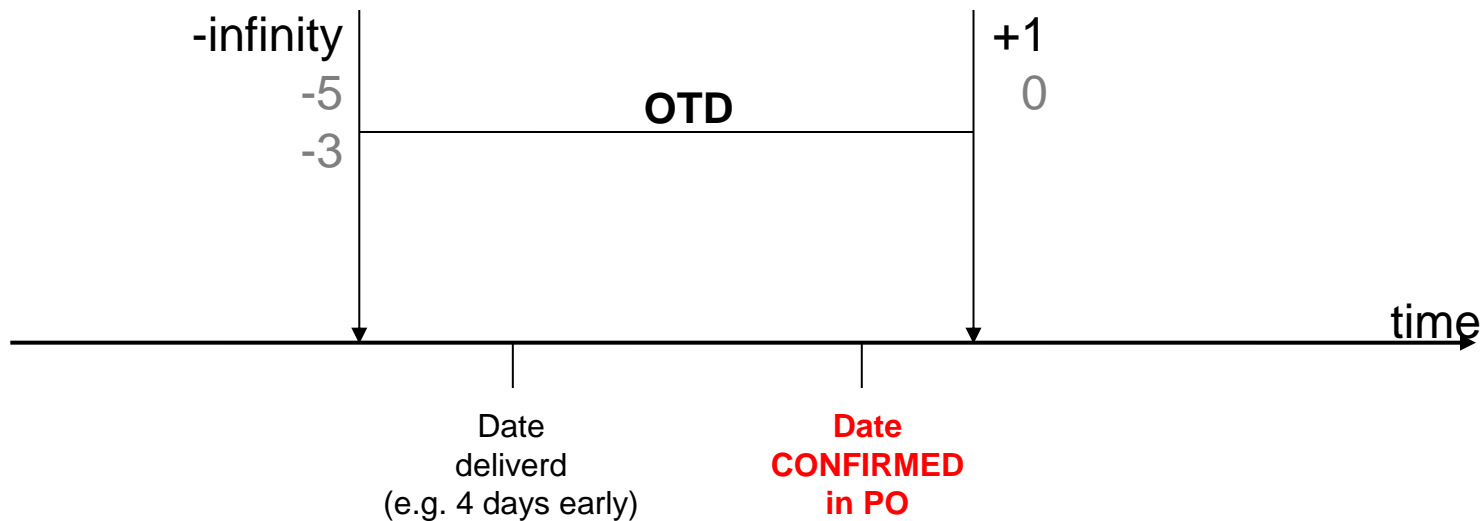




2012 Supplier Conference
ABB Inc.

OnTime Delivery OTD-SUPPLIER

$$\text{OTD} = \frac{\text{number of deliveries OnTime}}{\text{number of all deliveries}}$$



ABB's OTD vs. OTD-Source

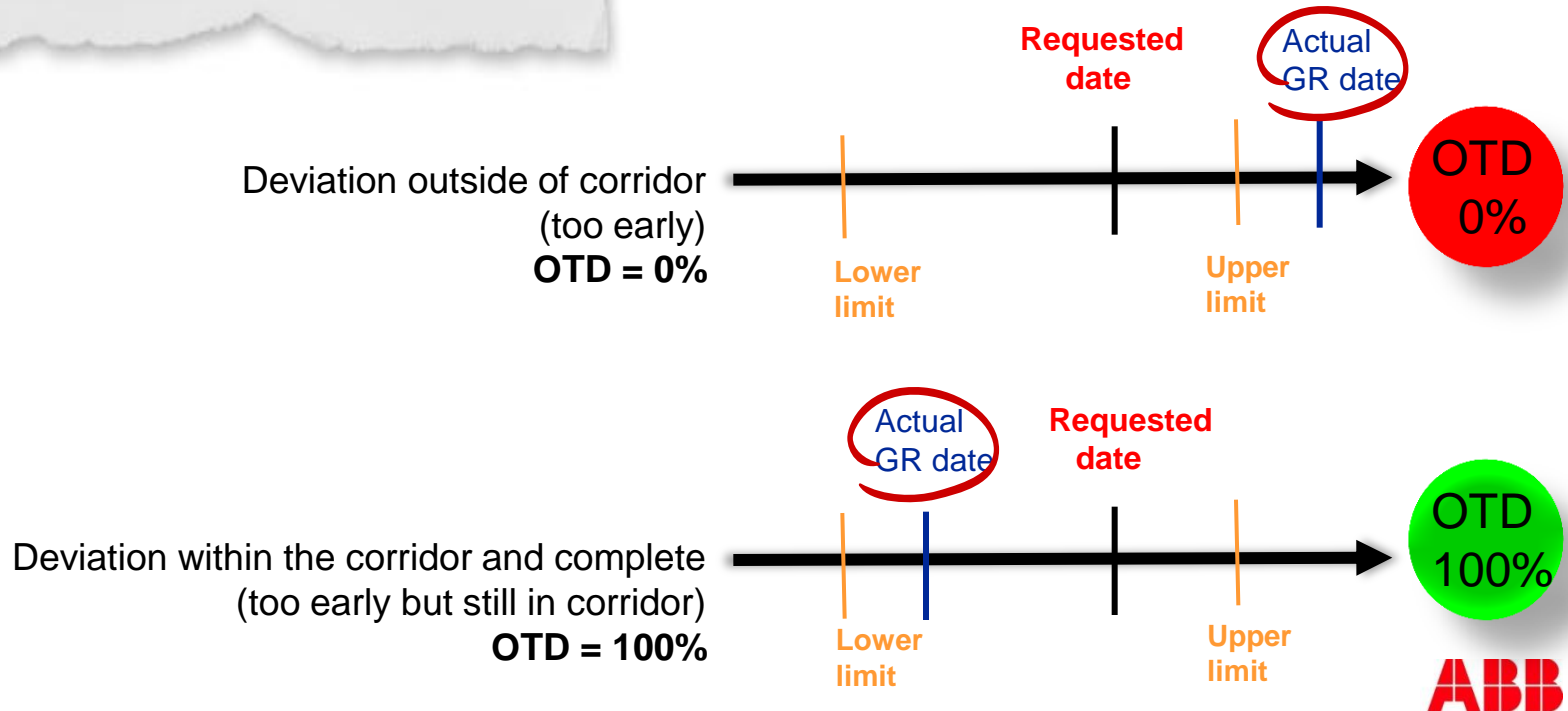
Basis is comprised of all good receipt line items
In a certain time bucket .
Each delivery line is assessed to be either

- a) OnTime **OTD = 100%** or
- b) not OnTime **OTD = 0%**

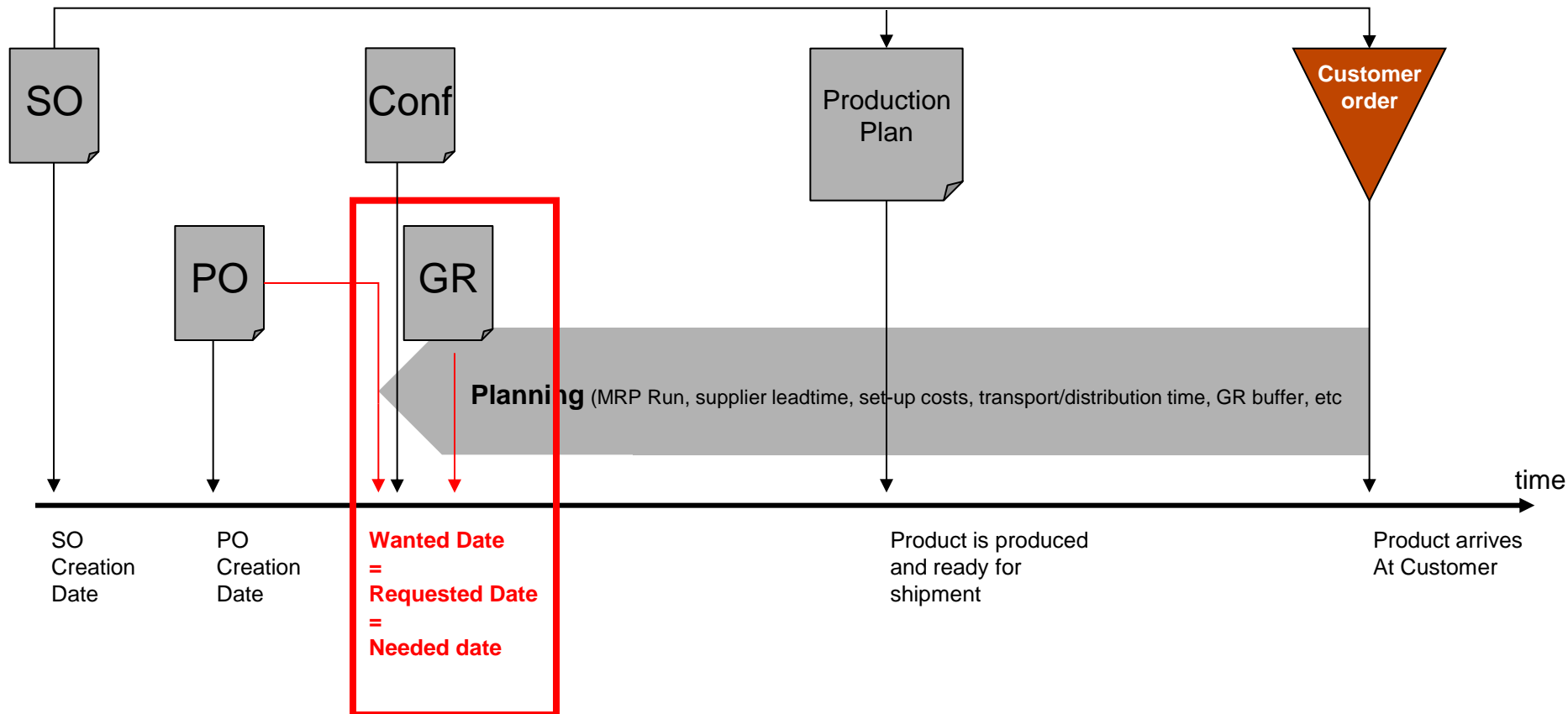
All data is interpreted from the point of view of an ABB customer. Comparison is done against **Requested Date** (as NPS score needs to be improved) and not against supplier confirmed date!

$$\text{OTD} = \frac{\text{number of complete deliveries OnTime}}{\text{number of all deliveries}}$$

OnTime Delivery Window: zero days late and infinite days early



SOURCE OTD - How is the Wanted Date derived?



SO = Sales order
PO = Purchase Order
GR = goods receiving

ABB's OTD

Difference between OTD-Supplier and OTD-SOURCE

OTD-SUPPLIER

GR compared against
Confirmed Date

- The OTD-Supplier measures OTD on the basis of promised commitments. By that, OTD-Supplier is quite „supplier-centric“.
- KPI measures trustworthiness of Supplier, Supplier reliability.
- However, OTD-Supplier does not capture whether the Supplier captures what ABB (and its customers are requesting).

OTD-SOURCE

GR compared against
Requested Date

- OTD-Source, however, focuses on the entire inbound Source process and is more focused on ABB's Source-capability rather than supplier performance
- KPI measures Inbound Supply Chain capability and Supplier capability.

Example:

Contractual agreed supplier lead time: 6 weeks

ABB Requested Date: 2 weeks

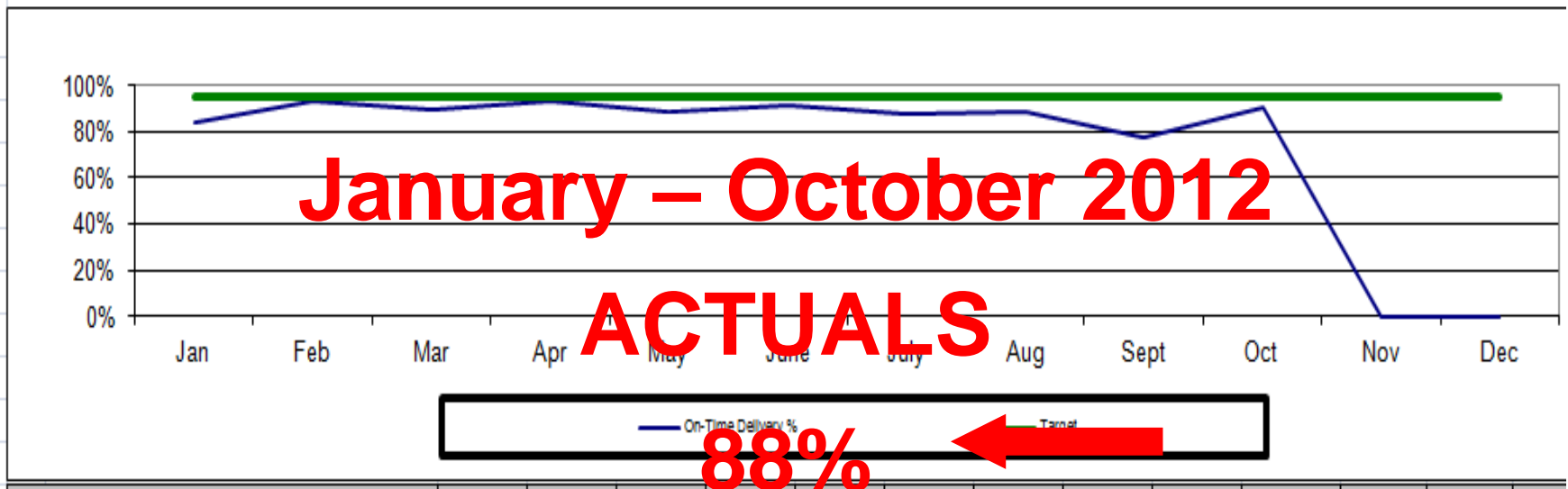
Supplier delivers in 3 weeks

OTD-SUPPLIER: 100% and **OTD-SOURCE: 0%**

OTD – ON TIME DELIVERY

2012 YEAR TO DATE

Supplier On-time Delivery - Top 50 Suppliers



Actual: 95.2% 27 Suppliers that performed above the YTD average
67.9% 26 Suppliers that performed below the YTD average

Note: Top 50 Suppliers represent around 70% of Total PO Lines
– Top Performance of these Suppliers are expected

ON TIME DELIVERY TARGET

100%



OTD – ON TIME DELIVERY

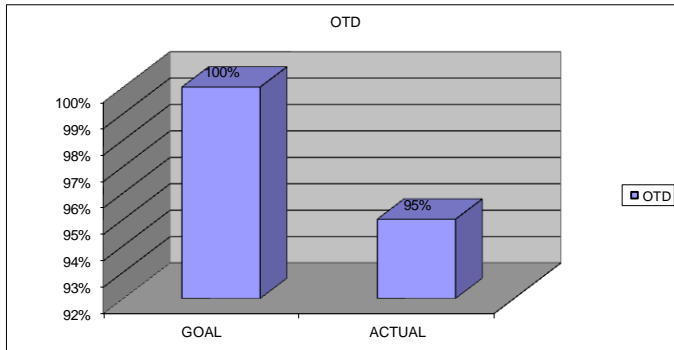
ACTIVITIES THAT WILL AFFECT YOUR OTD SCORE?

- **LATE DELIVERIES**
SUPPLIER DOES NOT DELIVER ON “AGREED” PROMISED DATE.
- **BUYER DOES NOT RECEIVE PO ACKNOWLEDGMENT from the SUPPLIER.**
SUPPLIER DOES NOT RECEIVE REVISED PO FROM BUYER WITH UPDATES
- **SERVICE PO’S (I.E. DESIGN, INSTALLATION, RETENTION) –**
SERVICES THAT ARE NOT PHYSICALLY RECEIVED AT OUR DOCK.
BUYER MUST BE NOTIFIED WHEN WORK IS COMPLETE THROUGH SOME FORM OF DOCUMENT OR OTHER COMMUNICATION.
- **ABB ENGINEER MAKES CHANGES with SUPPLIER and BUYER IS UNAWARE.**
BUYER MUST BE NOTIFIED, FOR ANY REASON, IF THE SUPPLIER IS NOT GOING TO MEET THE STATED PO DOCK DATE.
- **DROP SHIPMENTS (‘SHIP TO’ DIFFERENT THAN 1250 BROWN ROAD) –**
SIGNED PACKING SLIPS MUST BE FORWARDED TO YOUR BUYER.

2012 ABB SUPPLIER SCORECARD – Auburn Hills

ABC COMPANY Vendor Code 2721234

On Time Delivery (OTD)



OTD Performance – Rating

95%-100%	10
92%-94%	9
90%-91%	7
<89%	5

NCMR

Non Conforming Material Reports generated: 1

Performance is determined by the number of non-conforming reports generated divided into the number of line items received in the given year.

Quality Performance	Rating
99%-100%	10
95%-98%	9
90%-94%	8
<89%	0

Points Awarded:

10

Cost Reduction (CRP)

Cost reduction activities can include but not limited to higher efficiency, low cost sourcing, new investments, quality system improvements, discount programs, rebates, payment terms, and the like.

Cost Reduction Program in place with ABB?

Yes	2 pts
No	0 pts

Supplier Performance Measurement

BEST IN CLASS : 22

PREFERRED: 20-21

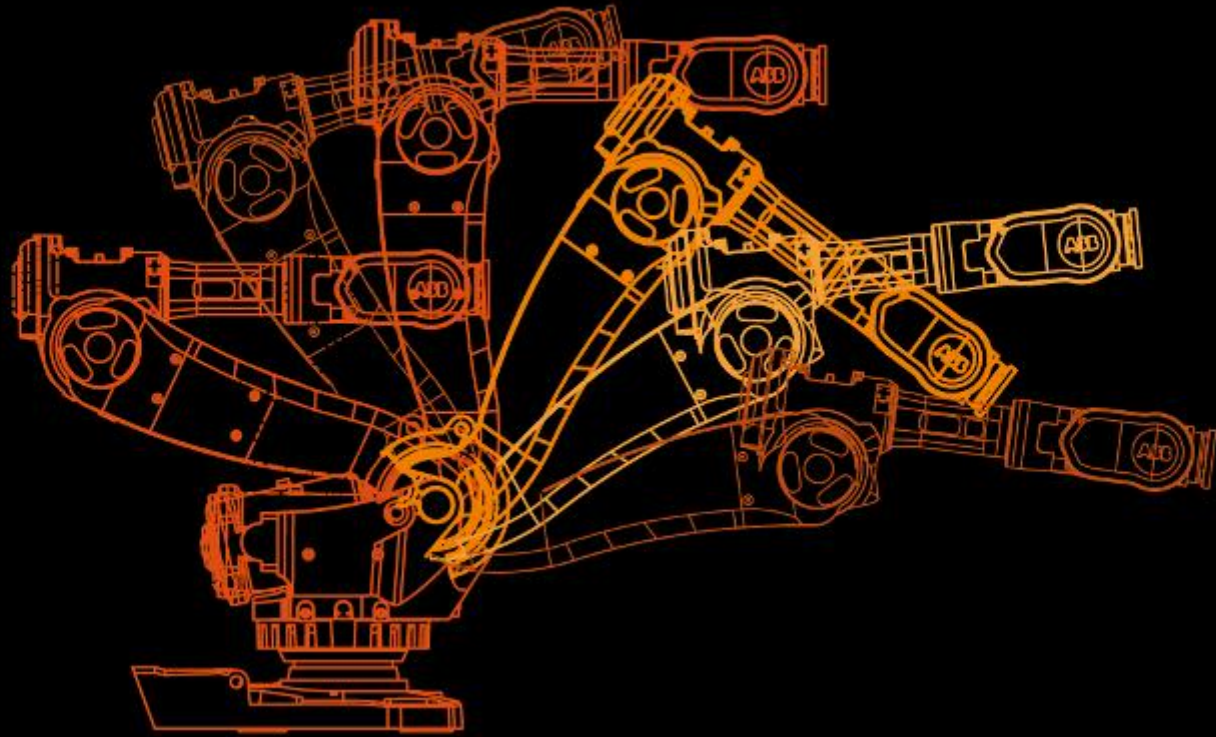
QUALIFIED: 15-19

MUST IMPROVE: <14

Your composite score is:

22





QUALITY

THUMB DRIVE Documents...



- Supplier Quality Guidelines – [changes from 2011](#)
- Quick Reference Guide - [updated contacts](#)
- Packaging Guidelines - [NEW](#)
- Logistics and Facilities Overview Presentation
- Supplier Requirements - [NEW](#)
- Supplier Questionnaire - [NEW](#)

Supplier Quality Guidelines Changes and Reiterations...

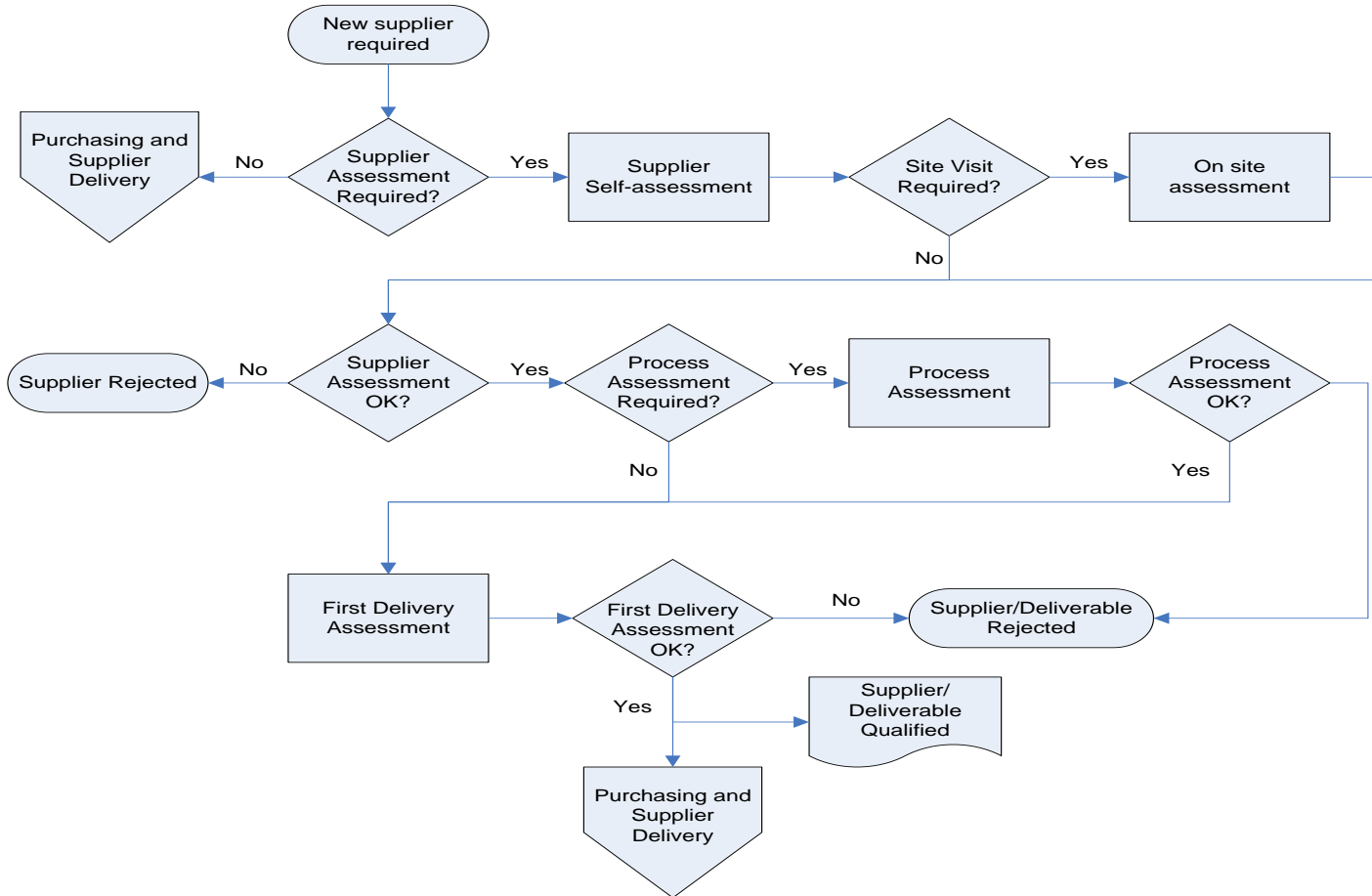
- If your 2012 SCORECARD ratings are less than “14” or state “MUST IMPROVE;” the SCM manager must give buyer prior approval for soliciting bids and/or placing orders with your company.
- SCORECARDS will be sent out in first quarter 2013
- Non-Conformance back-charge amount has been increased to \$85.00/hr
- If you ship in a service or material to ABB, you have agreed to our Supplier Quality Guidelines.
- All Critical Key Suppliers (CKS) are required to complete and submit form 9AKK102951, ABB Qualification Questionnaire.
- All Critical Key Suppliers (CKS) are required to read the Supplier Requirements, form 9AKK102949.

If you are here today, you are a CKS supplier! 😊

Supplier Requirements – NEW FORM

file name 9AKK102949

ABB Corporate is requesting all Critical Key Suppliers review and understand this supplement. Process flow from page 3:



Supplier Qualification Questionnaire – NEW FORM

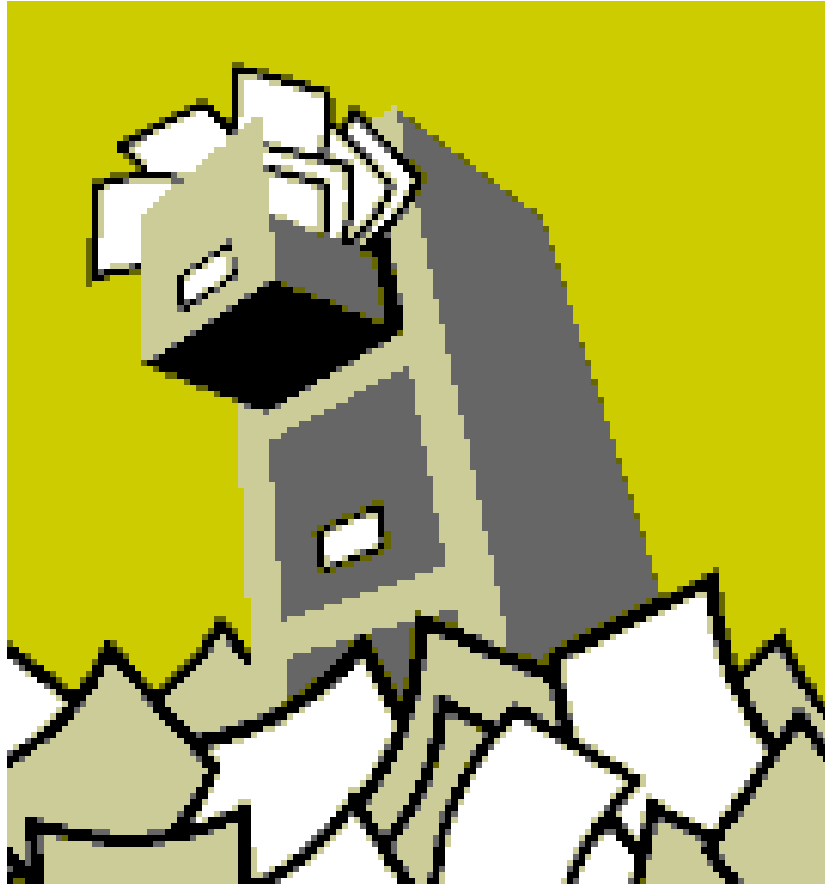
file name 9AKK102951

- ABB Corporate is requesting all Critical Key Suppliers **complete** this form.
- Completed forms can be sent to Erika Arms via email
- Completed forms are due no later than December 20th, 2012**
- All completed supplier forms will be uploaded to ProSupply; a shared site in which Global SCM departments will have access to view.

Let's take a look at the form...

..\..\Supplier Quality\Global Supplier Qualification_Process_Forms\2012\9AKK102951 ABB Supplier Qualification Questionnaire.xlsx

Non-Conforming Material Report's (NCMR)



Non-Conforming Material Report's (NCMR)

- Why are NCMR's issued?

Damaged Product

Detail Not To Print

Error in Controls Design

Error in Mechanical Design

Functional Failure

Late Delivery

Missing Part

Other

Shipping Damage

Workmanship

Wrong Part Sent

Wrong Quantity

How much can a NCMR cost?

Example: Details Not to Print

Builder has realized the part does not fit.

Estimated Value of Part \$120

Breakdown of Example

Steps	Time (min)	# of People Touching Problem
1	15	1
2	30	2
3	10	3
4	30	
5	30	
6	15	4
7	20	5
8	10	6
9	15	
10	20	
11	40	
12	15	
13	15	

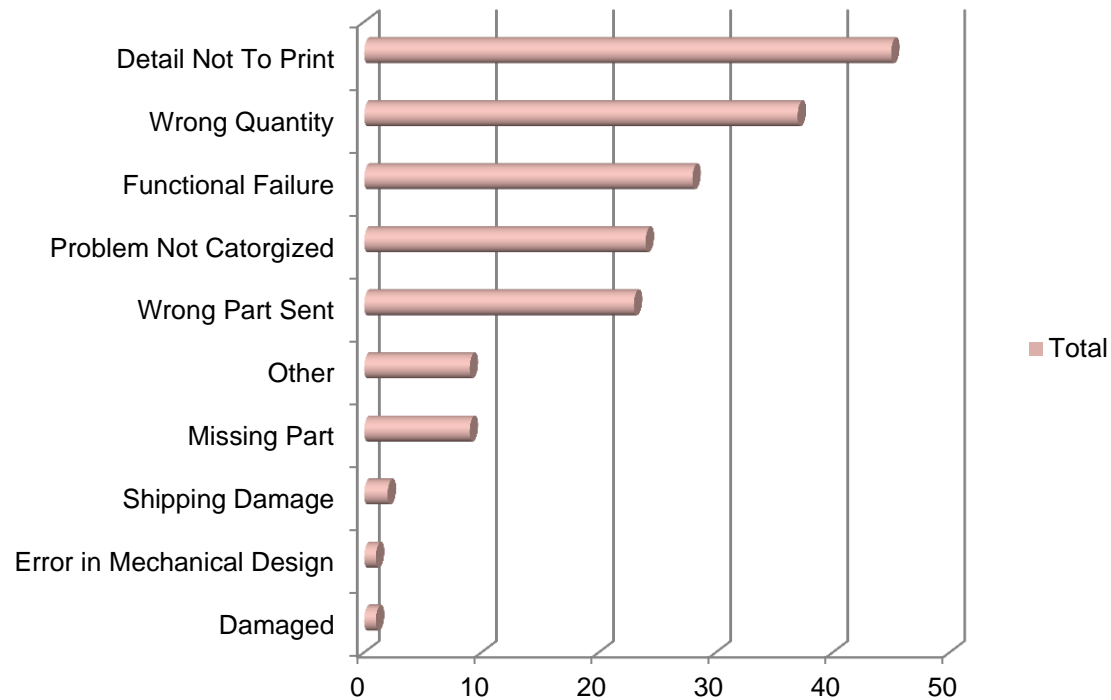
TOTAL TIME (MIN)

265

2012 YTD NCMR DATA

67 % of all NCMR's issued in building are supplier related.

NCMR Discrepancy

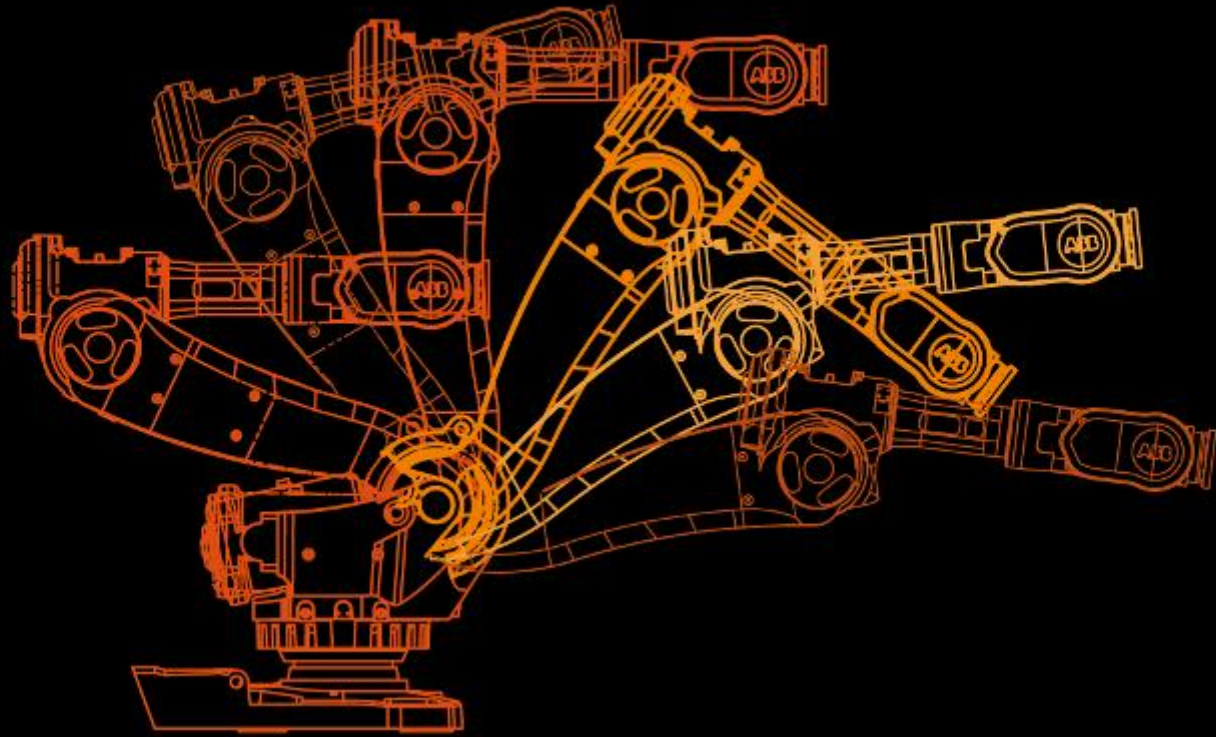


Here's the Objective!

Let's not talk about NCMR's



- Ship on-time...
- Package the product properly...
- Ship the purchase order quantity requested...
 - Ship in good quality...



PRICE - CRP

Cost Reduction Program...

What is the supplier cost reduction program:

ABB is looking for the activities in your facility which will reduce your production costs.

- Maintaining an active cost reduction program is crucial to a supplier's success with ABB. Not only does an active program increase a supplier's overall performance rating, it helps keep a supplier favorable compared to others in its commodity group by offering the most competitive pricing.

Cost Reduction Program...

What are some cost reductions?

- For cost reductions, we are looking for the activities in your facility which will reduce your production costs:
 - Process improvement for higher efficiency
 - Low cost outsourcing plans
 - New investments for productivity
 - Quality system enhancements
 - Programs for reducing waste, discount programs, rebates and the like.

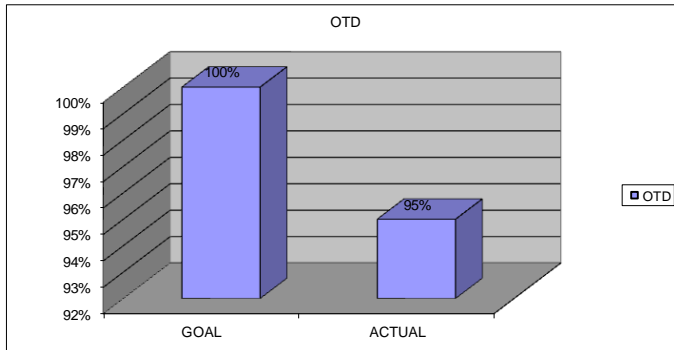
Cost Reduction Programs will be rated as follows:

- **Cost Reduction Program Rating**
 - Yes - 2
 - No - 0

2012 ABB SUPPLIER SCORECARD – Auburn Hills

ABC COMPANY Vendor Code 2721234

On Time Delivery (OTD)



OTD Performance – Rating

95%-100%	10
92%-94%	9
90%-91%	7
<89%	5

NCMR

Non Conforming
Material Reports
generated: 1

Performance is determined by the number of non-conforming reports generated divided into the number of line items received in the given year.

Quality Performance	Rating
99%-100%	10
95%-98%	9
90%-94%	8
<89%	0

Points Awarded:

10

Cost Reduction (CRP)

Cost reduction activities can include but not limited to higher efficiency, low cost sourcing, new investments, quality system improvements, discount programs, rebates, payment terms, and the like.

Cost Reduction Program
in place with ABB?

Yes	2 pts
No	0 pts

Supplier Performance Measurement

BEST IN CLASS : 22

PREFERRED: 20-21

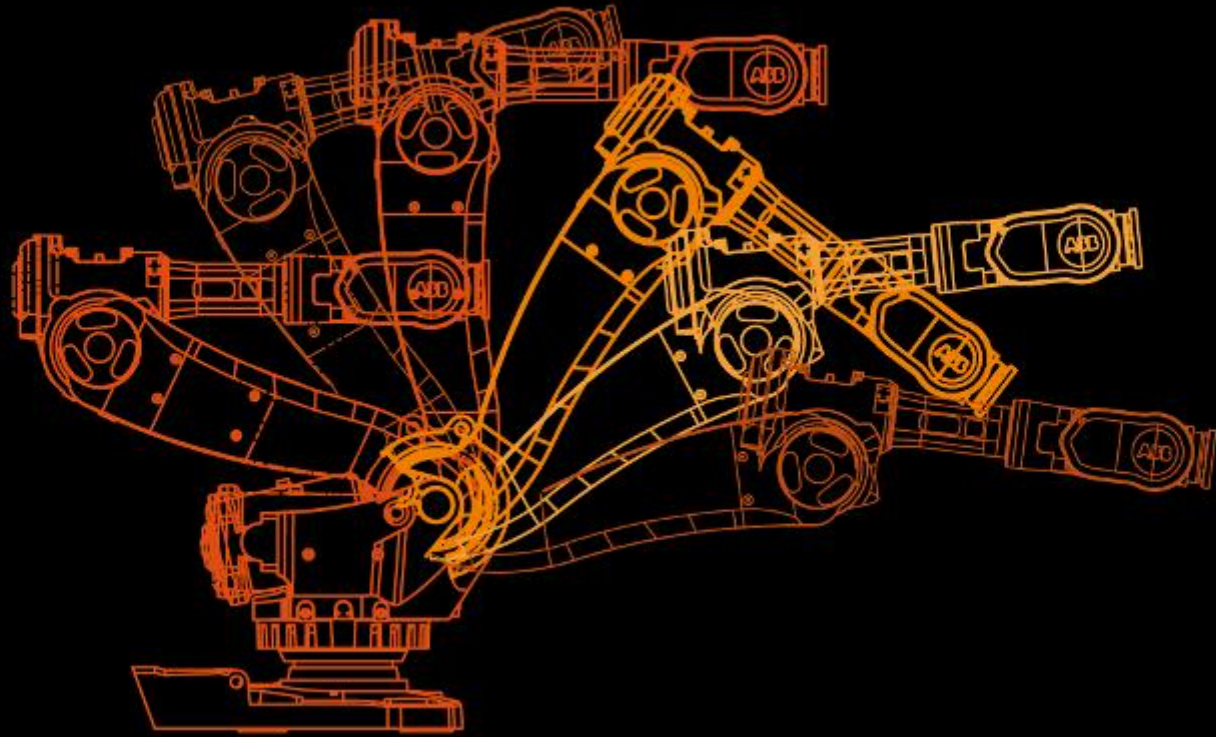
QUALIFIED: 15-19

MUST IMPROVE: <14

Your composite score is:

22





Logistics and Facilities Overview

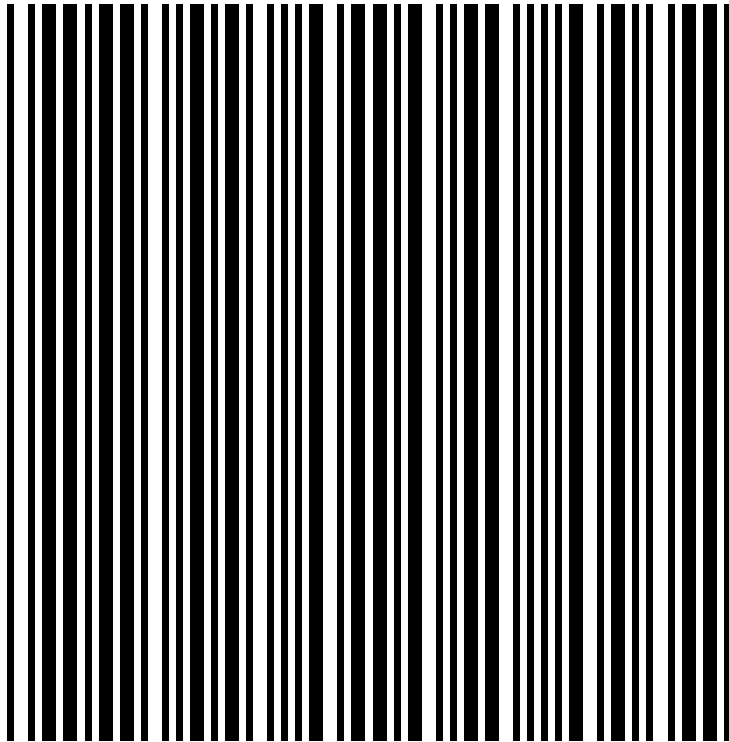
Label Overview

Carton Count: 1 OF 2		
Qty *12* EA:		Zone A
Part Number: *3AUA0000000171*		Zone B
		
Purchase Order Number: *4500123456*		Zone C
		
Description: Main Circuit Board		Zone D
Ship From Address: Company Name Company Address		Zone E
Ship To Address: ABB Inc. ABB Address ABB City, State & Zip		Zone F

- Standard Label Format (4" x 6")
- Must be printed on white label stock
- Code 39 encodes:
 - 0, 1, 2, 3, 4, 5, 6, 7, 8, 9
 - Uppercase letters (A - Z)
 - (Dash), \$ (Dollar), % (Percentage), (Space), . (Point), / (Slash), + (Plus)
- Code 39 is also known as the "Code 3/9", "Code 3 of 9", "USS Code 39", "USD-3", "Alpha39", "Type 39"
- All barcodes must be 100% visible and scanable

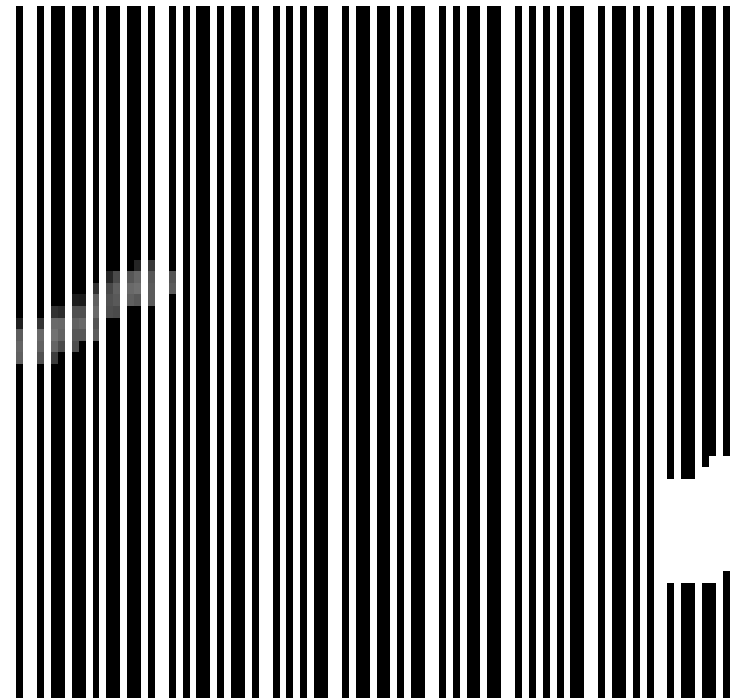
Barcode Samples

Acceptable



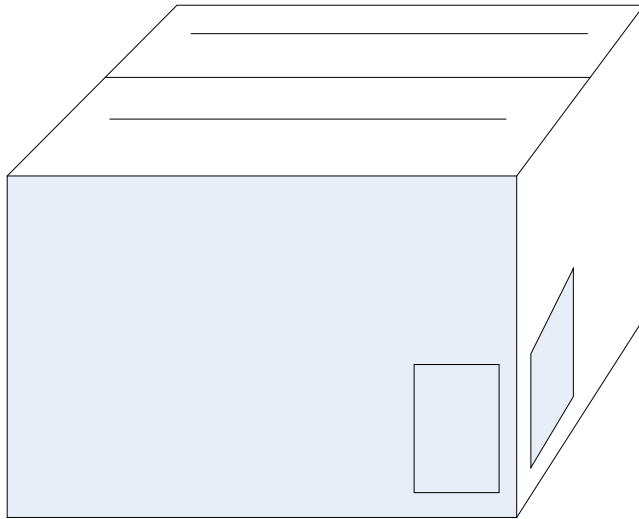
CODE39

Unacceptable



CODE39

Label Placement



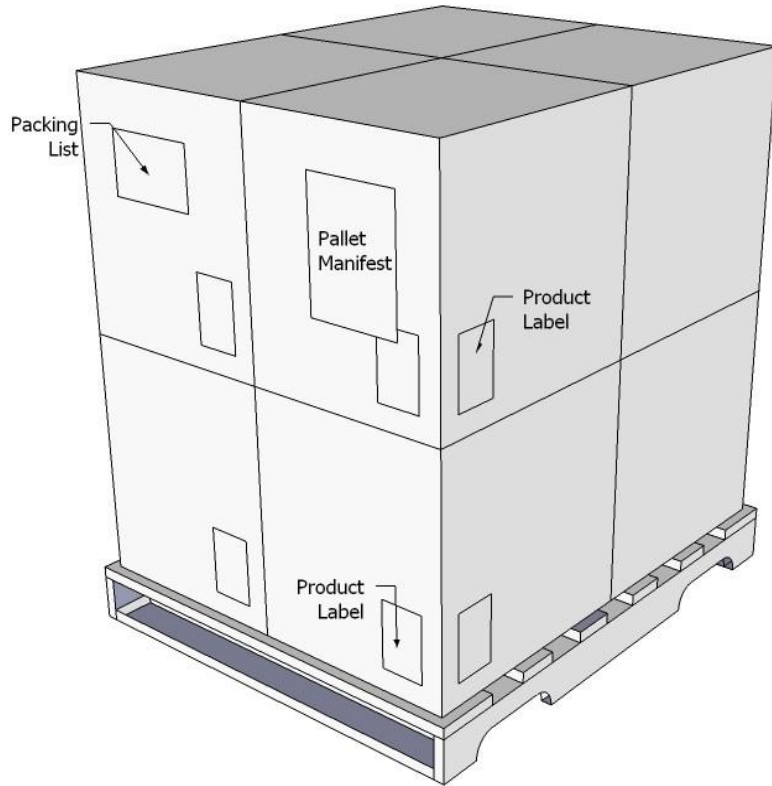
- Labels must be placed onto cartons after all packaging tape has been applied, i.e. do not cover any point of the label with tape, even if it is clear.
- Labels must be placed on the longest side of the carton and the adjacent short side.
- The leading edge is always the right-hand side of the carton
- Labels must be placed no closer than 1¼ and 3 inches from the right edge of the carton (when possible).
- The bottom edge of the label should be between 1¼ and 3 inches from the bottom edge of the carton (when possible)

Pallet Manifest Overview

Company Letterhead					
Shipment Date: 06/06/11					
Pallet Manifest					
Purchase Order Number	Part Number	Description	Total Quantity	Unit of Measure	Number of Cartons
4500123456	3AUA0000000171	Main Circuit Board	100	EA	5
4500123456	3AUA0000000171	Main Circuit Board	100	EA	5
Total					10
Page 1 of 1					

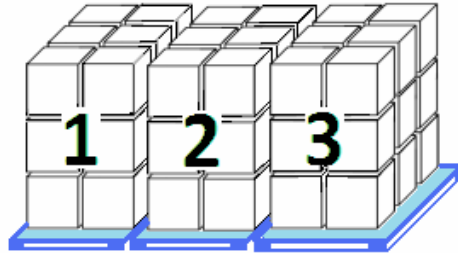
- Standard US Letter Size (8.5” x 11”)
- On company letterhead
- Shipment Date – MM/DD/YY
- “Pallet Manifest” Header
- **ABB** Purchase Order Number
- **ABB** Part Number
- Description of Part Number
- Total Quantity Shipped of Part Number on pallet
- Unit of Measure as requested by ABB
- Number of Cartons
 - Amount of cartons shipped for this specific line (No Mixing Part Numbers in same carton)
- “Total” Footer
 - Total number of Cartons for the entire pallet (should be the sum of above data)
- Bottom Right-Hand Corner to contain page identifier (1 of 3, 2 of 3, etc)
- Pallet Manifest to be sorted in Part Number Sequence (Low to High)

Pallet Manifest Placement

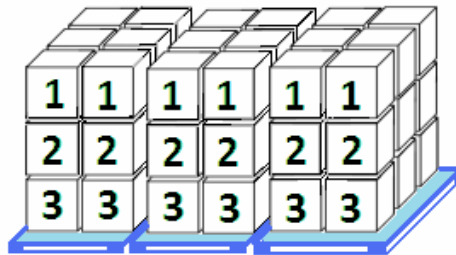


- Pallet Manifest must be on front and back facing of pallet, in the upper right-hand corner (under stretch-wrap).
- Packing List must be placed on front and back facing, in the upper left-hand corner (under stretch-wrap).

Multi-Part Pallet Configuration



correct loading













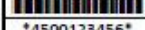


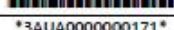


incorrect loading

- Product should be stacked vertically onto pallet
- Same part number shall not cross pallets unless carton quantity is more than single pallet.
- Multiple PO Numbers of the same part number shall not cross pallets unless carton quantity is more than single pallet

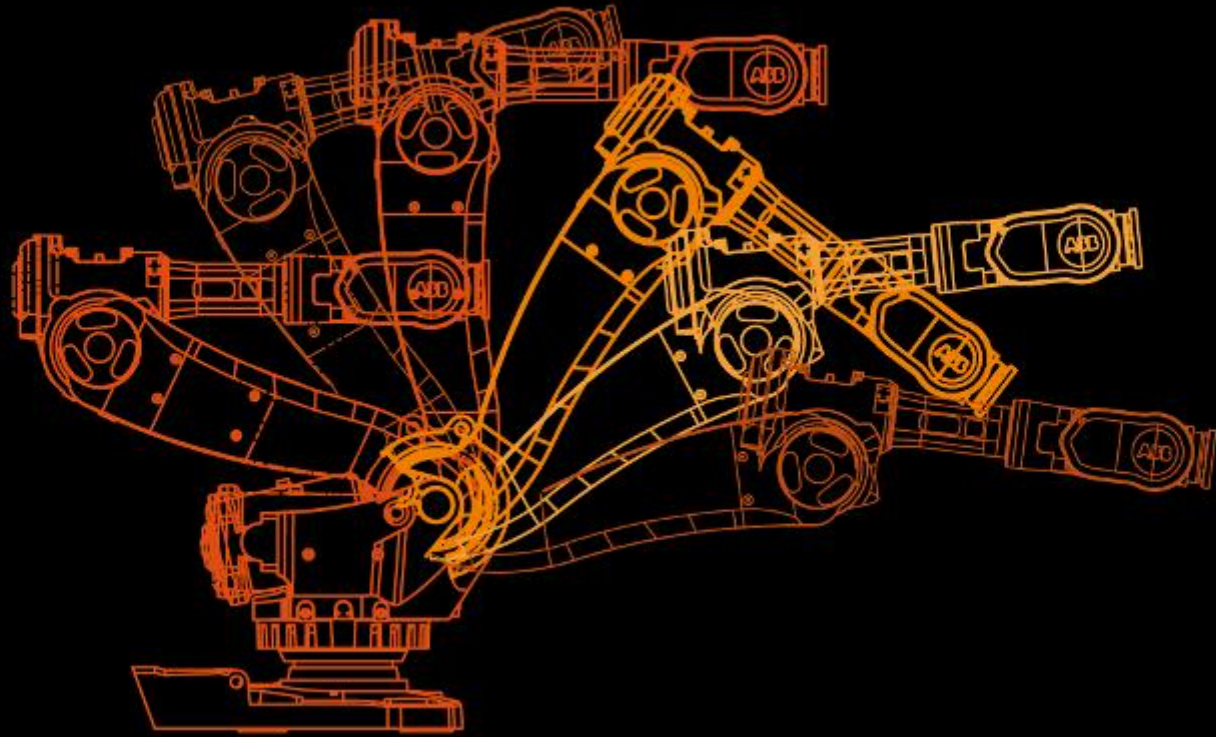
COMPLETE	COMPLETE	COMPLETE	
PALLET OF	PALLET OF	PALLET OF	
DUCKS	BIRDS	DOGS	

MIXED PALLET	MIXED PALLET	MIXED PALLET	
OF	OF	OF	
DUCKS, BIRDS,	DUCKS, BIRDS,	DUCKS, BIRDS,	
& DOGS	& DOGS	& DOGS	

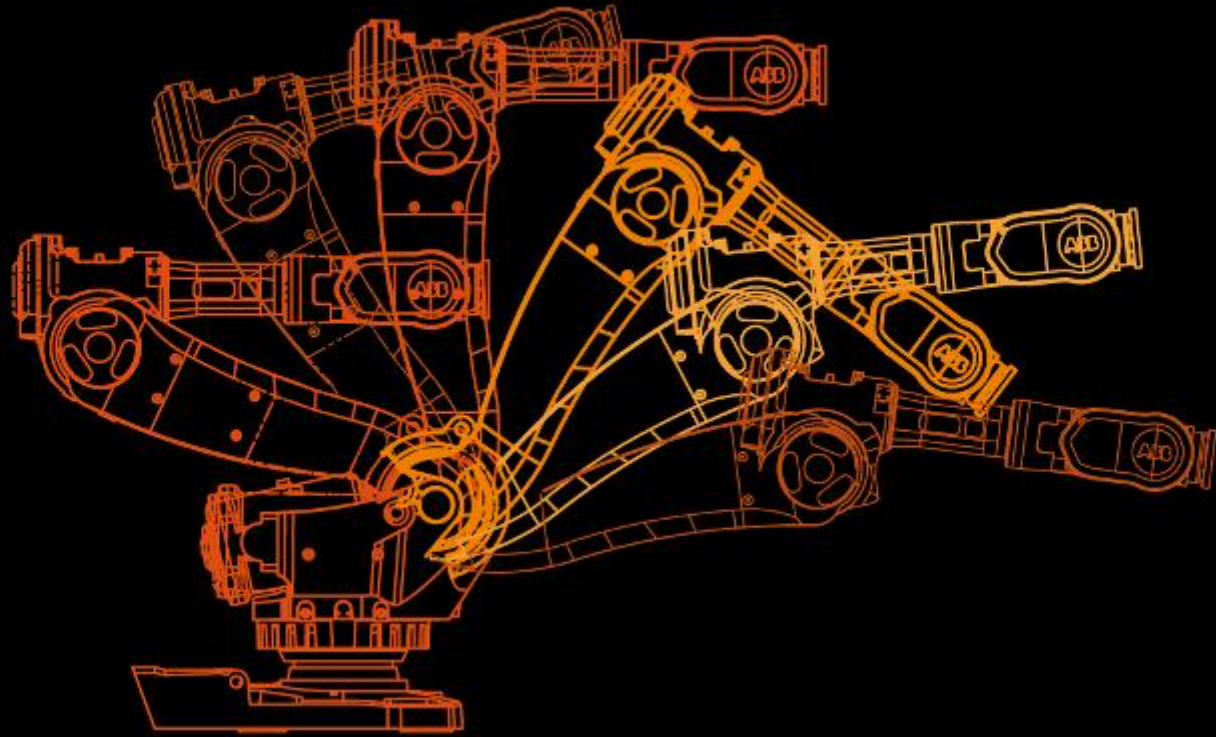
Packing List Overview

Company Letterhead		Invoice#:				
Address:						
Company Representative:						
Telephone Number:						
Packing List						
Ship To	ABB Inc	Ship Date: 01/03/11				
Address:	C/O ODW Logistics	Freight Carrier: UPS Parcel (when required)				
	1718 Pearl Street	Freight Carrier Tracking Number: 123456789 (when required)				
	Waukesha, WI 53186					
Notes:						
To be used for any communication for Consignee, especially Hazmat Materials						
***If none, please state "No Hazardous Material"						
Shipment Detail						
Purchase Order Number	Quantity Ordered	Quantity Shipped	Part Number	Description	Unit of Measure	Number of Cartons
4500123456	100	100	*3AUA0000000171*	Main Circuit Board	EA	5
				Country of Origin: USA		
4500123456	50	25	*3AUA0000000171*	Main Circuit Board	EA	1
				Country of Origin: USA		
4500123456	100	100	*3AUA0000000171*	Main Circuit Board	EA	5
				Country of Origin: USA		
4500123456	50	25	*3AUA0000000171*	Main Circuit Board	EA	1
				Country of Origin: USA		
4500123456	100	100	*3AUA0000000171*	Main Circuit Board	EA	5
				Country of Origin: USA		
4500123456	50	25	*3AUA0000000171*	Main Circuit Board	EA	1
				Country of Origin: USA		
4500123456	100	100	*3AUA0000000171*	Main Circuit Board	EA	5
				Country of Origin: USA		
4500123456	50	25	*3AUA0000000171*	Main Circuit Board	EA	1
				Country of Origin: USA		

- Standard US Letter Size (8.5" x 11")
- Must be printed on White Paper Stock (barcodes must scan properly)
- Packing to be sorted by Purchase Order Number, then by Part Number (sequence low to high)



SCM WEBSITE



ACCOUNTS PAYABLE

PURCHASE ORDER / INVOICING PROCESS

PO is generated

Confirmation received on all PO's (this is a must!)

By: FAX

time, no

copy be

Material

Vendor
either: l

ABB

Bill To:
ABB Inc.
P.O. Box 90364
RALEIGH, NC 27675
Or email to:
usabb.apinvoices@recall.com
per instruction below

Ship To:
ABB Inc Auburn Hills Operation
1250 Brown Road
Auburn Hills MI 48326
USA

Purchase Order: 4500611636 Version: 0
Creation Date : 11-NOV-2011
Buyer: Dale Payne
Buyer Phone #: 248-391-8780
Buyer Fax #: 860-298-3634
Buyer eMail: dale.p.payne@us.abb.com
Payment terms: Within 60 days Due net

Sold To:

Order acknowledgment

DATE 2011/11/29

ABB

Dear , Mr, Dale Payne

Thank you for your order.
The delivery time will be on
Details are on a list.(See below)
Please confirm us if you have any questions.

PO No. 4500592781
13-Dec-11

RS WORKS

is

re a new

entered by



-O

usabb.apinvoices@recall.com

- Only one invoice per PDF or TIF file



Process

If: Goods receipt is in system

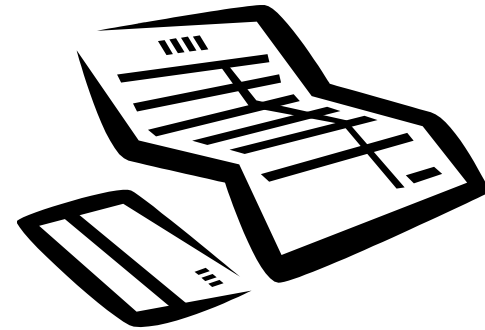
AND: Invoice and PO 'quantities and values' match, then the invoice is processed for payment

If: There is a discrepancy; the Invoice is routed to the buyer for further instruction – “**BASWARE**”

No payment can be processed without the buyer fixing the discrepancy.



Invoice Quality



- Send Invoice to the proper address
- Invoices must list **Purchase Order** number
- Only **One** Purchase Order per invoice
- Pricing must reflect price on PO
- UOM must match
 - If ABB PO shows unit of measure in FEET invoice should be in FEET
- Part number and/or description matches PO, if possible reference the PO line item
- Freight should not be invoiced unless prior approval is received. Follow ABB shipping instructions listed on your PO
- No short pays, we must receive a new invoice in order to process the payment
- If you want to verify an invoice is in the system or when payment will be made, you can contact SAS AP via website www.abb.us/supplierinquiries

Payment Proposal Timeline

Day of Week	Check/ACH	Wires
Monday	Check/ACH Payment Proposal pulled and sent for approvals.	
Tuesday	Check and ACH approvals are due. Check and ACH payment sent to the bank	Wire Payment Proposal pulled and sent for approvals.
Wednesday	Checks issued and mailed by bank. ACH payments are released.	Wire approvals are due. Wires are entered.
Thursday	Special handling checks received at SAS and mailed.	Wire payments are released.
Daily		Manual wire requests as required.

Contacting Accounts Payable

External Suppliers/Vendors

Supplier Inquiry Portal

www.abb.us/supplierinquiries

Vendors can use this page to:

- Request invoice payment status
- Submit requests for address, remittance, or name changes
- Request the status of an expected payment (check, wire, and ACH payments)



[Home](#) [About us](#) [Products & Services](#) [News Center](#) [Careers](#) [Investor Relations](#) [ABB Group](#)

[ABB Inc.](#) [Sustainability](#) [Where to find us](#)

About ABB U.S.

+ Our culture

North American
management

+ Events and tradeshows

ABB Supplier/Vendor Inquiry Portal

[CLICK HERE TO SUBMIT A NEW SUPPLIER/VENDOR INQUIRY FORM](#)

[CLICK HERE TO CHECK THE STATUS OF A PREVIOUSLY SUBMITTED INQUIRY](#)

[CLICK HERE FOR INSTRUCTIONS ON USING THE SUPPLIER/VENDOR INQUIRY FORM](#)

Click Here to start
an Inquiry



How you can help to avoid delays in payments!

- Send the invoice to the correct bill-to address
 - sending it to the site/location/correspondence address will delay payment.
- Insure everything on the invoice matches the PO – price, qty, uom, p/n, payment terms, etc.
- Do not re-send invoices to the bill-to address or email. This will create duplicate entries, which can delay payment of the initial invoice received and takes away valuable time from Accounts Payable. Instead, submit an inquiry first, if you are notified it is not in our system, then re-send.
- Always **clearly state the ABB PO# on your invoice**
- Be sure to include a phone number or email address where we can contact your Accounts Receivable if there are issues with the invoice.

New Mandate

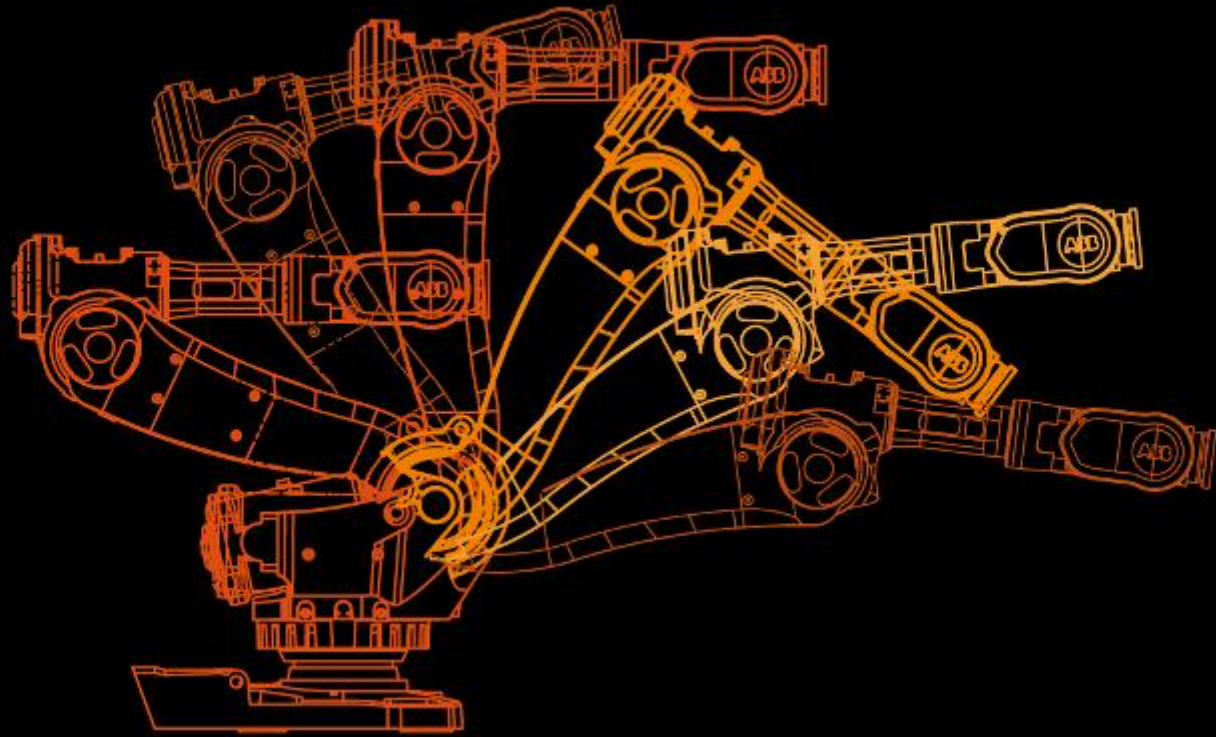
- The Bill To address must be on every invoice. (Even when emailing the invoice)
- Without this PO box address, AP does not know what business unit to apply the invoice to.

ABB Inc.

PO Box 90364

Raleigh, NC 27675

- Please notify your Accounts Receivable department of this mandate.



4Q INSTRUCTIONS

Breakout Session Teams

Breakout Sessions	GROUP #	Conference Room	ABB Leader
Catalog - Long Lead-time Products	1	CAFÉ	Terrie Harris
Design and Build Retentions	2	CR 1220	Dana Manion
Drop Shipments	3	CR 1120	Dan Nagridge
Improve ABB and Supplier Communication	4	CAFÉ	David Grabowski
Invoicing and Payments	5	CR 1230	Tom Wilson
Machine and Fabrication Product Quality	6	CAFÉ	Ken Harris
Payment Terms	7	CR 1130	Tammara Terrell
Time Between Supplier Quote To PO	8	CR 1140	Jack Still
Upcoming Projects At ABB?	9	CR 1150	Erika Arms

4Q Process

4Q Process	
Q1 - Measure	Q2 - Analyze
Define opportunity. Investigate to understand the current state in detail.	Identify and confirm <u>root causes</u> of the problem.
Q4 - Sustain	Q3 - Improve
Maintain the improvements by standardizing the work methods or processes.	<u>Develop, pilot, and implement solutions that eliminate root causes.</u>

BREAK – 10 MINUTES

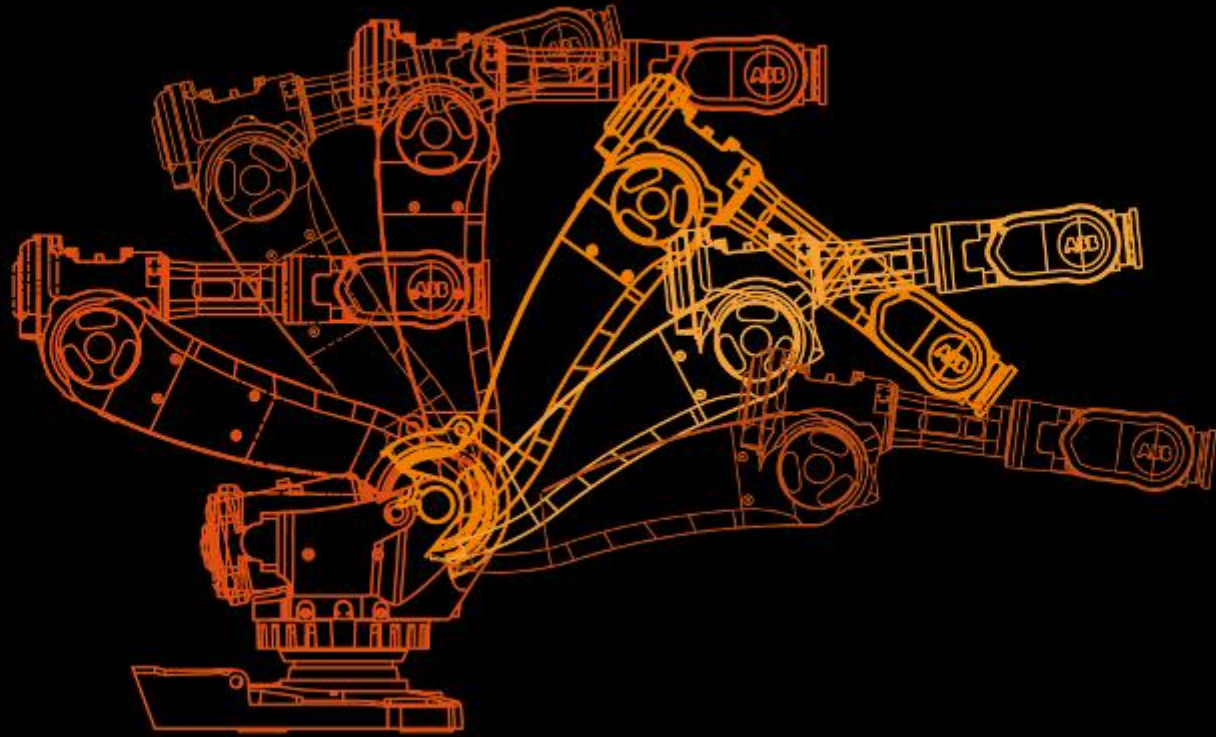
9:45 – 9:55

ALL – 4Q BREAKOUT SESSION

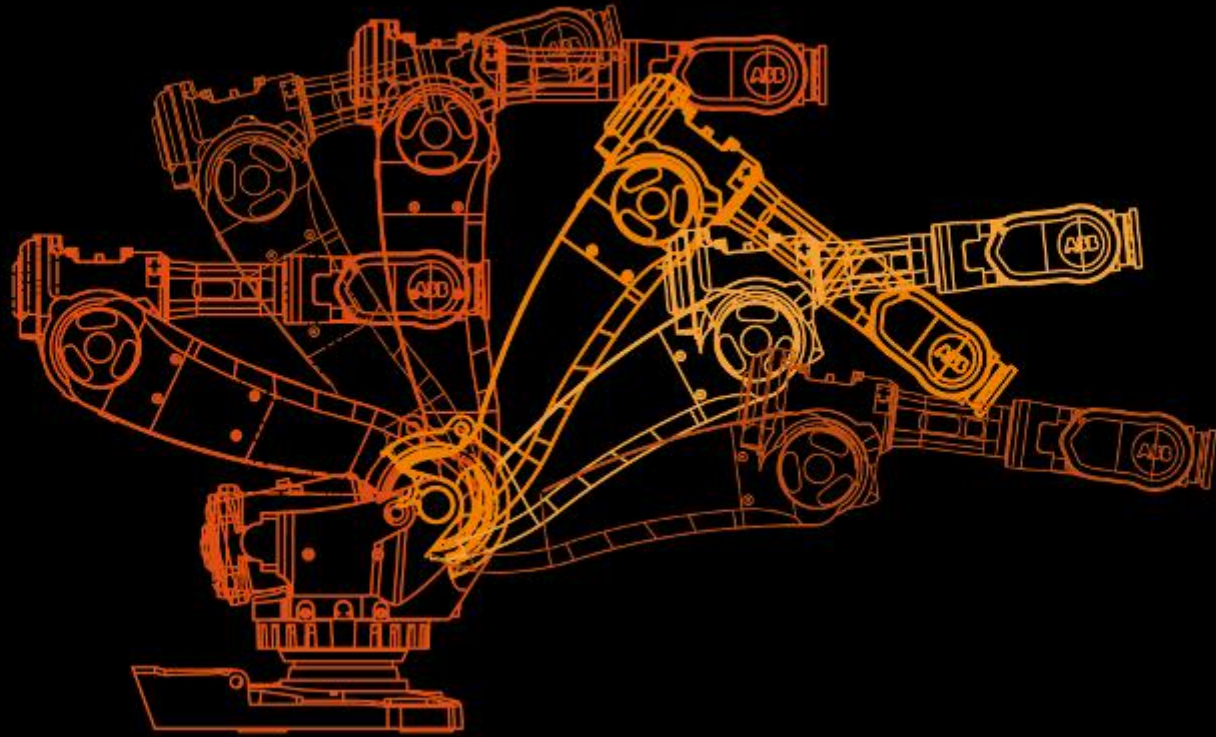
9:55 – 10:45

BREAK – 10 MINUTES

10:45 – 10:55



5 MINUTE TEAM PRESENTATIONS



**SUPPLIER OF THE YEAR
AWARD**

**2012
SUPPLIER OF THE YEAR AWARD**



Please don't let this valuable information stay at this meeting, take it back to your peers.

Thanks for coming!

ABB Inc. SCM

Power and productivity
for a better world™

