

LISTEN.
THINK.
SOLVE.®

RECKERS MECHATRONICS PVT LTD

ROCKWELL CERTIFIED SYSTEM INTEGRATOR



Allen-Bradley • Rockwell Software

Rockwell
Automation

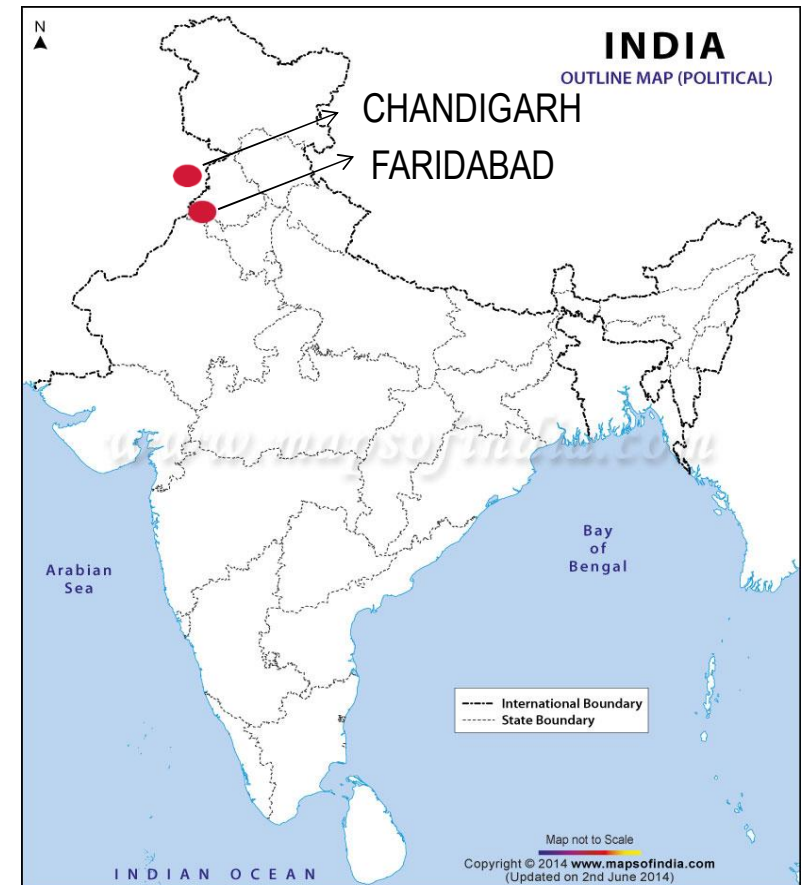
Copyright © 2012 Rockwell Automation, Inc. All rights reserved.

RcSI Introduction

**Rockwell
Automation**

INTRODUCTION-AREA OF WORK

- Industrial Automation
- Smart Productive System Solution
- Data Acquisitions Solutions-[OEE/ENDON]
- M2M interfacing
- Connected Enterprise Network
- Intelligent Safety Solutions
- Condition Monitoring Solutions
- Remote Access Solutions – Cloud Based
- Validations and Compliances in Food and Pharmaceutical Industries.(FDA and MHRA Compliance)
- Handshaking Capability with ERP



PRESENT INDUSTRIAL CHALLENGES

**Rockwell
Automation**

**TECHNOLOGY
INTEGRATION**

**SECURITY
OR
MANUAL INTERVENTION**

DATA ISLANDS

MAN MANAGEMENT

**COMPARATIVE
REPORTS**

RECKERS MECHATRONICS PVT LTD.

**Rockwell
Automation**

CUSTOMER CHALLENGES

- ❖ Manual Intervention
 - ❖ Changes in Report
 - ❖ Duplicate signature
 - ❖ Data Manipulation

DELIVERED SOLUTION

- ✓ Meet the Industry Compliance
 - ✓ Ex: 21CFR Part 11
 - ✓ Privatization of Data
 - ✓ Real Time Report

CUSTOMER CHALLENGES

- ❖ Downtime
 - ❖ Information about Machine
- ❖ Data Monitoring
 - ❖ Difficult to fault Tracing
 - ❖ Product Back Tracing

DELIVERED SOLUTION

- ✓ Digitization of Equipment
 - ✓ Real Time TAG Accessing
 - ✓ Diagnosing Feature
- ✓ Real Time Data
 - ✓ Multiple Location Of same data

CUSTOMER CHALLENGES

- ❖ Target Achievement
 - ❖ Meet the expected Number
 - ❖ Machine management

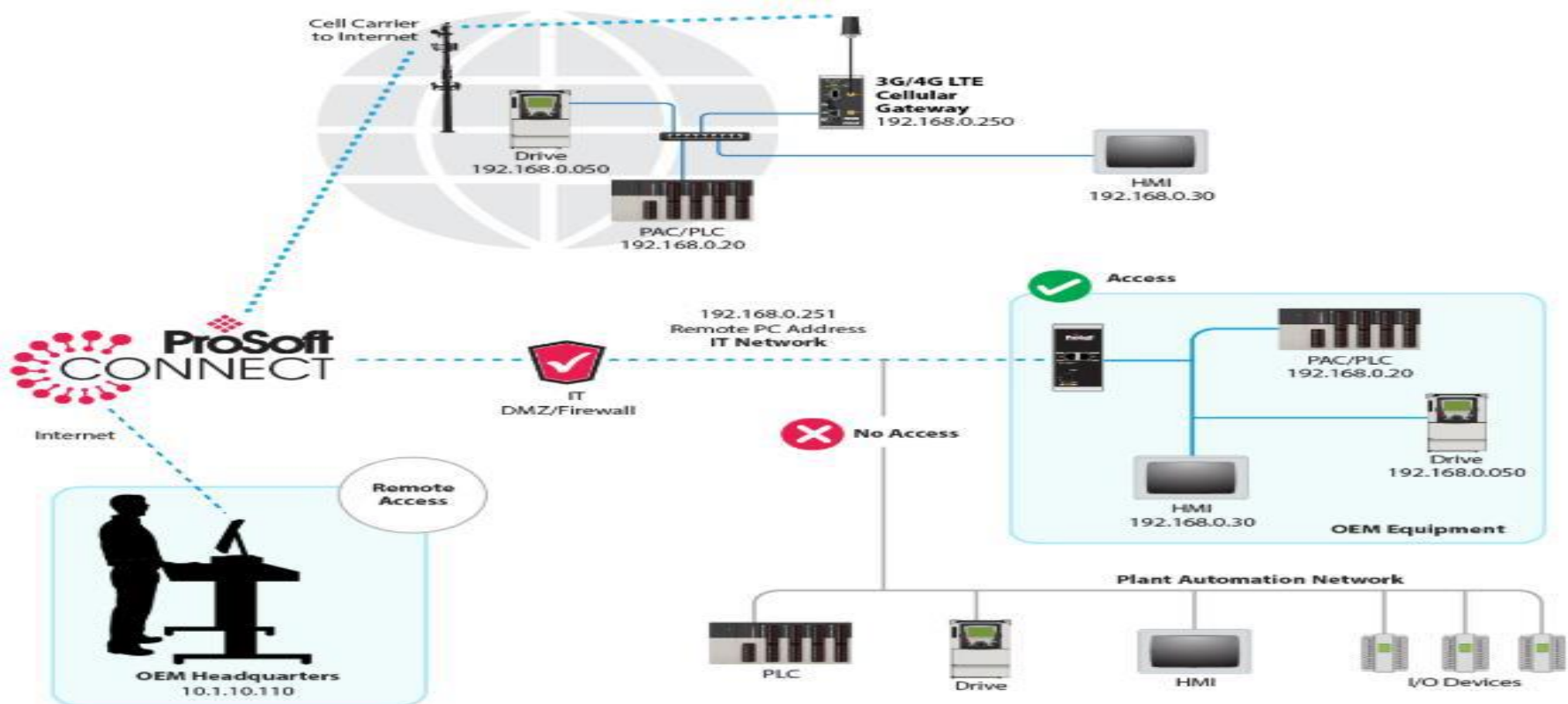
DELIVERED SOLUTION

- ✓ Planning In Controller/SCADA level
 - ✓ Utilization of available Equipment

CUSTOMER CHALLENGES	DELIVERED SOLUTION
<ul style="list-style-type: none">❖ Conventional OEE Calculation<ul style="list-style-type: none">❖ Manual Data logging❖ Manual Machine Monitoring❖ Synchronization of DATA	<ul style="list-style-type: none">✓ Enhance OEE<ul style="list-style-type: none">✓ Provide digital Solution✓ Machine Level calculation✓ Controlling of Quality✓ Monitoring of Availability in Real Time✓ Controlling the Performance of machine/operator

CUSTOMER CHALLENGES	DELIVERED SOLUTION
<ul style="list-style-type: none">❖ The Real Causes of LINE STOP<ul style="list-style-type: none">❖ Clarification of Production Stop❖ Manual Intervention❖ Information Channel❖ Downtime	<ul style="list-style-type: none">✓ Installation Of END-ON system<ul style="list-style-type: none">✓ Work Station Information✓ Operator to Responsible on Channel information✓ LINE STOP with actual CAUSE DISPLAY✓ Intimation to the concern person during Line OFF

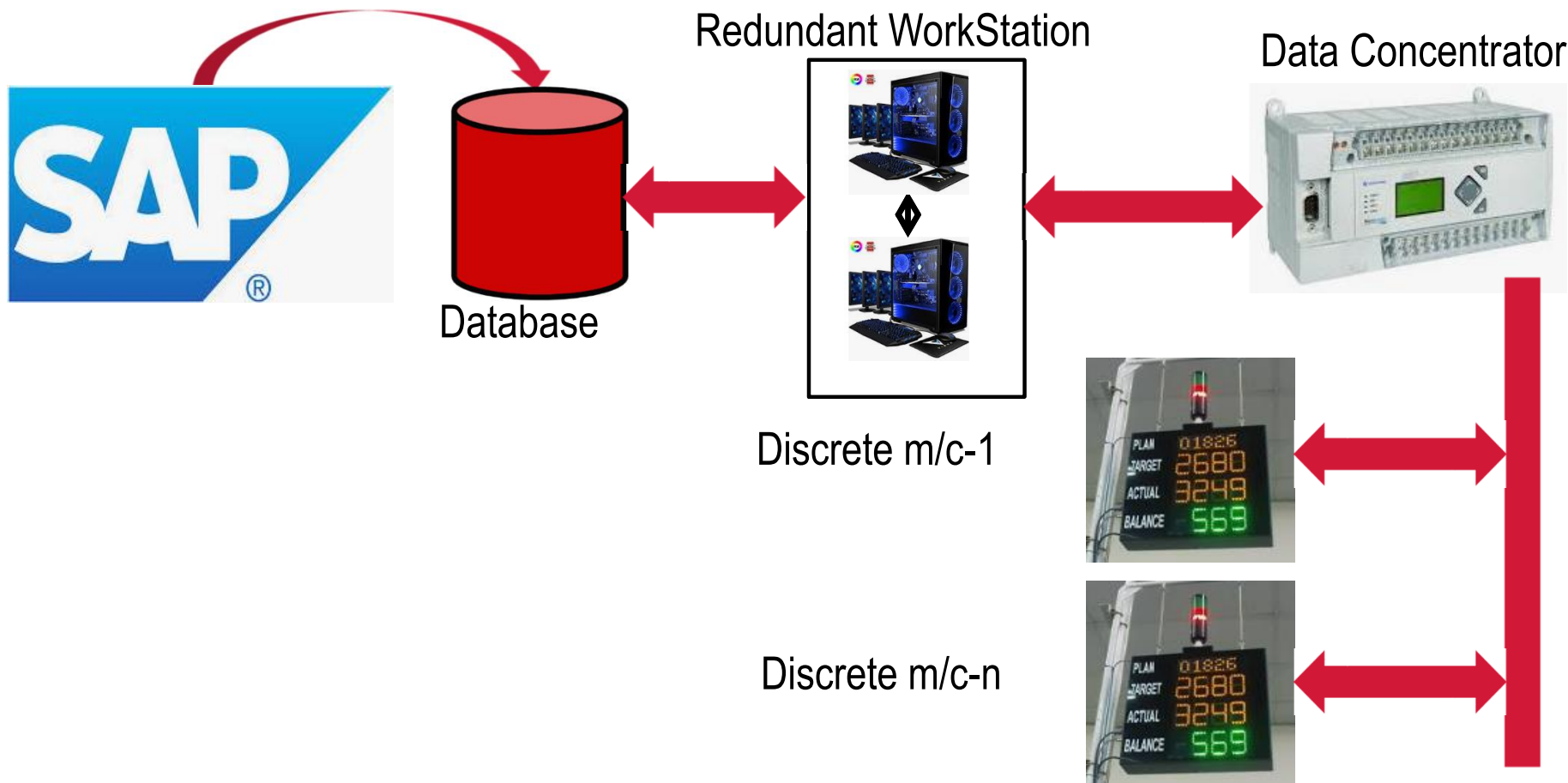
Digitization Architecture



DISCRETE MACHINE DIGITIZATION

RECKERS MECHATRONICS PVT LTD

**Rockwell
Automation**



RECKERS MECHATRONICS PVT LTD

**Rockwell
Automation**

RunTimeServer - FactoryTalk View SE Client

2/26/2019

HPDC-650TN-5

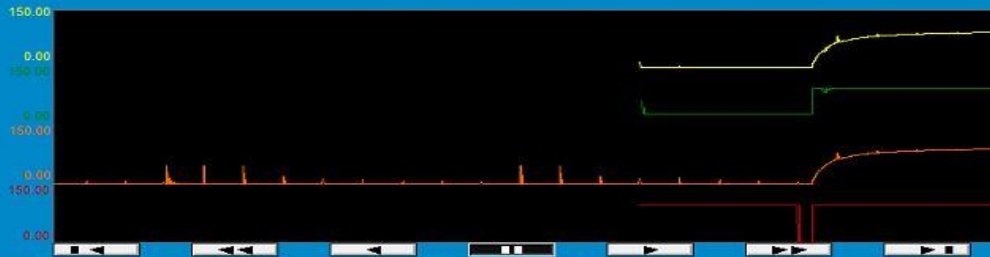
SELECT MACHINE NAME 11:11:13 AM

MACHINE	HPDC-650TN-5	SHIFT-	A
OPERATOR	rahul	PLANNED	244
OEE %	94.53	ACTUAL	299
PROD NO.	1252734	TO GO	0
DIE DESC.	CCL KWAG B21		
MAT DESC.	C/ DISK G0763.1104		

OEE % FOR	
SHIFT-A	94.53
SHIFT-B	0.00
SHIFT-C	0.00

CUR	ME
STAR	0:00
DOWN	0:00

TACK TIME (SEC.)	AVAILABLE TIME	RUNNING	TACK TIME (SEC.)
72.00	5: 11	4:	36



AVAILABILITY % OEE TRENDS FOR LAST 24 HOUR PERFORMANCE %



94.53 %



100.00 %

QUALITY %



100.00 %

OEE %



94.53 %

TOTAL SHUTDOWN TIMES

MAINTENANCE	00: 00: 00	IN FAULT	00: 00: 00
DIE MAINTENANCE	00: 09: 48	MINOR STOP	00: 07: 49
SET-UP TIME	00: 00: 00	OTHERS	00: 00: 00
MATERIAL	00: 00: 00	PROCESS BREAKDOWN	00: 00: 00
QUALITY	00: 00: 00	TOTAL DOWNTIME	00: 17: 37

WELCOME

NEXT

DASHBOARD

OPERATOR NAME

Report Structure



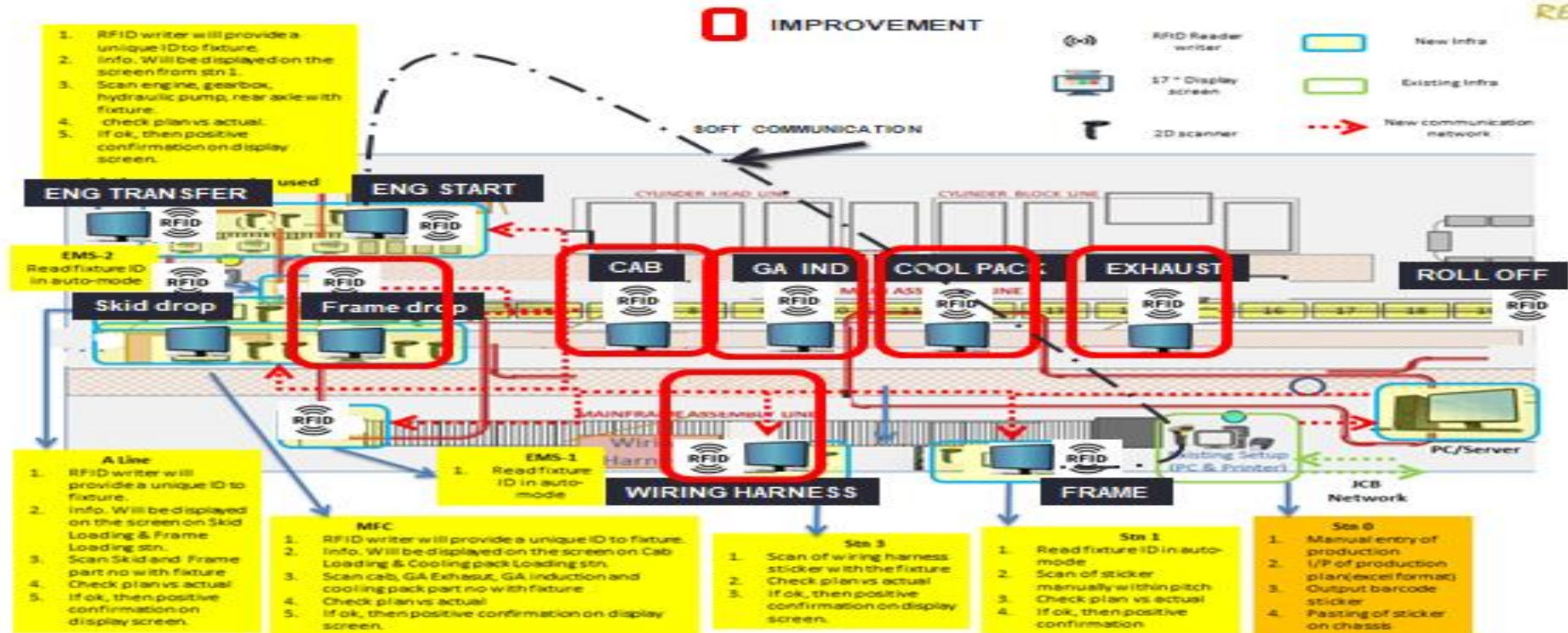
Date 08-02-2019 Shift WholeDay Machine No. HPDC4202

Date & Time	Operator Name	Material	Production Order No.	Die No.	No. of cavity	Total Plan	Total Shots	Total Qty.	OK Qty.	Rej. Qty	Efficiency	Utilization	Quality	OEE	Operational time	Available Time
08-Feb-2019 11:59		5215020009	1252715	10000058	1	414	409	409.00			98.79	98.90	100.00	95.73	08:48:00	08:59:00
08-Feb-2019 12:59		5215020009	1252715	10000058	1	488	488	488.00			100.00	97.29	100.00	97.29	07:48:00	07:59:00
08-Feb-2019 13:59		5215020009	1252715	10000058	1	558	561	561.00			100.00	97.59	100.00	97.59	08:48:00	08:59:00
08-Feb-2019 14:59		5215020009	1252715	10000058	1	70	76	76.00			100.00	100.00	100.00	100.00	01:59:00	01:59:00
08-Feb-2019 15:59	suraj	5215020009	1252715	10000058	1	142	153	153.00			100.00	100.00	100.00	100.00	02:59:00	02:59:00
08-Feb-2019 16:59	suraj	5215020009	1252715	10000058	1	214	228	228.00			100.00	100.00	100.00	100.00	03:59:00	03:59:00

CONTINUOUS LINE DIGITIZATION PROJECT-VARIANT MANAGEMENT SYSTEM

RECKERS MECHATRONICS PVT LTD

Rockwell
Automation



MIG-WELDING MACHINE DIGITIZATION

Solution-1

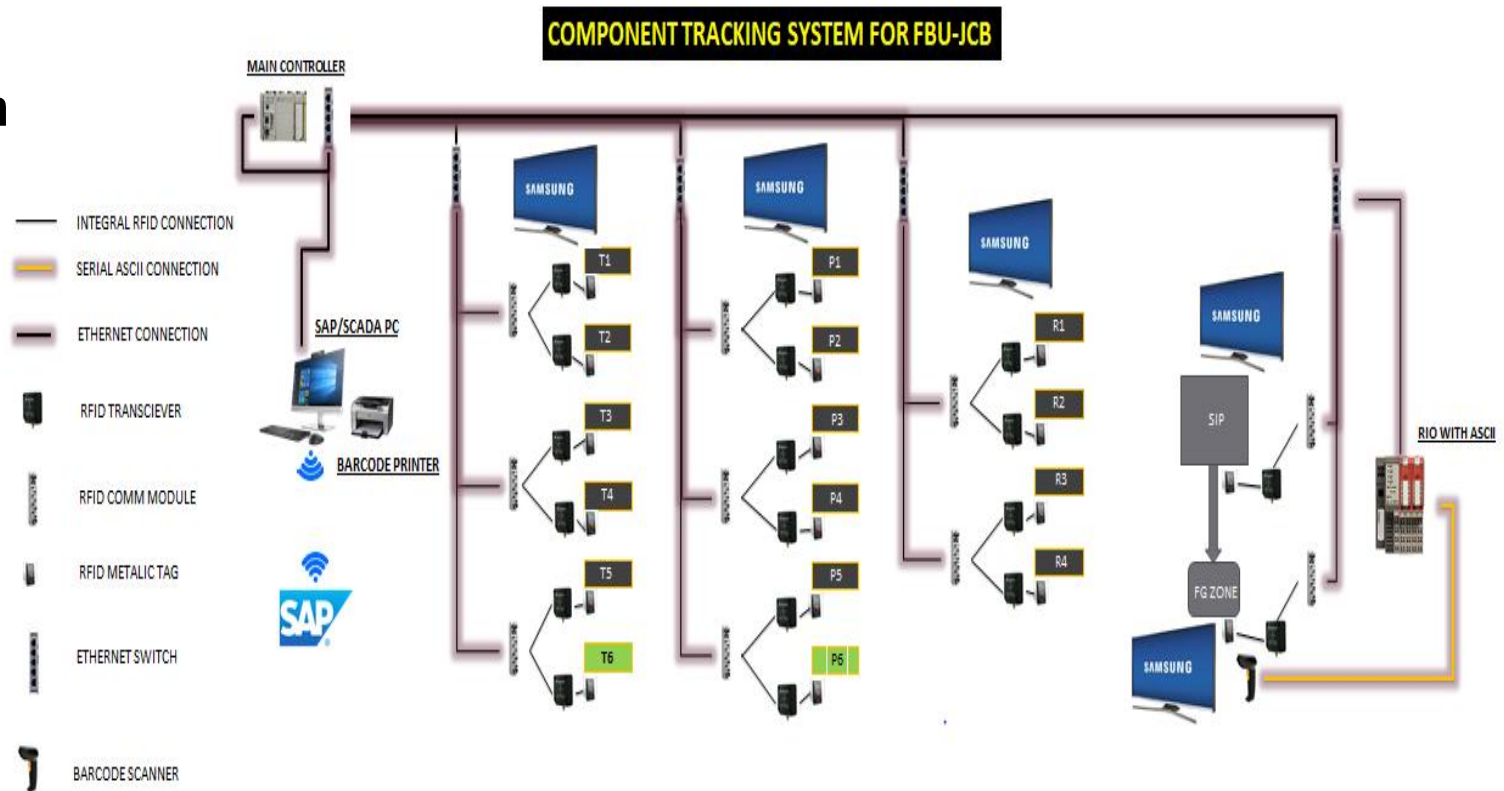
Tracking by RFID System

Challenges-

- ⌘ Metallic Structure
- ⌘ Limited frequency range

Solution-

- ⌘ HF vr. UHF
- ⌘ Integration of RFID with Barcode



After Execution

- ☐ Now data is updating itself from remote server.
- ☐ Real time Data Flow from Remote data to Discrete Machines.
- ☐ Plan vr. Actual Information.
- ☐ Operator to Manager Direct Connectivity.
- ☐ Use of Existing conventional machines for IOT.
- ☐ Increase in productivity.
- ☐ Managed information flow.
- ☐ Increased individual efficiency.

RECKERS MECHATRONICS PVT LTD

**Rockwell
Automation**



DELPHI



ESCORTS



Hindustan Unilever Limited



Johnson & Johnson

and many more...

16

LISTEN.
THINK.
SOLVE.®

Thank You



PUBLIC

 Allen-Bradley • Rockwell Software

Rockwell
Automation