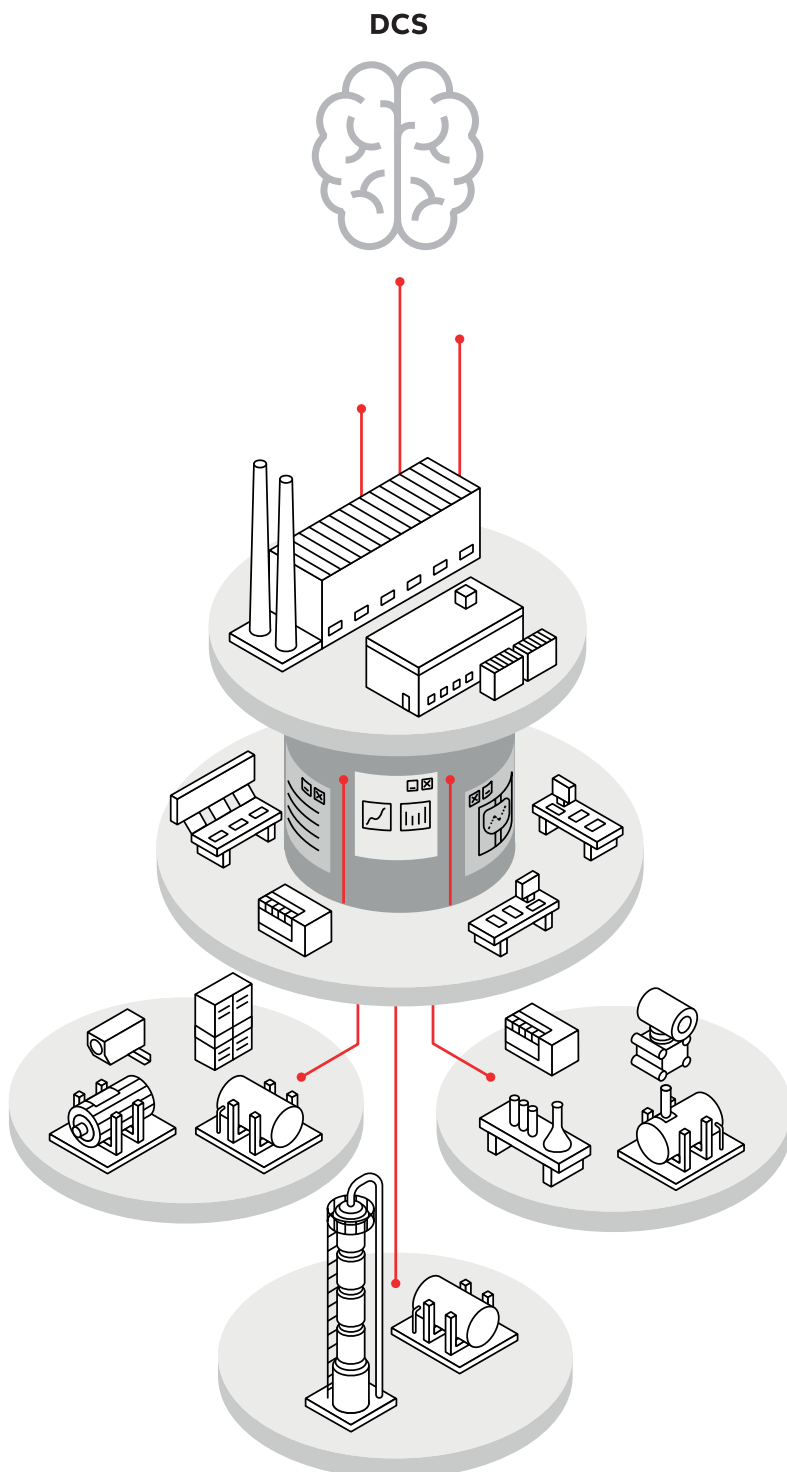


Distributed Control System (DCS)

Making a world of difference to industry



What is a Distributed Control System?

Central brain of the plant.

What is a DCS and what does it do?

Distributed Control Systems (DCS) can be found almost anywhere where there's a critical process to be monitored or controlled. A DCS, is a computerized system used to safely control industrial equipment for continuous and batch processes. The DCS is considered to be, the central brain of the plant, as it controls, automates and co-ordinates almost all aspects of production, to help optimize productivity, ensure quality and improve sustainability.

Distributed control systems are used for example in the chemical industry to safely convert raw materials into different products. DCS systems are also involved in all aspects of mining operations such as extraction, transportation, processing, and refining.

Distributed control systems remotely automate the way that industrial equipment like motors, valves and pumps operate, so everything runs safely and efficiently.

ABB Distributed Control Systems' core capabilities:



Safe & Secure

Ensure high production availability and output while protecting the safety of people and the environment.



Productive & efficient

The heart of plant-level digitalization, pushing asset utilization, process efficiency, and product quality.



Precise & sustainable

Significantly reduce environmental impact through tight control of plant energy & raw material consumption.

Process plant challenges met by Distributed Control System (DCS)

A distributed control system remotely automates the way that industrial equipment such as motors, valves and pumps operate, it ensures everything runs safely and efficiently. These systems use industrial-grade computers called process controllers. These controllers are functionally and physically distributed to oversee and control various parts of a process called units. Analogue and digital input and output modules, as well as Fieldbus technologies, relay information to and from process controllers and

various field devices. These field devices, such as transmitters, actuators and drives, are used to measure and control things such as temperature, level, pressure and flow of the various materials used in the industrial processes.

ABB Distributed Control Systems empowers industries to make a world of difference, helping them to keep their processes running and provide us with things we use in every-day life.

ABB Key facts

ABB ranked no. 1 in the global Distributed Control System (DCS) market in 2021.*

ABB has been the market leader in the DCS market for 23 consecutive years, with over 35,000 ABB control systems worldwide.



DCS Market Overview*

A multi-billion \$ market, distributed control systems are making a world of difference by helping to run the largest and most critical operations on our planet.



\$19.4 bn

Global market size by 2026



18.6%

ABB market share in 2021



100+

Countries using the DCS

Offering



Services **47%**

Software **16%**

Hardware **37%**

Channels



Direct sales **81%**

Distributors & Internet **12%**

System integrators **7%**

Geography



Asia **35%**

EMEA **41%**

Americas **24%**



Core industries in 2021*



Chemicals & Refining

Power Generation

Oil & Gas

Paper & Pulp

Pharmaceuticals & Biotech

Food & Beverage



“Being independently verified as the global market leader in DCS for 23 years is an outstanding moment of pride for ABB. It’s a reflection of our technology leadership and the strength of our long-term customer relations. We continue to invest in developments that extend the power of the DCS, to combine electrical and process automation, and help our customers leverage the era of digitalization with cloud and edge-based applications and services.”

PETER TERWIESCH

PRESIDENT, ABB PROCESS AUTOMATION

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