.
- Full provision is made for any loss in the year in which it is first foreseen.
- Liquidated damages/penalties are provided for wherever there is a delayed delivery.
- Commission income is recognised as per contracts/receipt of credit note.
- Dividend income is recognised when the right to receive dividend is established.
- Interest income is recognised on the time proportion method.

1.8 Warranties

Provision for the estimated liability in respect of warranty costs is made in the year in which the revenues are recognised, based on technical evaluation and past experience.

1.9 Research and Development

All revenue expenses pertaining to research and development are charged to the profit and loss account in the year in which they are incurred

and expenditure of capital nature is capitalised as fixed assets.

1.10 Foreign Currency Transactions

Foreign currency transactions are recorded by applying the respective monthly average rates. Exchange differences arising on foreign currency transactions settled during the year are recognised in the profit and loss account for the year, other than exchange differences related to the liabilities for acquisition of fixed assets that are adjusted to the cost of the related fixed assets.

All foreign currency denominated monetary assets and liabilities are translated at the exchange rates prevailing on the balance sheet date. The resultant exchange differences are recognised in the profit and loss account for the year, other than exchange differences related to the liabilities for acquisition of fixed assets that are adjusted to the cost of fixed assets.

1.11 Taxation

Provision for Income-tax is made on the basis of the results of the year although the actual liability will be computed and paid on the basis of the results for the year ending 31 March 2002.

In accordance with Accounting Standard 22 – Accounting for Taxes on Income, issued by the Institute of Chartered Accountants of India, the deferred tax for timing differences between the book and tax profits for the year is accounted for using the tax rates and laws that have been enacted or substantively enacted as of the balance sheet date.

Deferred tax assets arising from temporary timing differences are recognised to the extent there is reasonable certainty that the assets can be realised in future.

The accumulated net deferred tax liability arising on account of timing differences as on 1 January 2001 has been debited to the General Reserve Account.

2 Amalgamation

2.1 The High Courts of Judicature at Mumbai and Chandigarh have approved on 9 November 2001 and 22 November 2001 respectively, the Arrangement as embodied in the Scheme of Amalgamation ("the Scheme") of the erstwhile Introl (India) Limited ("INTRO"), ABB Instrumentation Limited ("ININS"), ABB Lenzohm Service Limited ("INSER") and ABB Analytical Limited ("INEBA"), the transferor companies, with the Company (INABB), the transferee Company. On complying with the requisite formalities by the Company, the Scheme became effective on 24 December 2001 ("the effective date"), operative retrospectively from 1 April 2001, the Appointed date as per the Scheme. Accordingly, the whole of the undertakings of the transferor companies transferred to and vested in the Company as a going concern and the transferor companies, without any further act, stand dissolved without winding up.

2.2 INTRO, ININS and INEBA were in the business of manufacturing and sale of actuators and control valves, process control instruments and analytical instruments respectively. INSER was mainly engaged in servicing of rotating machines and transformers.

2.3 The amalgamation has been accounted for under the "pooling of interests" method and the specific provisions of the Scheme. Accordingly, all the assets, liabilities and reserves of the transferor companies as on 1 April 2001 have been recorded by the Company at their respective carrying amounts. These values were adjusted for the following differences in the accounting policies of the transferor companies, the impact of which has been adjusted against the General Reserve Account of the Company :

- Rs 16,929 thousand being the write back for the cumulative impact arising on a change in the method of providing depreciation on fixed assets from the written down value to the straight line method, in the case of ININS and INSER;
- Rs 13,150 thousand being the write off of the unamortised portion of expenses on voluntary retirement scheme, carried forward by ININS as "Miscellaneous expenditure" in its balance sheet;
- Rs 46,167 thousand being the amount provided for in respect of a disputed liability in the case of ININS; and
- Rs 11,152 thousand being the accumulated net deferred tax asset on the timing differences as of 1 April 2001, between the book and tax profits of all transferor companies, including the timing differences resulting from the aforesaid adjustments.

2.4 Upon the Scheme coming into effect, in consideration of the transfer of and vesting of the undertakings of the transferor companies in the transferee Company,

- i) 963,319 equity shares of Rs 10 each fully paid up of the Company (New Equity Shares) have been issued and allotted as on 31 December 2001 as follows:
 - a) 234,000 New Equity Shares to the equity share holders of INTRO (13 New Equity Shares for every 2 equity shares of Rs 100 each held in INTRO)
 - b) 172,271 New Equity Shares to the equity share holders of ININS (1 New Equity Share for every 21 equity shares of Rs 10 each held in ININS)
 - c) 249,356 New Equity Shares to the equity share holders of INSER (19 New Equity Shares for every 1 equity share of Rs 100 each held in INSER)
 - d) 307,692 New Equity Shares to the equity share holders of INEBA (1 New Equity Share for every 13 equity shares of Rs 10 each held in INEBA)The new equity shares issued and allotted as above shall in all respects rank *pari passu* with the existing equity shares of the Company except they shall not be entitled to dividend declared for the year 2001.

- ii) 750,000, 11% redeemable 10 year cumulative preference shares of Rs 100 each fully paid of the Company were issued and allotted as on 31 December 2001 to the preference shareholders of ININS in lieu of 750,000, 15 % redeemable 10 year cumulative preference shares of Rs. 100 each held by them in ININS. The redemption period for these new preference shares will be the

remaining period at the date of allotment till completion of 10 years from the date that the shares were originally issued by ININS.

- 2.5 Rs 71,456 thousand being the excess of the value of the assets over the value of the liabilities of the transferor companies, after adjusting for the aggregate face value of the new shares issued by the Company as above, has been credited to General Reserve Account of the Company, in accordance with the Scheme.
- 2.6 With effect from the Appointed Date, all debts, liabilities, duties and obligations of the transferor companies as on the close of business on the date preceding the Appointed Date, whether or not provided in the books of the transferor companies and all liabilities which arise or accrue on or after the Appointed Date shall be deemed to be the debts, liabilities, duties and obligations of Company.
- 2.7 In view of the amalgamation of INTRO, ININS, INSER and INEBA with the Company effective from 1 April 2001, the figures of the current year are not directly comparable to those of the previous year. The Company's results for the current year include Sales of Rs 456,576 thousand and Profit Before Tax of Rs 62,831 thousand (including profit of Rs 54,856 thousand on sale of land and building) for the period 1 April 2001 to 31 December 2001 attributable to the transferor companies. Net current assets as at 31 December 2001 include Inventories Rs 119,589 thousand, Sundry Debtors Rs 223,390 thousand, and current liabilities Rs 220,199 thousand attributable to the transferor companies.

	2001	2000
3 Earnings Per Share		
a) Calculation of Weighted Average number of Equity Shares of Rs 10 each		
Number of shares at the beginning of the year	41,418,356	41,418,356
Shares issued on 31 December 2001 to shareholders of ININS, INTRO, INSER and INEBA on their amalgamation with the Company (Appointed date of amalgamation 1 April 2001)	963,319	—
Total number of equity shares outstanding at the end of the year	42,381,675	41,418,356
Equity shares outstanding for three months	41,418,356	—
Equity shares outstanding for nine months	42,381,675	—
Weighted Average number of equity shares outstanding during the year	42,140,845	41,418,356
b) Net profit after tax available for equity Shareholders (Rs in thousand)	653,259	540,115
c) Basic and Diluted Earnings (in Rupees) Per Share	15.50	13.04

4. Segment Information

A) Primary Segment Reporting (by Business Segments)

i) Composition of Business Segments

The Company's business segments are organised around customers on industry and product lines as under:

Utilities (UT) Segment manufactures, engineers, supplies and provides solutions for high voltage and medium voltage substations, power line carrier communication equipments, relay control panels, networking management and services to utilities.

Process Industries (PI) Segment serves the chemical, pharmaceutical, petroleum, gas, marine, metals, minerals, mining, cement, pulp, paper and printing industries with a variety of power, automation and unique process industry technology products.

Manufacturing and Consumer Industries (MC) Segment sells air handling equipment and provide solutions for industrial and environmental processes.

Power Technology Products (PT) Segment produces power transformers, switchgears, breakers, capacitors as well as other products and technologies for high and medium voltage applications.

Automation Technology Products (AT) Segment provides products, systems, software and services for the automation and optimisation of discrete, process and batch manufacturing operations and related business aspects. Key technologies include measurement control, instrumentation, process analysis, drives and motors, power electronics, robots and low voltage products, all geared towards a common industrial IT architecture.

ii) Inter Segment Transfer Pricing

Inter Segment prices are normally negotiated amongst the segments with reference to the costs, market prices and business risks, within an overall optimisation objective for the Company.

As at / For the year ended 31 December 2001

(Rs in Thousands)

iii) Segment Revenues, Results and Other Information

	UT	PI	MC	PT	AT	Total of Reportable Segments
External sales	3,165,272	1,643,140	801,991	2,349,874	2,426,408	10,386,685
Inter Segment Sales	30,982	690	6,608	405,405	526,219	969,904
Other Income	17,383	659	3,670	14,861	73,070	109,643
Segment Revenues	<u>3,213,637</u>	<u>1,644,489</u>	<u>812,269</u>	<u>2,770,140</u>	<u>3,025,697</u>	<u>11,466,232</u>
Segment Results	349,332	141,662	2,777	200,715	345,300	1,039,786
Segment Assets	1,984,967	919,881	553,655	2,155,231	1,886,989	7,500,723
Segment Liabilities	1,291,157	670,969	491,750	972,909	933,022	4,359,807
Capital Expenditure	11,335	11,329	3,960	20,210	31,422	78,256
Depreciation / Amortisation	15,568	7,876	8,907	67,179	44,981	144,511

iv) Reconciliation of Reportable Segments with the Financial Statements

(Rs in Thousands)

	Revenues	Results/Net Profit	Assets	Liabilities
Total of Reportable Segments	11,466,232	1,039,786	7,500,723	4,359,807
Corporate - Unallocated/ Others (net)	61,251	(116,435)	1,946,255	500,872
Inter Segment Sales	(969,904)	—	—	—
Interest Expenses	—	(72,562)	—	—
Taxes	—	(197,530)	—	—
As per Financial Statements	<u>10,557,579</u>	<u>653,259</u>	<u>9,446,978</u>	<u>4,860,679</u>

B) Secondary Segment Reporting (by Geographical Segments)

(Rs in Thousands)

	Domestic	Exports	Total
Revenues	9,752,837	804,742	10,557,579
Total Assets	9,446,978	—	9,446,978
Capital Expenditure	143,062	—	143,062

5. Debentures

Unclaimed debentures are reported under Schedule 11 – Current Liabilities. These debentures are secured by a first charge created over certain immovable assets at Bangalore and Nashik ranking pari-passu inter se with the charges created in favour of other institutions and a second charge over certain stocks, book debts and other movables, subject to prior charges in favour of the Company's bankers for securing its working capital requirements.

As at 31 December 2001

(Rs in Thousands)

	2001	2000
6. Amounts due from companies under the same management as defined in sub-section (1-B) of Section 370 of the Companies Act, 1956, are as under:		
a) Sundry Debtors		
- Universal ABB Power Cables Limited	—	4
b) Advances and Current Accounts		
- Universal ABB Power Cables Limited (Maximum amount due during the year Rs 391 thousand, previous year Rs 2,904 thousand)	30	260
- ABB Industrial IT Development Center Limited (Maximum amount due during the year Rs 332 thousand, previous year Rs Nil)	332	—
- ABB Holdings (South Asia) Limited (Maximum amount due during the year Rs 183 thousand, previous year Rs 885 thousand)	35	25

As at 31 December 2001	(Rs in Thousands)	
	2001	2000
7. Sundry creditors include amounts due to Small Scale Industrial Undertakings to the extent such parties have been identified from available information with the Company. Names of the Small Scale Industrial Undertakings to whom the Company owes a sum exceeding Rs 100 thousand which is outstanding for more than 30 days as at 31 December 2001 are as per attached Annexure.	132,395	129,098
8. Contingent Liabilities		
i) Claims against the Company not acknowledged as debts	209,981	192,917
ii) Bills discounted	176,342	106,139
The above excludes bills co-accepted by the customers' bankers/guaranteed by the State Governments	870,731	927,072
iii) Income tax matters in dispute	134,629	134,629
9. Estimated amount of contracts remaining to be executed on capital account and not provided for (net of advances)	31,200	12,656

10. Finance Lease Obligations

The Company normally acquires computers and vehicles under finance lease with the respective underlying assets as security. Minimum lease payments outstanding as of 31 December 2001 in respect of these assets are as under:

Due	Total Minimum Lease Payments outstanding as on 31 December 2001	Interest Not Due	Present Value of Minimum Lease Payments
Within one year	13,814	2,768	11,046
Later than one year and not later than five years	24,747	2,911	21,836
	<u>38,561</u>	<u>5,679</u>	<u>32,882</u>

11. Deferred Tax

i) The Company has adopted Accounting Standard 22 – Accounting for Taxes on Income with effect from 1 January 2001. The accumulated net deferred tax liability amounting to Rs 152,693 thousand on account of timing differences between book and tax profits as of 1 January 2001 has been debited to the General Reserve Account.

ii) The break up of net deferred tax liability as at 31 December 2001 is as under:

	Deferred tax asset	Deferred tax liability
Timing differences on account of:		
Difference between book depreciation and depreciation under the Income-tax Act, 1961		257,683
Expenditure under Section 43B of the Income-tax Act, 1961	16,482	
Lease Finance	11,739	
Provisions for doubtful debts and advances	77,390	
Others	13,001	
	<u>118,612</u>	<u>257,683</u>
Net Deferred Tax Liability		139,071

12. Capacities, Production, Stock and Turnover (Refer Schedule 13)

12.1 Capacities

- a) Installed capacities are as certified by the Managing Director, but not verified by the Auditors, being a technical matter.
- b) In terms of the Scheme of Amalgamation, facilities for the manufacture of Control Valves, Gas Analysers and Systems and Process Control Instruments have been transferred to the Company with effect from 1 April 2001.

- 12.2 Production
- a) Production of finished goods is inclusive of production for captive use.
- b) "Others" represent internally manufactured components, sold during the year. The Company considers these 'meant for sale' when actually sold. Since the quantitative denominations of these items are dissimilar, it is impracticable to disclose the quantitative information in respect of production and turnover.

12.3 Project items

- a) These comprise sale of trading items, equipment and miscellaneous items meant for execution of projects. Since the quantitative denominations of these items are dissimilar, it is impracticable to disclose the quantitative information in respect thereof.
- b) Purchases of these items during the year aggregated to **Rs 2,726,777 thousand** (Previous Year Rs 1,745,111 thousand).

12.4 Work and Contracts-in-Progress

The work and contracts-in-progress at the beginning of the year amounted to **Rs 471,497 thousand** (Previous Year Rs 372,121 thousand).

		(Rs in Thousands)	
For the year ended 31 December 2001		2001	2000
13. Earnings in Foreign Exchange			
(on accrual basis)			
i	Export of Goods		
	- Direct on FOB basis	684,857	369,621
	- Deemed Exports	1,397,153	181,965
ii	Goods supplied/services rendered locally against foreign exchange remittances	74,439	3,831
iii	Erection and other services	89,159	57,437
iv	Other Income:		
	a. Commission	23,235	28,989
	b. Freight/Insurance	—	471
	c. Service Fees	1,170	8,482
	d. Others	30,913	28,902
		2,300,926	679,698

14. Consumption of Raw Materials and Components

		Quantity	Rs in Thousands	Quantity	Rs in Thousands
Ferrous Metals	MT	3,069	138,474	2,965	137,770
Non-Ferrous Metals	MT	1,193	157,181	1,201	155,371
Components		*	3,393,986	*	2,591,295
Others			500,367		388,039
			4,190,008		3,272,475
		%		%	
Imported		42.31	1,772,675	38.51	1,260,071
Indigenously acquired		57.69	2,417,333	61.49	2,012,404
		100.00	4,190,008	100.00	3,272,475

For the purpose of para 4D (c) of Part II of Schedule VI to the Companies Act, 1956, components and spare parts are assumed to mean those incorporated in the product finally sold and not those used as spares for the repairs and maintenance of Plant and Machinery.

* Since the quantity denominations and the type of components are dissimilar in nature, it is impracticable to disclose the quantitative information in respect thereof.

For the year ended 31 December 2001		2001	(Rs in Thousands)	2000
15. Value of imports on CIF basis				
(on accrual basis)				
Raw Materials and Components		1,639,895		1,262,507
Maintenance Spare Parts		570		166
Capital Goods and Technical Know-How Fees		14,005		21,803
Software		10,341		4,273
Project items		218,359		70,468
		<u>1,883,170</u>		<u>1,359,217</u>
16. Expenditure in foreign currency				
(on accrual basis)				
Royalty and technical fees		58,242		30,321
Erection Services		1,284		3,075
Commission		3,683		817
Professional/Consultancy fees		16,446		10,511
Others		123,610		79,867
		<u>203,265</u>		<u>124,591</u>
17. Amount remitted during the year in foreign currency, on account of dividend				
i	Number of shareholders	3		3
ii	Number of equity shares held by them on which dividend was paid	21,120,879		21,120,879
iii	Year ended to which the dividend related	31 December 2000		31 December 1999
iv	Amount remitted	105,604		105,604
18. Managerial Remuneration				
a)	i	Directors' fee	175	194
	ii	Other remuneration		
		Salary	1,715	2,170
		Commission	1,105	1,085
		Contribution to Provident and other funds	541	692
		Other pequisites	1,997	2,522
			<u>5,358</u>	<u>6,469</u>
			<u>5,533</u>	<u>6,663</u>
b)	Computation of Net Profit as per Section 349 of the Companies Act, 1956			
		Profit Before Tax as per Profit and Loss Account	850,789	705,115
		Add: Managerial Remuneration	5,533	6,663
		Provision for doubtful debts/advances	1,670	(52,859)
			<u>7,203</u>	<u>(46,196)</u>
			<u>857,992</u>	<u>658,919</u>
		Less: Reversal of provision for diminution in the value of investment	4,256	—
			<u>853,736</u>	<u>658,919</u>
		Commission to the Managing Director and Whole-time Director	1,105	1,085
19. Auditors' Remuneration				
(excluding service tax)				
i	Audit Fee	2,975		1,600
ii	Tax Audit Fee	1,550		1,440
iii	Other Services	2,615		2,395
iv	Reimbursement of out of pocket expenses	548		491

20. Interest charge for the year includes **Rs 17,293 thousand** (Previous Year Rs 694 thousand) being interest on Debentures and Fixed period loans.
21. Net foreign exchange gain of **Rs 1,503 thousand** (Previous Year loss Rs 2,772 thousand) has been accounted for in the profit and loss account.
22. Research and development expenditure of **Rs 20,274 thousand** (Previous Year Rs 23,083 thousand) on revenue account has been incurred during the year.

23. Related Party Disclosures

a) List of Related Parties

Parties where control exists:

ABB Asea Brown Boveri Limited, Zurich (Holding Company)

Other Related parties with whom transactions have taken place during the year:

Fellow subsidiaries:

ABB Assist AB, Ludvika, Sweden,
 ABB Automation (Pty) Ltd., Sunninghill
 ABB Automation E.C., Bahrain
 ABB Automation GmbH, Germany
 ABB Automation Inc., USA
 ABB Automation Inc., Columbus, OH
 ABB Automation Ltd., UK
 ABB Automation Ltd., France
 ABB Automation Ltd., Hong Kong
 ABB Automation Ltd., Stevenage
 ABB Automation Ltd., Manor Royal, UK
 ABB Automation Ltd., Shropshire, UK
 ABB Automation Products AB
 ABB Automation Products GmbH, Eschborn
 ABB Automation Products GmbH, Germany
 ABB Automation Products, Sweden
 ABB Automation Systems GmbH, Germany
 ABB Automation Technology Products AB, Västerås
 ABB B.V., Netherlands
 ABB Business Services Ltd.
 ABB BV, Rotterdam
 ABB Calor EmagMittespannung GmbH, Germany
 ABB Calor EmagSchaltanlagen, Mannheim
 ABB Capacitors Ltd., Samutprakarn
 ABB Capital B.V. Business Operation, Switzerland
 ABB Components AB, Ludvika, Sweden
 ABB Control Oy, Finland
 ABB Control SAS Chassieu, France
 ABB Corporate Management Services AG, Zurich
 ABB Ejf S.R.O., Czech Republic
 ABB Energy Automation S.p.A., Milan
 ABB Energy Engineering Ltd, Zurich
 ABB Energy Information Systems GmbH
 ABB Engery Ventures B V, USA
 ABB Engineering (Shanghai) Ltd, Shanghai
 ABB Flexible Automation, New Berlin,
 ABB Group Processes Ltd., Zurich
 ABB High Voltage S.A.E, Cairo, Egypt
 ABB High Voltage Technologies Ltd., Zurich
 ABB Hochspannungstechnik AG, Zurich
 ABB Holdings (South Asia) Limited
 ABB Holding AS, Billingstad
 ABB Inc., Raleigh, USA
 ABB Industrial IT Development Center Limited
 ABB Industrie AG, Baden
 ABB Industries (L.L.C.), Dubai
 ABB Industries AG

ABB Industry KK Japan
 ABB Industry Oy Systems Group, Helsinki
 ABB Industry Pte. Ltd., Singapore
 ABB Instrumentation Ltd.
 ABB Instrumentation Ltd., St. Neots
 ABB Instrumentation S.p.A., Italy
 ABB International Marketing Services Ltd
 ABB IT Partner
 ABB Karebo Manufacturers (Pty) Ltd, South Africa
 ABB Kenya Ltd., Nairobi, Kenya
 ABB Kraft Distribution AS
 ABB Limited, Thailand
 ABB Ltd., Dubai
 ABB Ltd., Samutprakarn, Thailand
 ABB Ltd., Seoul
 ABB LTDA, Guarulhus, Brazil
 ABB Lummus Global GmbH, Mainz-Kastel
 ABB Lumus Heat Transfer B. V.
 ABB LV Installation Material, Beijing
 ABB Manufacturing & Consumer Industries AB, Västerås
 ABB Manufacturing & Consumer Industries GmbH, Friedberg
 ABB Motors AB, Vasteras, Sweden
 ABB Motors Oy, Vassa, Finland
 ABB Nordkomponent, Sollefteå
 ABB Power Automation Ltd., Turgi
 ABB Power T & D Co. Inc, Greensburg, USA
 ABB Power T&D Ltd, Stone
 ABB Power T&D Power, Tennessee, USA
 ABB Power T&D, USA
 ABB Power Technology Products AB
 ABB Power Technology Products, Sweden
 ABB Power Technology, Madrid Espana, Spain
 ABB Power Transmission AB
 ABB Process Analytics Inc., USA
 ABB Process Industries AB, Västerås
 ABB Relays AB, Vasteras, Sweden
 ABB S.G.P.S., Amadora, Portugal
 ABB Sace S.p.A., Italy
 ABB Schaltanlagentechnik, Germany
 ABB Secheron SA, Zurich, Switzerland
 ABB Semiconductors AG, Baden
 ABB Service AB, Västerås
 ABB Service Ltd, Camacari, Brazil
 ABB Service Oy,
 ABB Service Oy, Helsinki
 ABB Service Pty Ltd., Melbourne, Australia
 ABB Sistemas Industriales S.A., Spain
 ABB Solyvent Ventec SAS, Meyzieu France
 ABB Stotz Kontakt, GmbH, Germany

ABB Structured Finance, Zurich
 ABB Substation Automation Oy, Vassa, Finland
 ABB Support AB, Västerås
 ABB Switchgear AB, Ludvika, Sweden
 ABB T & D S.p.A. Sace
 ABB T&D Ltd.
 ABB Transformatoren GmbH, Germany
 ABB Transmission & Distribution Ltd., Australia
 ABB Transmit Oy., Vaasa, Finland
 ABB Trasmissione & Distribuzione S.p.A., Milan
 ABB Trasmissione & Distribuzione S.p.A., Lodi, Italy
 ABB Turbosystem AG, Baden
 ABB Turbocharger Services, Hamburg, Germany
 ABB Turbosystems AB, Switzerland
 ABB Utilities AB, Ludvika
 ABB Utilities GmbH, Mannheim
 ABB Utility Automation AG
 ABB Utility Automation GmbH, Mannheim
 ABB Vetco Gray UK Ltd.
 ABB Vietnam, Danang, Vietnam

ABB World Treasury
 ABB Xiamen Switchgear Co. Ltd.
 Asea Brown Boveri (Pty) Ltd., Gaborone, Botswana
 Asea Brown Boveri BV, Rotterdam
 Asea Brown Boveri Ltd., Petaling Jaya, Malaysia
 Asea Brown Boveri S. A., Brussels
 Asea Brown Boveri S.A. Amadora Portugal
 Asea Brown Boveri S.A., Chile
 Asea Brown Boveri., Lima, Peru
 AT - LV Systems, Västerås
 AT - Robotics, Västerås
 AT Control Västerås, Sweden
 Electronic Technology Systems Inc., Natrona Heights
 Elsag Bailey Automation, Wickliffe
 Introl Control Valve, USA
 Kraft & Wärme Gebäudesysteme GmbH, Vienna
 MC – Automotive Industries, Olofstrom
 PT Plast Pitea, Sweden
 Pucaro Electro Isolierstoffe GmbH
 Universal ABB Power Cables Limited

Associates:

Integra Hindustan Control Limited
 National Switchgears Limited

Directors:

Mr. K.N. Shenoy
 Mr. Ravi Uppal
 Mr. Vijay Karan
 Mr. Sune Karlsson
 Mr. K. K. Kaura
 Mr. Eric Drewery
 Mr. A. Ramamurthy

(Rs in Thousands)

2001

b) Transactions with related parties

i) Sales, Services and other income	
Fellow Subsidiaries	531,446
Associates	9,199
ii) Purchases of Raw Materials and Components	
Fellow Subsidiaries	1,364,429
iii) Expenditure on Royalty, Trade-mark, Technical and Consultancy Services	
Holding Company	72,912
Fellow Subsidiaries	36,944
iv) Expenditure on Other Services	
Fellow Subsidiaries	15,341
v) Capital expenditure for Technical Know-how	
Fellow Subsidiaries	9,191
vi) Outstanding balances as at 31 December 2001	
Debtors	
Holding Company	384
Fellow Subsidiaries	113,493
Associates	1,943
Creditors	
Holding Company	45,022
Fellow Subsidiaries	286,770

vii) Provision for doubtful advance written back	
Associates	16,558
viii) Amount written off during the year	
Associates (net of Rs 16,558 written back)	960
ix) Dividend Paid for the year 2000	
Holding Company	93,063
Fellow Subsidiaries	12,540
x) Shares Issued on amalgamation	
Holding Company – Equity Shares	9,633
Fellow Subsidiaries – Preference Shares	75,000
xi) Managerial Remuneration	5,533

24. Pursuant to the ABB Group's decision to sell worldwide air handling equipment business to Global Air Movement (Luxembourg) SARL, the Board of Directors of the Company in its meeting held on 20 February, 2002 has decided to divest Company's air handling equipment business, subject to the consent of the shareholders.
25. The figures of the previous year have been regrouped/reclassified, where necessary, to conform with the current year's classifications.

Signature to Schedules 1 to 17

For and on behalf of the Board

K. N. Shenoy	Chairman
Ravi Uppal	Managing Director
Vijay Karan	Director
Eric Drewery	Director
Peter Smits	Director
Nasser Munjee	Director
N.S. Raghavan	Director
K. Rajagopal	Vice President – Finance
Aashay S. Khandwala	Company Secretary

Mumbai, 20 February, 2002

Annexure to Schedule 17 – Notes to the Accounts (see Note 7)

Names of the Small Scale Industrial Undertakings to whom the Company owes a sum exceeding Rs 100 thousand which is outstanding for more than 30 days as at 31 December 2001.

Abhay Engineering Industries	Mary Fathima Cartons
Amey Innovatives	Mathur Corr-Tech Private Limited
Auto Shell Casts Private Limited	Mcroch and Company
Abak Electrofab Engineering Private Limited	Mehta Electronics
Abhiman Packing Industries	Metalcraft Engineering and Spring
Accutech Auto Private Limited	Micro Works
Agate Electroinsulants Private Limited	Minal Electrical and Engineering
Akshay Udyog	Monal Equipment Engineers Private Limited
Alan Electronic Systems Private Limited	Monarch Industries
Amba Industries	MPP Technologies Private Limited
Amruta Engineers and Galvanisers	Neelay Industries
Anil Metal Industries	Nitin Engineering Works
Anuja Enterprise	Oblum Electrical Industries Private Limited
Apex	Ohmark Control Private Limited
Arc Weld Engineers	Paarth Industries
Bajaj Nylon and Plastic	Pack Well
Banerjee Fabricators	Panchashil Industries
Benvin Systems	Par Excellence
Bethall Engineering Company	Paramount Seals and Packings
Bharat Timber	Perennial Elemech Fabricon
BL Electricals Private Limited	Polycab Industries
BSA Enterprises	Polycom Associates
Builders Industries	Pyrotech Electronics Private Limited
Canara Communication Systems	Power Electronics
Central Hardware Industries	PP Engineering
Copper Metal Corporation	Pranav Engineering Works
Creative Power Engineers (P) Limited	Pratima Engineering Works
Crystal Plastic Industries	Pritika Engineering Industries
Dalal Auto Cast	R.C. Das Engineering Private Limited
Dee Bee Enterprise	Rahul Enterprises
Desai Udyog	Ramani Enterprises
Dhananjay Metal Industries Private Limited	Ranu Fabricators
Dhruv Packaging and Engineers	Ratnaparkhi Electronics Industries
Diamond Engineering (Chennai) Private Limited	Resistro Enterprises
Diamond Fabricators	Rohit Industries
Dieco Pressings and Tools	Rollex Engineering Works
D.N. Engineers	Recherche Industries
Dynamic Industries	Sameer Paints
Easy Pack	S.R.R. Enterprises
Elcon Systems	Saini Engineering Works
Electrical Controls and Systems	Sameer Udyog
Electrohms Private Limited	Sanghvi Brothers
Electronic Relays India (P) Limited	Sans Electrolab
Electronic Technic	SAS Fabricators
Elmex Controls Private Limited	Sathesh Engineering
Empee Engineers	Satyam Engineering
Empkee Engineers (P) Limited	Sealvel Rubber Products (P) Limited
Engineers India Industries	Shkomin Services
Ercon Composites	Shree Meta Fab
Excel Engineering Private Limited	Shri Sagar Traders Mumbai
Excel Graphics Private Limited	Sindhu Cargo
Excelsior Enterprise	Sivasri Industries
Ferro-tic Dies and Moulds	SJPS Tools
Gyro Lab Private Limited	Shree Electrical and Engineering Company
Hind Tools	SNS Control Systems
Hindomech Engineers	Specialised Components Private Limited
Hybrid Metals Private Limited	Sri Ayyanar Engineering Works
Hyderabad Castings Limited	Sri Ganesh Switchgears Private Limited
Industrial Enterprises	Sri Satish Press Tools
Infos Control Systems	Stomy Engineering Works
Jayashree Electrodevices Private Limited	Sujatha Press Tools
Jayem Engineering	Sunrise Computers and Networks
Jupiter Engineering Works	Super Packers
Kabeer Engineering Works	Supreme Steel Industries
Kalpa Electrical Private Limited	Swaram Enginnering
Khandelwal Cables Limited	Switron Devices
KS Engineering Works	Symcom Engineers
KSK Engineering Company	Techno Control Engineering
Kee Auto Industries	Thermopads Private Limited
Modern Engineering Spring Company	Three M Technoplast
Multi Range Engineers	Trend Electric Company Private Limited
M.M. Fastners	Tru Tools
M.A. Durga Industries	Tushar Metals Private Limited
Madras Swastic Engineer (P) Limited	Uma Enterprises
Maharashtra Plastic and Engineering Industries	Vee Aar Engineers
Maruthi Microcomponents Private Limited	Vee Vee Controls (P) Limited
Light Industries	Venson Electric Company
Maruti Engineers	Vikas Industrial Products
Maruti Technical Services	Vim Sun Gears Private Limited
	Vinod Industries

Balance Sheet Abstract and Company's General Business Profile

I Registration Details

Registration No. State Code
 Balance Sheet Date
 Date Month Year

II Capital Raised during the year (Rs in Thousands)

Public Issue Rights Issue
 Bonus Issue Private Placement*

III Position of Mobilisation and Deployment of Funds (Rs in Thousands)

Total Liabilities Total Assets

Sources of Funds

Paid-up Capital Reserves and Surplus
 Secured Loans Unsecured Loans

Application of Funds

Net Fixed Assets Investments
 Net Current Assets** Misc. Expenditure
 Accumulated Losses

IV Performance of the Company (Rs in Thousands)

Turnover Total Expenditure
 +/- Profit/Loss Before Tax +/- Profit/Loss After Tax
 Earnings per Share in Rs Dividend Rate %

V Generic Names of Three Principal Products/Services of Company

(as per monetary terms)

Item Code No. (ITC Code)	85.35
Product Description	Switchgears of all types
Item Code No. (ITC Code)	85.04
Product Description	Electronic Control and Supply Units for Variable Speed Drives and other applications
Item Code No. (ITC Code)	85.01
Product Description	Motors/Alternators/Generators up to 20 MW

* Represents shares issued on amalgamation as per the Scheme of Amalgamation

** Net of deferred tax liability of Rs 139,071 thousand

Cash Flow Statement

For the year ended 31 December 2001	(Rs in Thousands)	
	2001	2000
A. Cash Flow from Operating Activities:		
Net Profit Before Tax	850,789	705,115
Adjustments for:		
Depreciation	182,483	167,608
Unrealised Gains on Restatement of Monetary Assets	(1,202)	(5,360)
Unrealised Losses on Restatement of Monetary Liabilities	1,204	9,474
Profit on Sale of Fixed Assets (net)	(52,715)	(5,481)
Interest Income	(9,762)	(14,153)
Dividends Received	(1,020)	(686)
Interest Expense	72,562	39,086
Provision for Diminution in the value of Investments	(4,256)	—
Investments Written Off	5,970	—
Preliminary and Pre-operative Expenses Written off	21	—
Operating Profit before Working Capital Changes	<u>1,044,074</u>	<u>895,603</u>
Movement in Working Capital:		
Decrease/(Increase) in Sundry Debtors	214,097	(470,628)
Decrease/(Increase) in Inventories	67,858	(200,832)
Decrease/(Increase) in Loans and Advances	(26,371)	(24,912)
Increase/(Decrease) in Current Liabilities	<u>761,450</u>	<u>437,245</u>
Cash Generated from Operations	<u>2,061,108</u>	636,476
Direct Taxes Paid (net of refunds)	<u>(260,538)</u>	<u>(224,482)</u>
Net cash from Operating Activities	<u><u>1,800,570</u></u>	<u><u>411,994</u></u>
B. Cash Flow from Investing Activities:		
Purchase of Fixed Assets	(143,064)	(175,965)
Proceeds from sale of Fixed Assets	68,059	14,000
Purchase of Investments	(52,894)	—
Sale/Maturity of Investments	23,004	10,009
Interest Received	6,823	5,436
Dividends Received	1,020	686
Cash and Cash Equivalents transferred from transferor companies on amalgamation	<u>(21,147)</u>	—
Net cash used in Investing Activities	<u><u>(118,199)</u></u>	<u><u>(145,834)</u></u>
C. Cash Flow from Financing Activities:		
Proceeds from new Borrowings	49,416	14,132
Repayment of Borrowings	(182,303)	(15,923)
Interest Paid	(74,796)	(39,871)
Dividend paid	<u>(228,215)</u>	<u>(229,872)</u>
Net Cash used in Financing Activities	<u><u>(435,898)</u></u>	<u><u>(271,534)</u></u>
Net Increase/(Decrease) in Cash and Cash Equivalents (A+B+C)	<u><u>1,246,473</u></u>	<u><u>(5,374)</u></u>

As at 31 December 2001	2001	2000
Cash and Cash Equivalents (Opening Balance)	178,682	184,056
Cash and Cash Equivalents (Closing Balance)	1,425,155	178,682
Components of Cash and Cash Equivalents as at	31-12-2001	31-12-2000
Cash and Cheques on Hand	22,099	10,611
Balances With Banks - on Current Account	830,817	279,147
- on Deposit Account	567,498	3,227
- on Margin Account	4,741	669
- Cash Credit/Overdraft	—	(114,972)
	<u>1,425,155</u>	<u>178,682</u>

Notes

1. Bank borrowings relating to working capital requirements are grouped under "Cash and Cash Equivalents" as the same form an integral part of the Company's Cash Management System.
2. The amalgamation of INTRO, ININS, INSERT and INEBA with the Company with effect from 1 April 2001 is cash neutral and does not effect the cash flow. In consideration of the transfer of and vesting of the undertakings of the transferor companies, share holders of transferor companies have been issued fully paid up equity and preference shares of the Company .
3. The figures of the previous year have been regrouped/reclassified, where necessary, to conform with the figures of the current year.

For and on behalf of the Board

K. N. Shenoy	Chairman
Ravi Uppal	Managing Director
Vijay Karan	Director
Eric Drewery	Director
Peter Smits	Director
Nasser Munjee	Director
N.S. Raghavan	Director
K. Rajagopal	Vice President – Finance
Aashay S. Khandwala	Company Secretary

Mumbai, 20 February, 2002

Auditors' Certificate

To

The Board of Directors
Asea Brown Boveri Limited
Plot No. 22A, Shah Industrial Estate
1st Floor, Off Veera Desai Road
Andheri (W)
Mumbai – 400 053

We have examined the attached Cash Flow Statement of Asea Brown Boveri Limited ("the Company") for the year ended 31 December 2001. The statement has been prepared by the Company in accordance with the requirement of listing agreement Clause 32 with the Stock Exchanges and is based on and in agreement with the corresponding profit and loss account and balance sheet of the Company covered by our report of even date to the members of the Company.

For Bharat S Raut & Co.
Chartered Accountants
Pradip Kanakia
Partner
Bangalore
20 February, 2002

