





## Advantage for Our Clients

Ruj. Fail : MIDA.001.600-4/5/5

Tetuan  
**RPAPLUS Sdn. Bhd.**  
1-4-7 Krystal Point Corporate Park  
Jalan Tun Dr. Awang, 11900 Bayan Lepas  
Pulau Pinang

Tuan,

Permohonan Daripada **RPAPLUS Sdn. Bhd.** Untuk Mendapatkan **Galakan Taraf Perintis Di Bawah Takrifan Syarikat Penyelidikan Dan Kemajuan Kontrak Di Bawah Akta Penggalakan Pelaburan 1986** Bagi Menjalankan Perkhidmatan Penyelidikan Dan Kemajuan Kontrak Ke Atas '**R&D Services for Smart Manufacturing and Digitalisation Solutions**' Sebagai Projek Baharu

AUTHORITY  
**MIDA**  
MIDA SENTRAL  
No. 5, Jalan Stesen Sentral 5  
Kuala Lumpur Sentral,  
50470 Kuala Lumpur, Malaysia  
T : +603 2267 3633  
F : +603 2267 7970  
E : [investmalaysia@mida.gov.my](mailto:investmalaysia@mida.gov.my)  
[www.mida.gov.my](http://www.mida.gov.my)

**MIDA**  
**Approved R&D**  
**Service**  
**Provider**

Our clients can claim  
DOUBLE TAX  
DEDUCTION  
on approved R&D  
expenditure



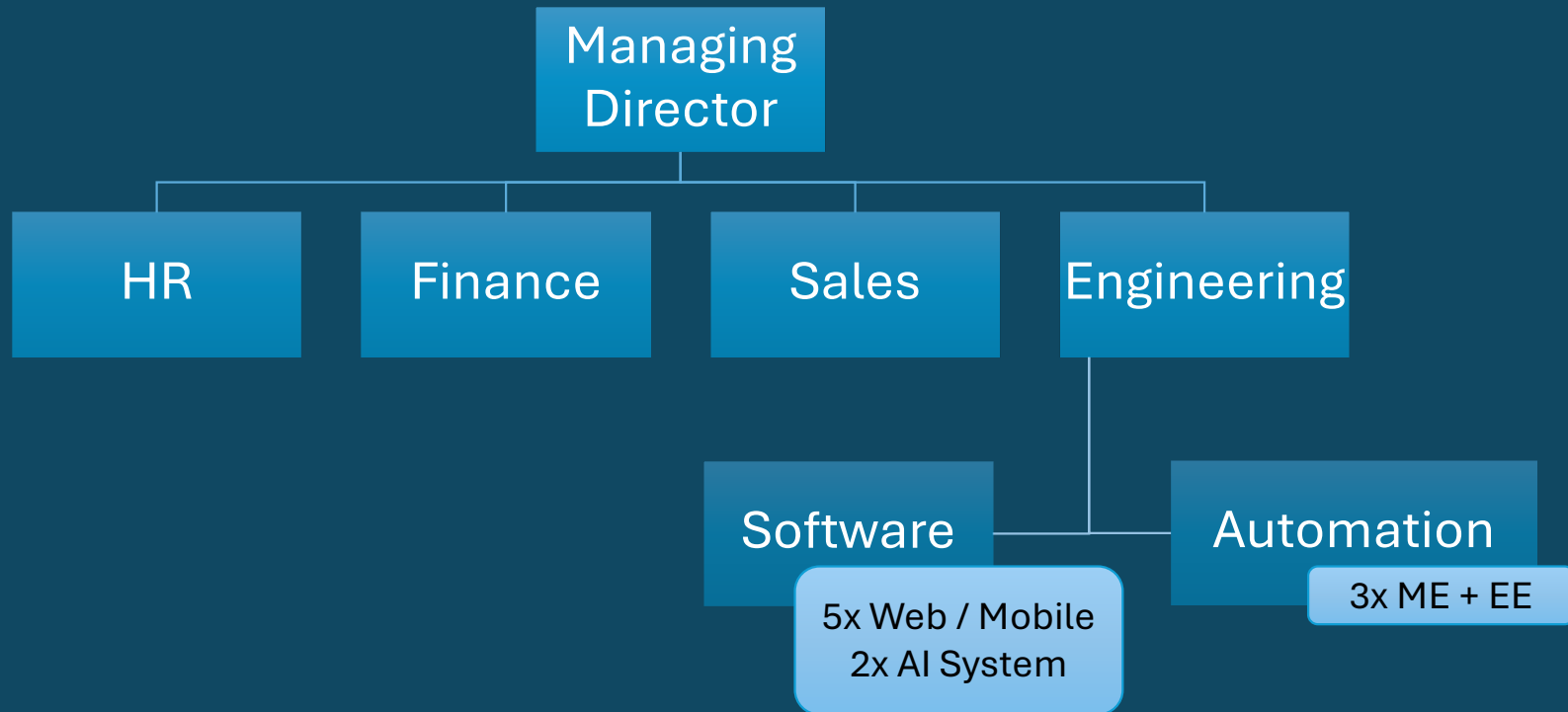
Automation  
Engineering



Software  
Engineering

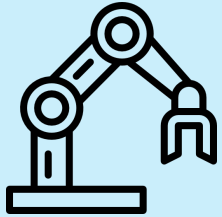


# Organization chart





# Capability



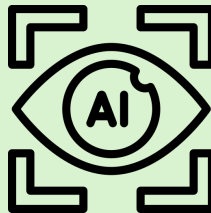
Automation



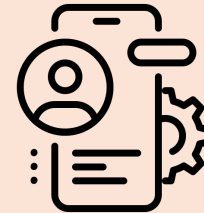
System  
integration



MES



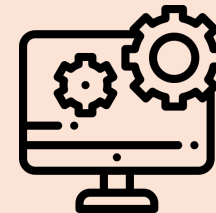
AI Vision



iOS / Android  
Mobile App



Digital  
forms



Bespoke  
Software

**Reduce Manual Operation**  
Connectivity to Bridge between the **OT-IT** domains.

# Portfolio

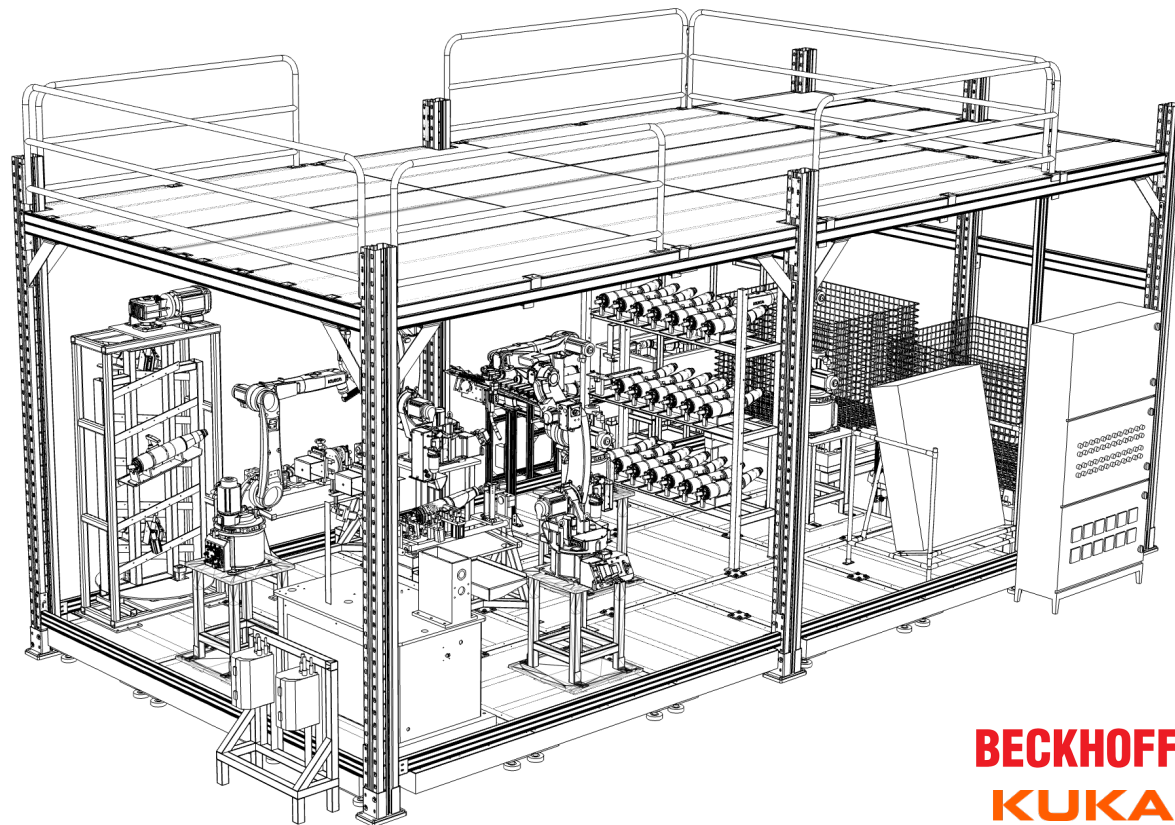
# Smart Automation



# Muffler Welding Assembly Production

- 5 robots work cell
- Multiple welding and manipulation job run in parallel
- 3D SCADA connectivity monitor real time status for every robot & station

	Spec
Product	Motorcycle Muffler
Dimension	7815 x 4890 x 3780
Cycle Time	96s / muffler
Load / Unload	Manual, non-stop feeding



**BECKHOFF**  
**KUKA**

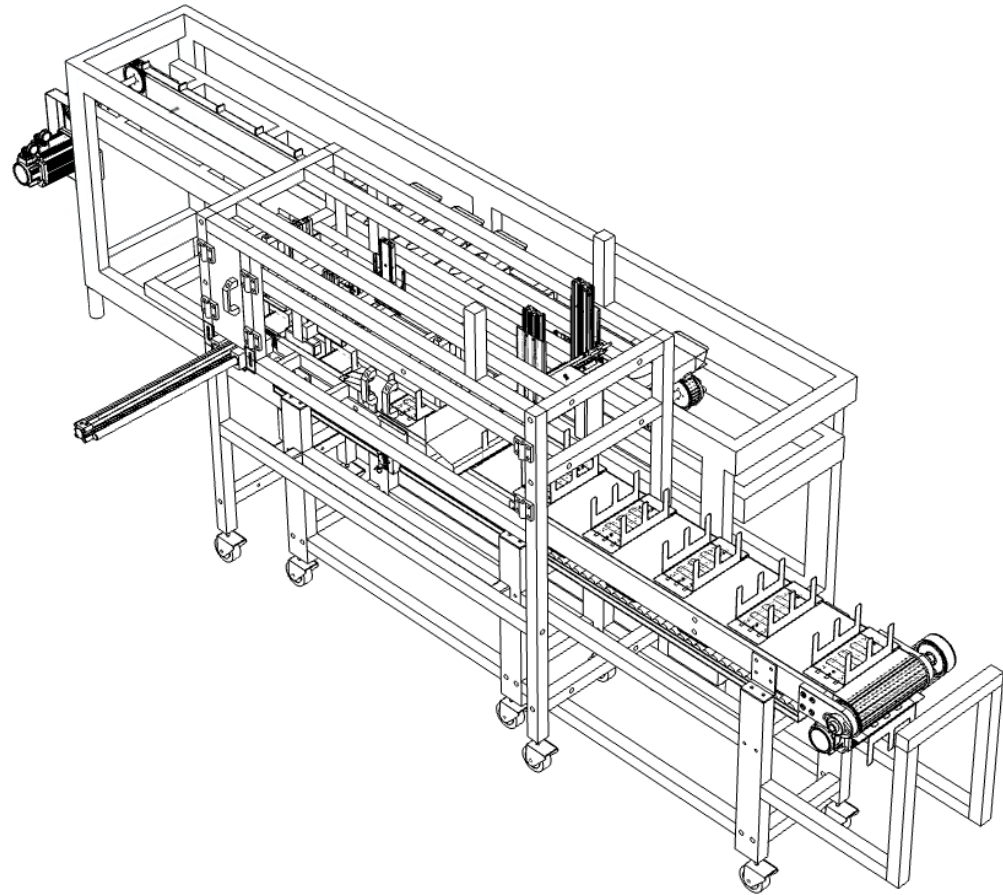
ISP Soft

EtherCAT®

EtherNet/IP®

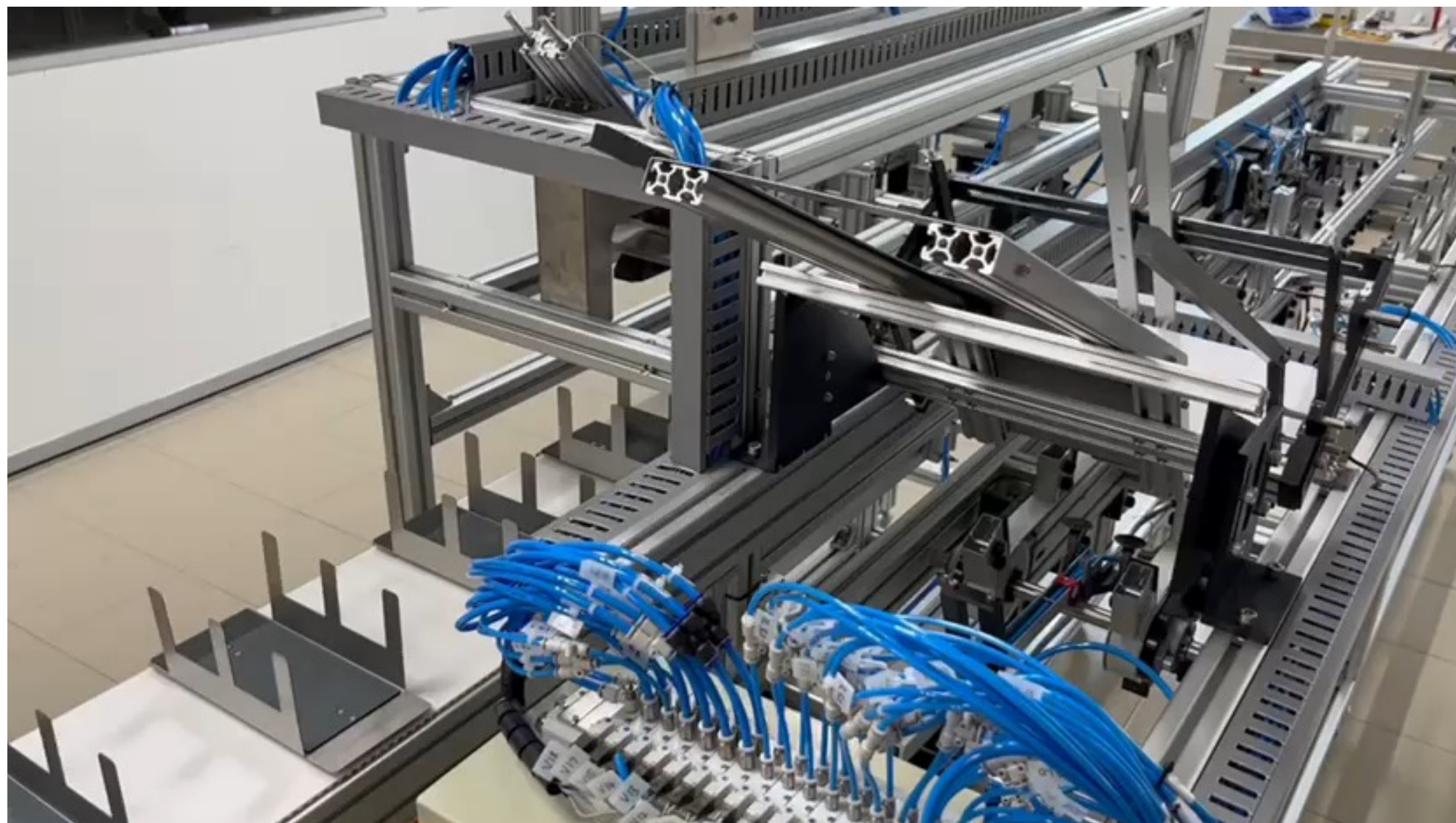
## Glove wrapping & box insertion process

- Auto wrap glove stacks with thin paper sheet
- Glove box auto folding mechanism
- Wrapped glove stacks auto insert into glove box
- both side of glove box is folded & sealed.



	Spec
Product	Nitrile Glove (100x in a box)
Dimension	3900 x 1530 x 1420
Cycle Time	7s / glove box
Load / Unload	Auto, non-stop feeding

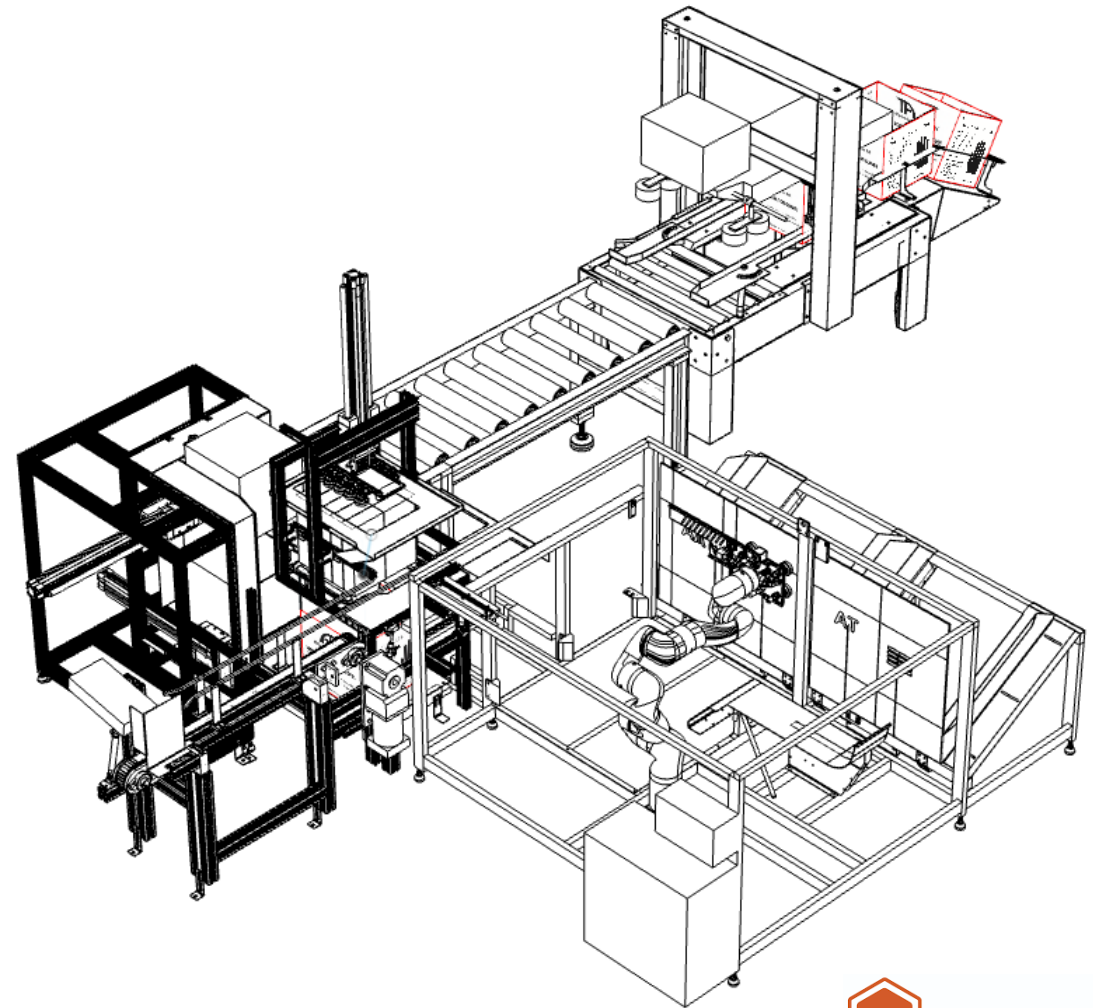




# Glove carton packing

- Auto pack 10x glove box in a stack
- Auto fold carton
- Auto insert glove box stacks to carton
- Seal & print lot num, & Manu. Date on Carton

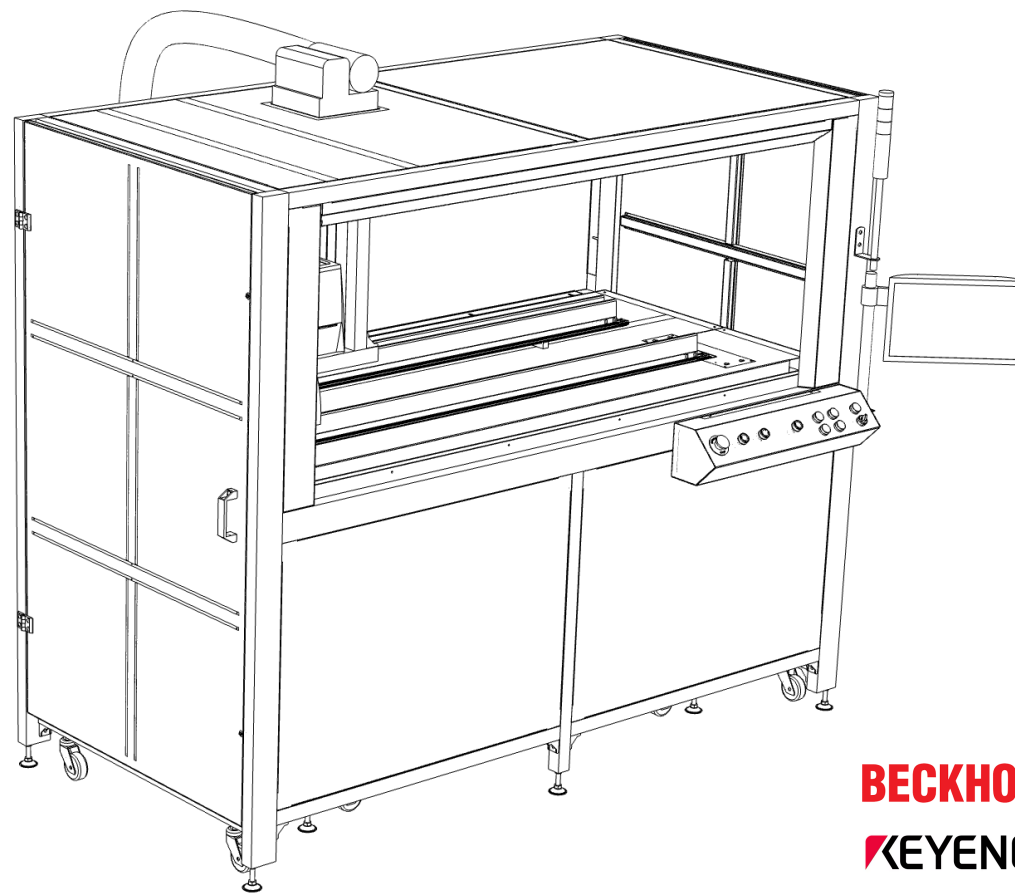
	Spec
Product	Carton Glove (10x in a carton)
Dimension	4470 x 2660 x 1700
Cycle Time	60s / carton
Load / Unload	Manual, non-stop feeding



## Flat rod QC Inspection Automation

- Accuracy 16um
- Dual lane laser profiler scanning
- Full scan profile, reconfigurable inspection point
- Auto engrave S/N on flat rod on pass FG

	Spec
Product	QC Flat rod
Dimension	4470 x 2660 x 1700
Cycle Time	30s / flatrod
Load / Unload	Manual



**BECKHOFF**

**KEYENCE**

Ether**CAT**®

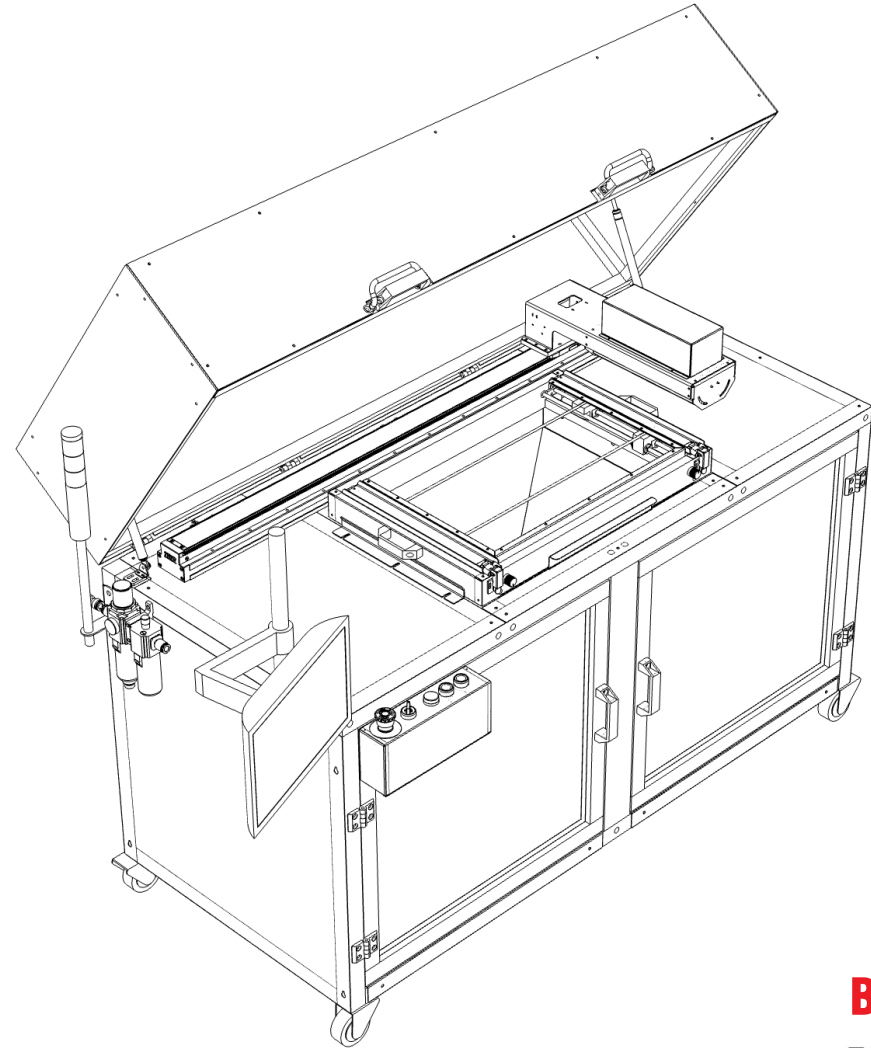
Ether**Net/IP**®



## Ionizing spacer remover Automation

- Dual directional blower
- Ionized Air blower to remove die cut spacer
- Support multi model

	Spec
Product	IC spacer
Dimension	1660 x 780 x 1195
Cycle Time	60s / 100 spaces
Load / Unload	Manual



## Nessiok coffee robot

- Auto capsule coffee serving
- Robot pick & place selected coffee into coffee machine
- Auto cup dispenser
- custom design ordering kiosk



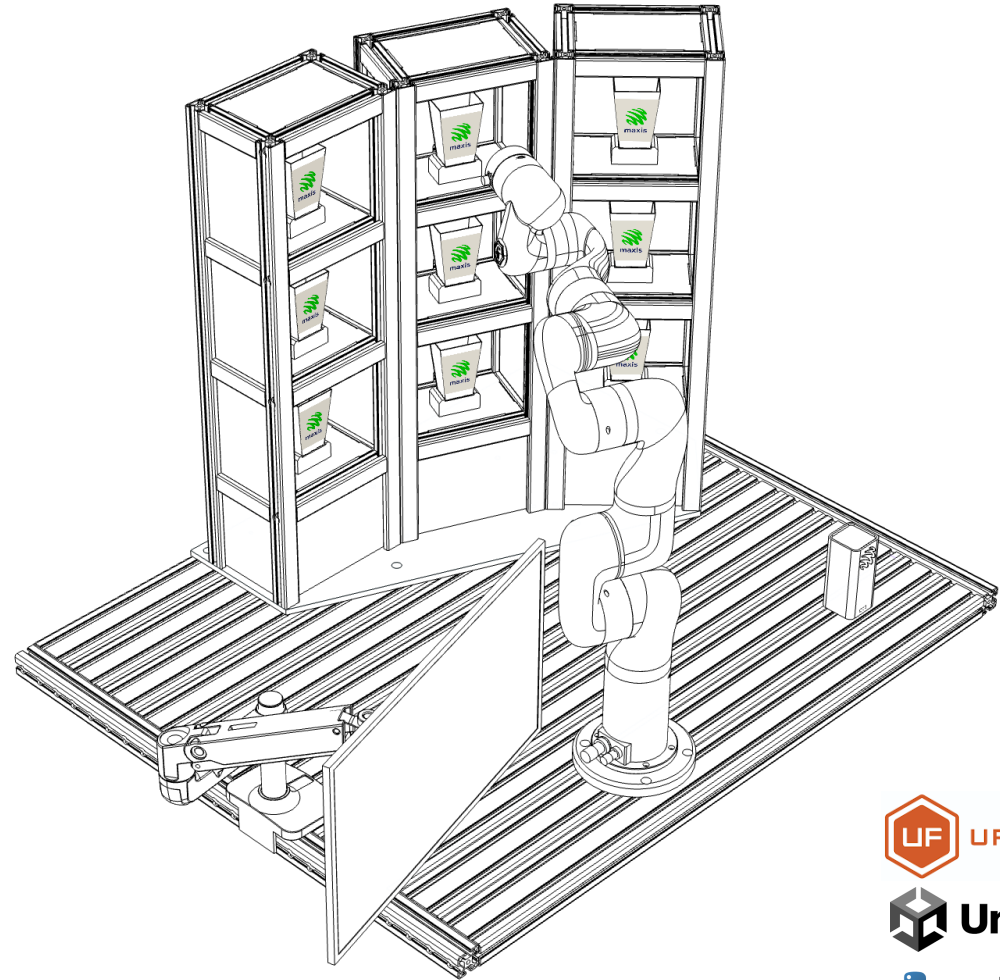
	Spec
Product	Coffee (Nescafe Nespresso)
Dimension	1525 x 915 x 1630
Cycle Time	150s / cup (110ml)
Load / Unload	Manual, 100 capsule/load



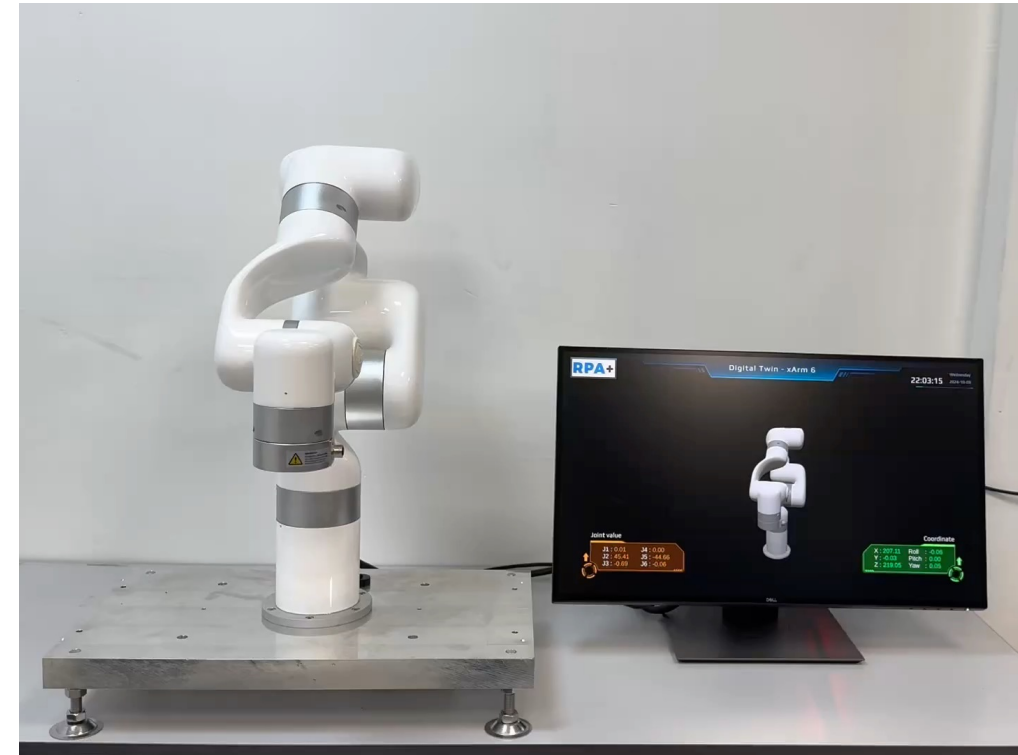
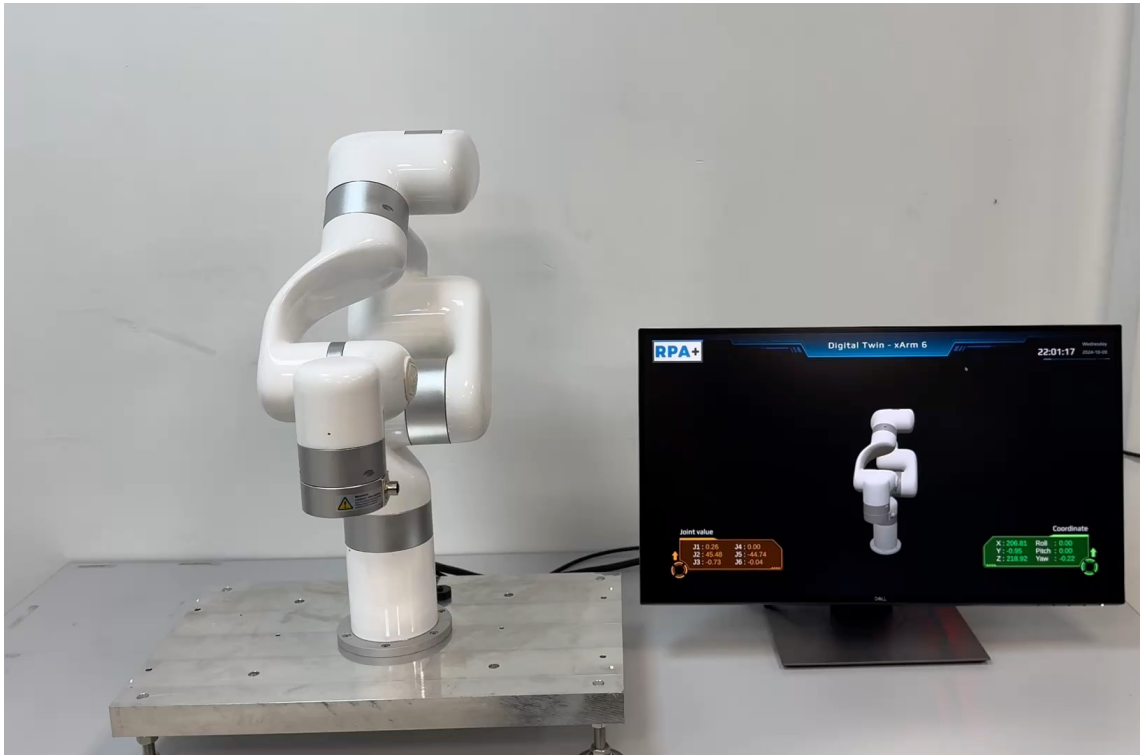
## Maxis business innovation center gamified inventory allocation automation robot

- Digital twin interaction
- Real time robot & sensor monitoring in 3D
- Robot auto pick & place rack selection

	Spec
Product	Gift on rack
Dimension	1200 x 960 x 860
Cycle Time	20s
Load / Unload	Manual



## Digital Twin

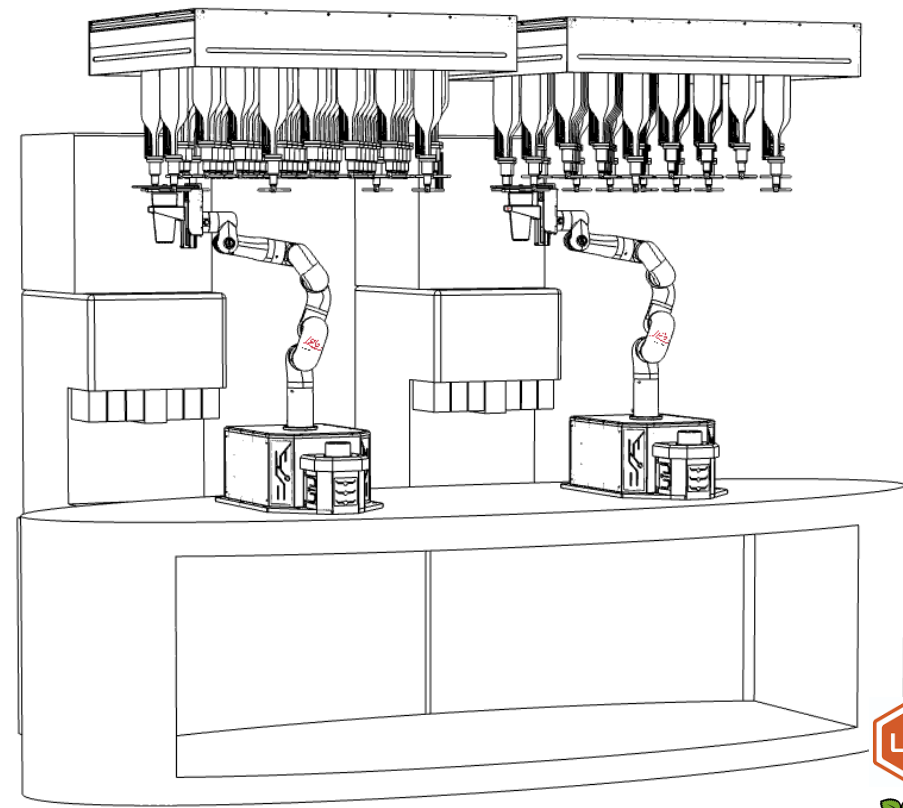


**Digital twin** is a virtual replica of a physical object or system that simulates its behaviour in real time to enhance **Monitoring**, **analysis**, and **decision-making**.

# Mixobot Cobot

- Auto cocktail preparation
- Robot dispenser the selected liquor recipe into mixer, add soda & ice with designed shake mixing motion
- Auto ordering & serving program

	Spec
Product	Cocktail
Dimension	2870 x 1920 x 1790
Cycle Time	150s / cup
Load / Unload	Manual, 50 liquor/load





# Malaysia First Mixologist Robot







# Smart Factory



# RPA - MES

Smart  
Manufacturing  
Execution  
System



# RPA - MES

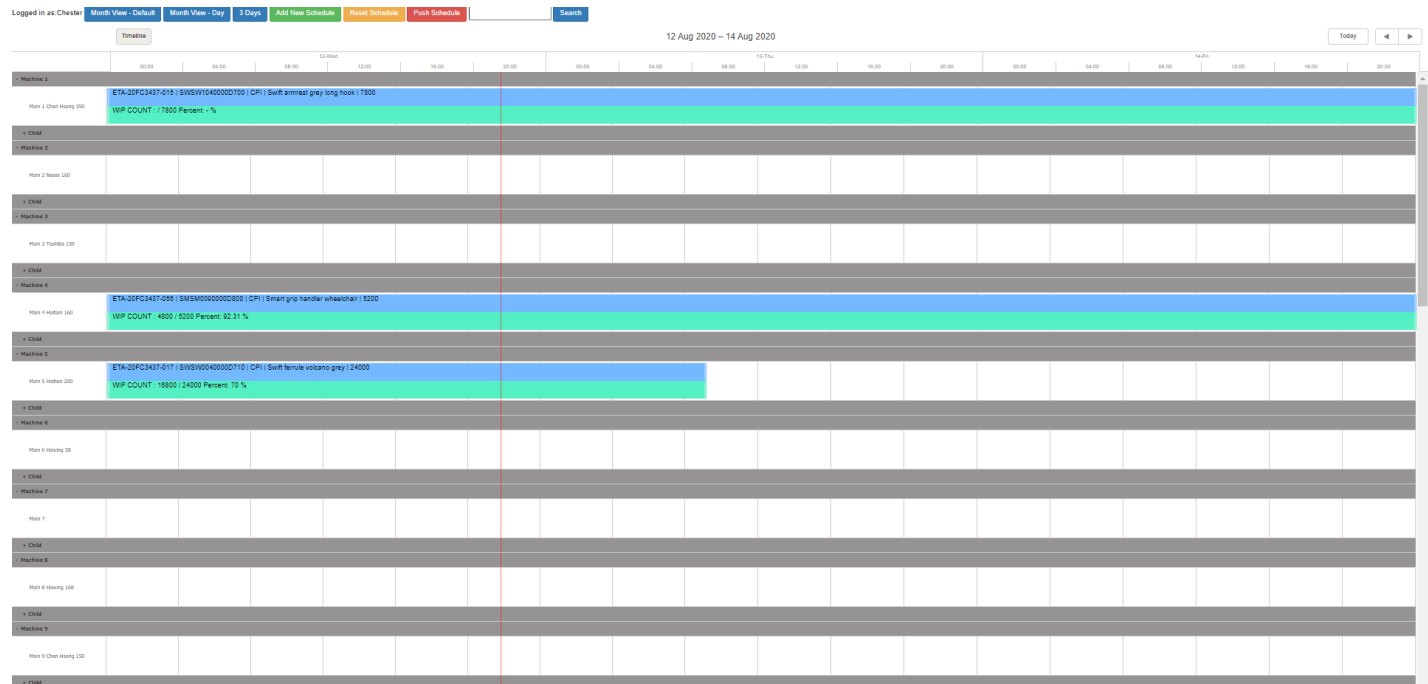
- Production Planner
- Work Order Tracking
- Toll Gate
- Real-time OEE
- Down Time Tracking
- QC Report



# Production Planner

Production Scheduler features a drag-and-drop interface within a calendar Gantt chart view, enabling planners to quickly identify production lead times with just a few clicks.

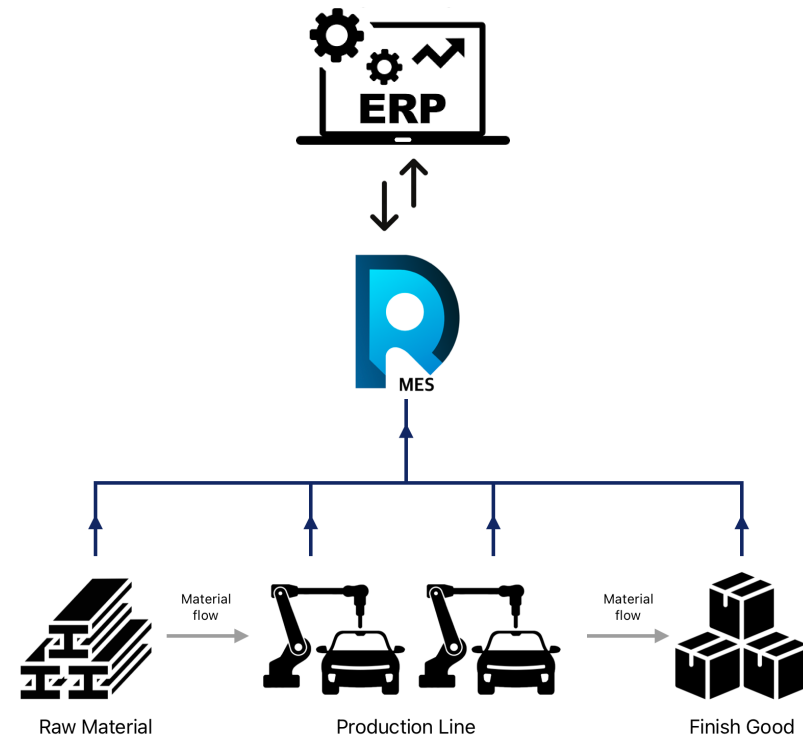
Allowing planner for easy oversight of overall production capacity and machine utilization immediately.



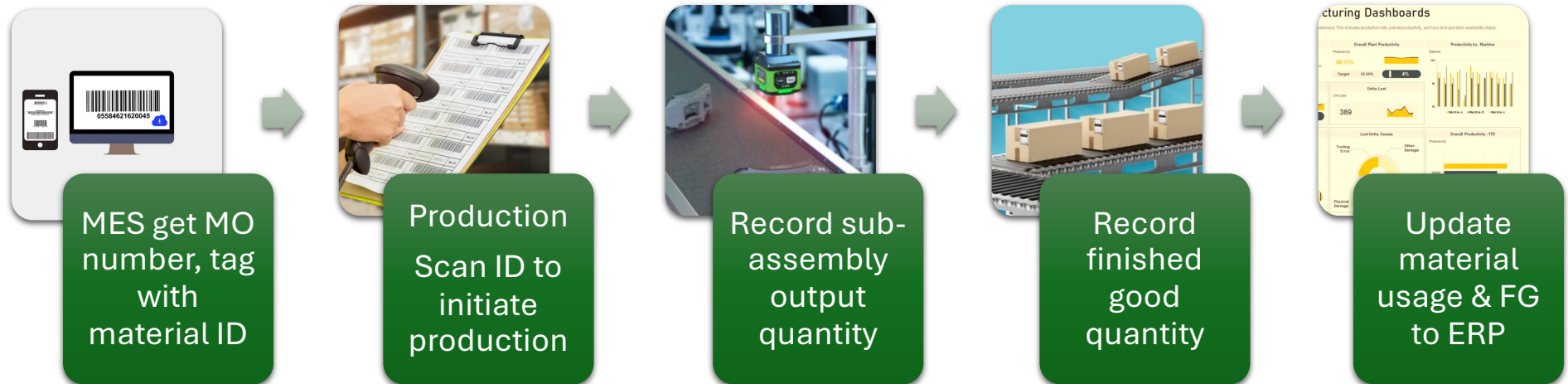
## Work Order Tracking

Work Order Tracking oversees the utilization of raw materials from the Inventory as they progress through each production phase. It monitors both the incoming raw materials and the outgoing finished components, culminating in the final product. This process guarantees that there is no chance for unrecorded waste.

By synchronizing with ERP, inventory data will be updated in real-time, enhancing stock counts and improving procurement planning.

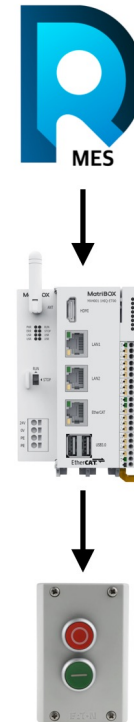


# Work Order Tracking



## Toll Gate

Toll Gate controls the Start button of production machines, disable unplan production and control the lot quantity to prevent mixture of raw material to track variations & rejects.



# Real Time OEE

Toll Gate controls the Start button of production machines, disable unplan production and control the lot quantity to prevent mixture of raw material to track variations & rejects.

JTC / Barcode

Workcell ID: 2

Part #

CO #

Machine Status (OEE)

0%

Remarks:

Remember to scan out upon completion of JTC in your process

WC2

Station

TIG

Balance

10

0%

WC2

Station

MIG\_1

Balance

10

0%

WC2

Station

MIG\_2

Balance

9

10%

WC2

Station

Robot 1 Task 1

Balance

20

0%

WC2

Station

Robot 1 Task 2

Balance

20

0%

WC2

Station

Robot 2 Task 1

Balance

0

0%

WC2

Station

Robot 2 Task 2

Balance

0

0%

WC2

Station

Robot 3 Task 1

Balance

0

0%

WC2

Station

Robot 3 Task 2

Balance

0

0%

WC2

Station

Leak Test

Balance



0

0%

Select Employee

Select Shift

ManPower Ratio.

No	Image	Part No	Part Name	Edit
1		E17-0132	COLLAR MOUTH	<div>-10-10</div> <div>-1-1</div> <div>0</div> <div>+1+10</div>
2		E17-0133	JOINT, EXT PIPE	<div>-10-10</div> <div>-1-1</div> <div>0</div> <div>+1+10</div>

RESET SUBMIT

Machine Setup

Machine Error Check

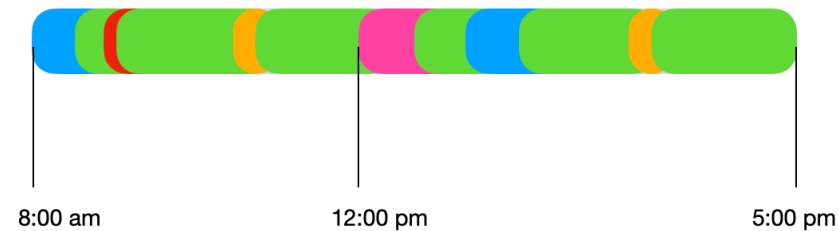
Material Check

Man Power Check

Break Time Check

# Down Time Tracking

## Zone Performance Dashboard



- Material Handling
- Running Production
- Not Running Production (Idle, Toilet Break etc)
- Lunch hour

Material Handling time : 40 minutes  
Running Production time : 422 minutes  
Not Running Production time : 20 minutes  
Lunch time : 58 minutes

Planned Production Time = Total Shift Time - Lunch Time - Material Handling Time

Planned Production Time = 540 - 58 - 40 = 442 minutes

Availability = Running Production Time / Planned Production Time

Availability = 422 / 442 ≈ 0.95475 or 95.475%



BECKHOFF

KEYENCE

EtherCAT®

EtherNet/IP®

python™

OpenCV

DAHUA  
TECHNOLOGY

NEXT.js

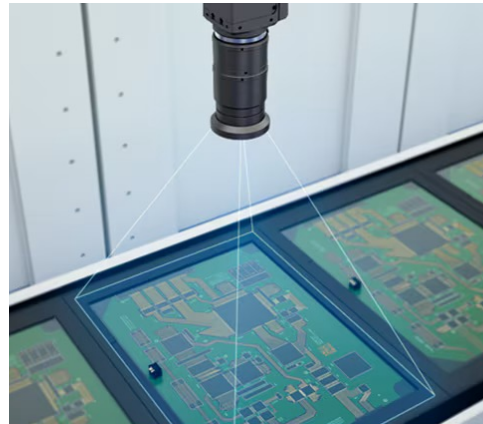


## QC Report

QC Report allows both AI vision or human input.

Record & notifies the defect parts to the line engineer to inspect the specific station/machines that causes the quality issue.

Also notifies stake holder on the production status through Telegram API.



Location	: BKY_F2
Workcell ID	: 2
Station ID	: 14
Station Name	: Robot 1 Task 1
JTC ID	: 3150
JTC Order No	: MES Testing V3
Action	: Start 3:16 PM

Location	: BKY_F2
Workcell ID	: 2
Station ID	: 14
Station Name	: Robot 1 Task 1
JTC ID	: 3150
JTC Order No	: MES Testing V3
Output Cycles	: 10
Duration	: 00:00:20
Action	: Stop 3:16 PM

**BECKHOFF**

 **python**™

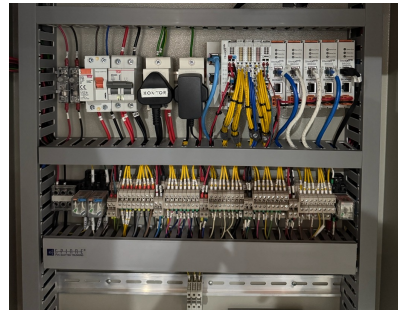
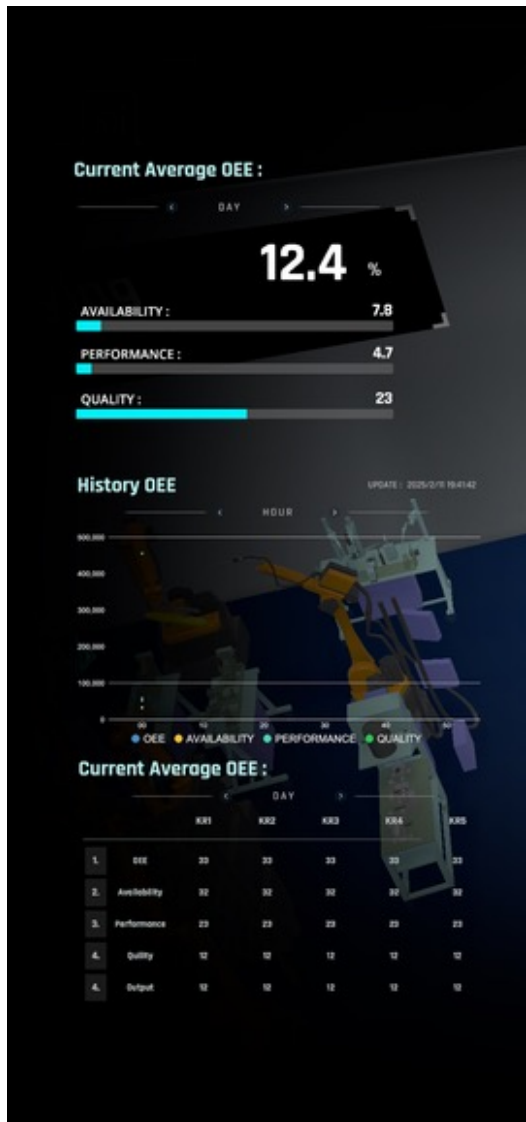
**KEYENCE**

 **OpenCV**

**EtherCAT**™

**alhua**  
TECHNOLOGY

**EtherNet/IP**™



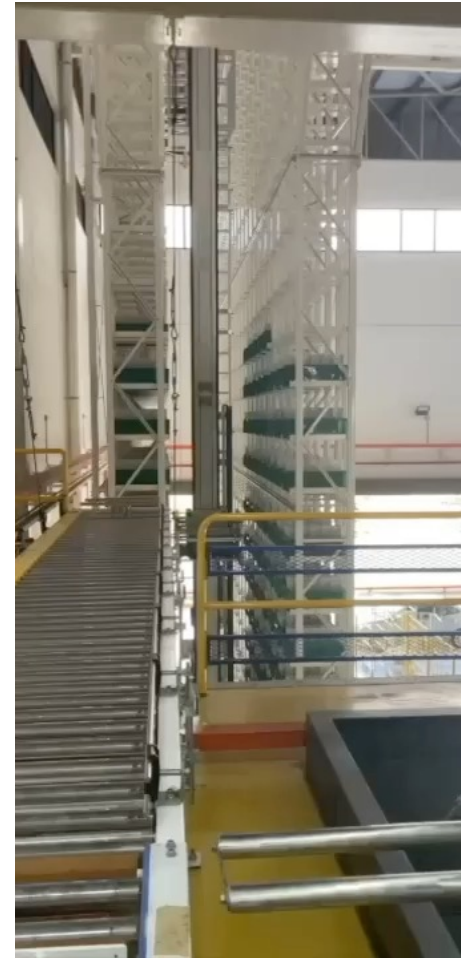
## Digitalization - Smart Factory

“More efficient, agile & lean factory”

- ✓ Automated, Integrated systems & work-flows
- ✓ Streamlined business processes
- ✓ Data & info at finger tips for decision making
- ✓ Remote access to live operation
- ✓ Track from **Sales Order, Work Order to Finished Goods**



## 3D Scada Control Room



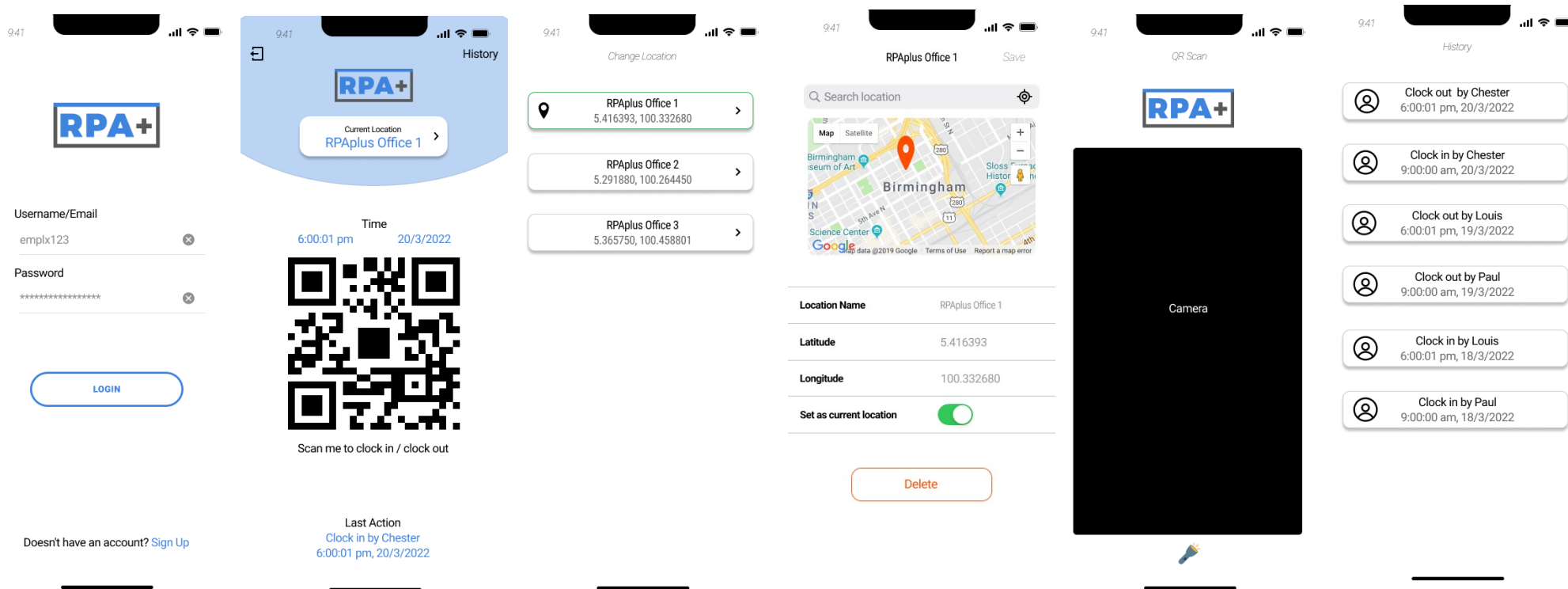


# 3D Scada Control Room



# Bespoke Software





# Office-Anywhere Attendance System

The Best Attendance Solution for Mobile / Remote Employees  
Use this to replace the traditional badge scan terminal – Why Not ?



## Custom eForms to Suite Customer Needs

The screenshot displays the 'DIPPING MACHINE START-UP CHECK' form on the AT Glove Eng website. The form is titled 'DIPPING MACHINE START-UP CHECK' and is part of the 'Electronic Forms' section. It includes a sidebar with navigation links, a header with user information, and a main content area with a form titled 'DIPPING MACHINE START-UP CHECK'. The form contains a table with 5 rows of instructions and a 'Status' column with radio buttons for Yes, No, or NA. A red box highlights the 'DIPPING MACHINE START-UP CHECK' form title.

No.	Description	Status
1	Sound the Alarm before run the chain	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> NA
2	Free run the chain in Bypass Mode (coagulant, latex 1, latex 2, silicone)	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> NA
3	Check all the Thank Levels and incoming Water Flow	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> NA
4	Check the Level Sensor function of the coagulant, latex 1, latex 2 dipping tank	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> NA
5	Turn-on the Burner and Blower for all the ovens	<input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> NA

Serial # M.S16000865	E. Serial #
Station PB - ALL IN ONE	Vendor
Description RI SOLUTION (A)	Target Date
	SSD

Full Order Items		Ship From Unit																	
Order #	Start Job	Phase Job																	
Orig Qty: 1.0000	Cur Qty: 1.0000	Time: 00:03	mins																
Seq No, Level, Part Code, Rev, Bar/Ref, Status, Qty/Unit, UOM, Description																			
<div> <div>Get Complete Detail</div> <table border="1"> <thead> <tr> <th>Name</th> <th>Status</th> <th>Solution</th> <th>Machine ID</th> <th>Quantity</th> <th>Remain Qty</th> <th>Sample Qty</th> <th>CompG</th> </tr> </thead> <tbody> <tr> <td>WALC C181825RUP (C1818)</td> <td>REV</td> <td>REV</td> <td>REV</td> <td>REV</td> <td>REV</td> <td>REV</td> <td>REV</td> </tr> </tbody> </table> </div>				Name	Status	Solution	Machine ID	Quantity	Remain Qty	Sample Qty	CompG	WALC C181825RUP (C1818)	REV	REV	REV	REV	REV	REV	REV
Name	Status	Solution	Machine ID	Quantity	Remain Qty	Sample Qty	CompG												
WALC C181825RUP (C1818)	REV	REV	REV	REV	REV	REV	REV												
<div> <div>Phase Detail</div> <table border="1"> <thead> <tr> <th>Start</th> <th>End</th> <th>Phase</th> <th>Time (mins)</th> <th>Code</th> <th>Code Description</th> <th>Comment</th> <th>Updated User</th> </tr> </thead> <tbody> <tr> <td colspan="8"></td> </tr> </tbody> </table> </div>				Start	End	Phase	Time (mins)	Code	Code Description	Comment	Updated User								
Start	End	Phase	Time (mins)	Code	Code Description	Comment	Updated User												

Unit Comp.	Get Info.	Next
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Comment	Vendor	WIP	Hold	Exit
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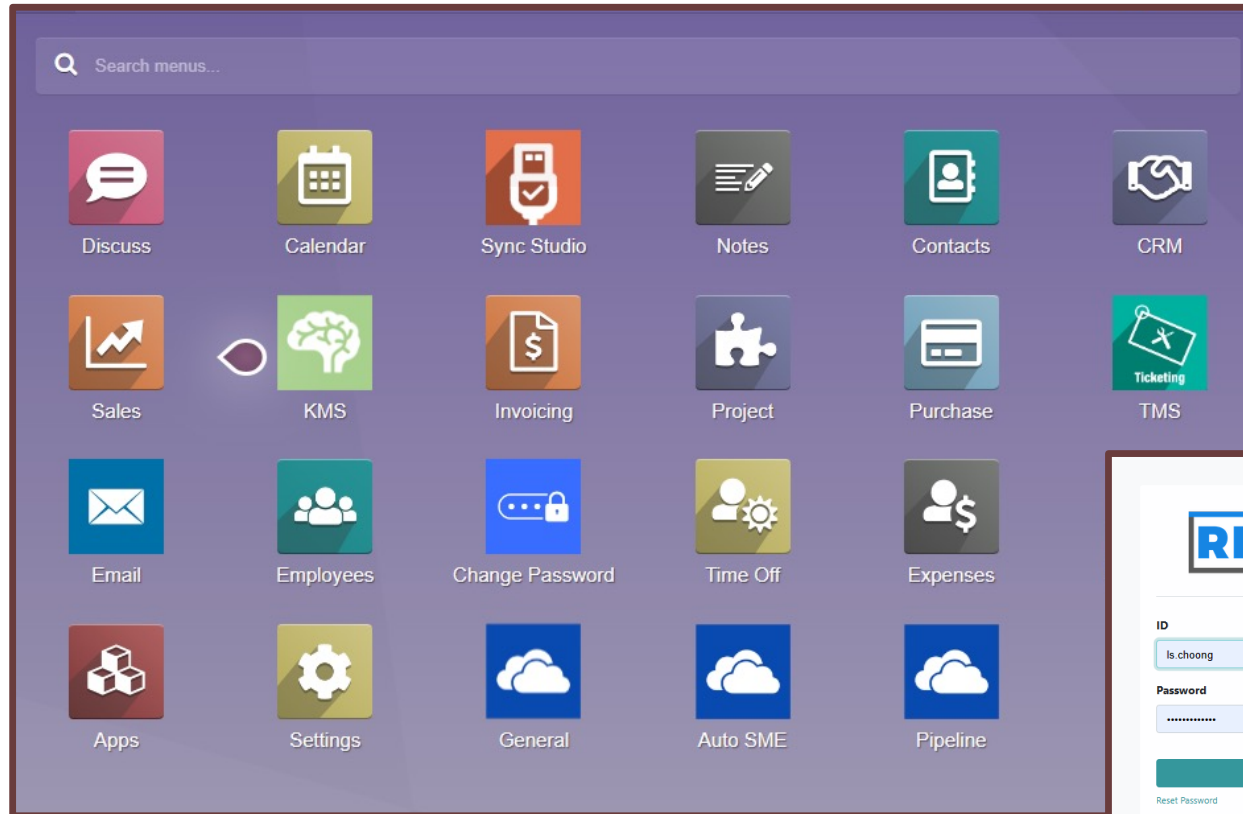
Integrated with Doc-control  
document numbering.

Auto extract info from database  
to be integrated into the  
eForm.

Time saving and avoidance of manual errors.



## Single Secured Sign-on



Standard based Authentication as a service.

Single login passwd and ID to access to all applications on dashboard. Secured and reliable.

Optional VPN framework per customer need.

A login form for RPA+. It features the RPA+ logo at the top. Below the logo, there are two input fields: "ID" with the value "Is choong" and "Password" with masked characters. A green "Log in" button is positioned below the password field. A link for "Reset Password" is located below the login button. At the bottom, it says "Powered by Odoo".



# Service Ticket Management System

TMSTicket Management SystemConfiguration

Tickets

+ Create

Search...

FiltersGroup ByFavorites

	Reference	State	Subject	Date	Customer...	Executed by...	Topic	Sub Topic
<input type="checkbox"/>	RPA-241	Closed	[12M] Autodesk F...	08/02/2023	Internal [I...	Jasmine	[INT] BizDev	Supplier Require...
<input type="checkbox"/>	RPA-240	Closed	[YISB] payment t...	07/03/2023	Internal [I...	Finance Team	[INT] Finan...	[INT] Supplier Rel...
<input type="checkbox"/>	RPA-239	Closed	[AV] Payment to A...	07/03/2023	Internal [I...	Finance Team	[INT] Finan...	[INT] Supplier Rel...
<input type="checkbox"/>	RPA-238	Closed	[AV] Balance pay...	07/03/2023	Internal [I...	Finance Team	[INT] Finan...	[INT] Supplier Rel...
<input type="checkbox"/>	RPA-237	Closed	[AV] Payment to A...	06/27/2023	Internal [I...	Finance Team	[INT] Finan...	[INT] Supplier Rel...
<input type="checkbox"/>	RPA-236	Cancelled	[YISB] Send DO (...	06/19/2023	YISB	Jasmine	[INT] Project	Project Required ...
<input type="checkbox"/>	RPA-235	Closed	[YISB] Send DO (...	06/19/2023	YISB	Jasmine	[INT] Project	Project Required ...
<input type="checkbox"/>	RPA-234	Closed	[YISB] Send DO (...	06/19/2023	YISB	Jasmine	[INT] Project	Project Required ...
<input type="checkbox"/>	RPA-233	Closed	[AV] PO to ATES	06/11/2023	Dnonce (KL)	Jasmine	[INT] Project	Project Required ...
<input type="checkbox"/>	RPA-232	Closed	[YISB] DO to YIS...	05/25/2023	YISB	Jasmine	[INT] Project	Customer Requir...
<input type="checkbox"/>	RPA-231	Cancelled	[YISB] DO to Yollink	05/22/2023	YISB	Jasmine	[INT] Project	Deployment & Se...
<input type="checkbox"/>	RPA-230	Closed	[YISB] PO to ATES	05/18/2023	YISB	Jasmine	[INT] Project	Project Required ...
<input type="checkbox"/>	RPA-229	Closed	[YISB] Payment t...	05/12/2023	Internal [I...	Finance Team	[INT] Finan...	[INT] Supplier Rel...
<input type="checkbox"/>	RPA-228	Closed	[AV] DO to ATES ...	05/12/2023	Dnonce (KL)	Jasmine	[INT] Project	Project Required ...
<input type="checkbox"/>	RPA-227	Closed	[AV] PO to ATES	05/11/2023	Dnonce (KL)	Jasmine	[INT] Project	Project Required ...
<input type="checkbox"/>	RPA-226	Closed	PO to purchase c...	05/10/2023	Internal [I...	Jasmine	[INT] BizDev	Supplier Require...
<input type="checkbox"/>	RPA-225	Closed	[YISB] Payment t...	05/09/2023	Internal [I...	Finance Team	[INT] Finan...	[INT] Supplier Rel...
<input type="checkbox"/>	RPA-224	Closed	[AV] Payment to ...	05/08/2023	Internal [I...	Finance Team	[INT] Finan...	[INT] Supplier Rel...
<input type="checkbox"/>	RPA-223	Closed	[YISB] PO to Best...	05/06/2023	YISB	Jasmine	[INT] Project	Project Required ...

Tickets / RPA-241

Edit+ CreateActionKnowSystem

Closed

ID	RPA-241	Customer	Internal [INT]
Subject	[12M] Autodesk Fusion Software Subs	Topic	[INT] BizDev
Date	08/02/2023	Sub Topic	Supplier Required Action (SRA)
Safety impacted	<input type="checkbox"/>	Requested by	Louis Ooi
Quality impacted	<input type="checkbox"/>	Request Approved by	LS Choong
Delivery impacted	<input type="checkbox"/>	Executed by	Jasmine
Cost impacted	<input type="checkbox"/>	Approved to execute by	LS Choong

Send messageLog note2Follow2

August 3, 2023

Louis Ooi - 12 days ago

State: Verification → Closed

Louis Ooi - 12 days ago

Louis Ooi confirm and close ticket.

Jasmine - 12 days ago

State: In Progress → Verification

Jasmine - 12 days ago

Jasmine added new task Task ID is TASK-254

Collaboration messages between team members are clearly logged and time stamped to improve turn around time.

A great productivity collaboration tool between functional teams.

# Manufacturing Orders Tracking App

GENERAL	Add/Edit Completion Date																		
	<div> <div>Show 10 entries</div> <div>PDF Excel Copy</div> <div>Search:</div> </div>																		
	Shipment ID	Shipment Value (USD)	Volume m3	Agreed Production Completion Date	Latest Revised Completion Date	Actual Production Completion date	P2 Production Completion Date	Total PIM Quantity For P2	Total PIM Progress	PIM WH1	PIM WH2	JIG	Total Shipment Carton / Quantity	Shipment FG (Carton) Progress %	P1 FG (Carton) Completion Progress	P2 FG (Carton) Completion Progress	Total P2 Production Quantity	FG WH 1 Receiving	Co pu da
FG Scanning	TRY-20C01	35,142.31	21.0	2020-01-31	2020-08-27		2020-08-25	1735	2135   123.05%	0   0%	110   6%	2025   85%	25	586   561940	0   0%	0 / 542 0%	0 / 44 0%	7100	0   0
Subcon FG Scanning	TRY-20A02	1,381.15	0.7	2020-08-03	2020-08-03	2020-07-29	0000-00-00	0	0   0%	0   0%	0   0%	0   0%	2	17   2750	17   100%	17 / 17 100%	0 / 0 0%	0	0   17
Injection Parts Scanning	TRE-20C01	38,960.12	33.3	2020-04-24	2020-08-13		2020-08-11	53350	56090   105.14%	0   0%	2000   4%	54090   92%	15	1181   99570	1097   92%	870 / 876 99%	227 / 305 74%	48610	185   1097
Subcon Injection Scanning	TEH-20L01	5,866.86	3.8	2020-06-22	2020-06-22	2020-06-30	2020-06-19	14535	17165   118.09%	0   0%	4742   33%	12423   75%	4	109   16195	109   100%	1 / 1 100%	108 / 108 100%	15945	96   109
SO Status Summary	TEH-20C01	29,770.96	19.1	2020-03-24	0000-00-00		0000-00-00	80185	75729   94.44%	2580   3%	20357   25%	52792   55%	3	518   84015	388   74%	40 / 40 100%	348 / 478 72%	76235	339   388
PIM / Subcon Order Tracking	TCD-20L01	1,209.60	1.2	2020-03-27	2020-06-16	2020-06-15	2020-06-12	2200	2200   100%	0   0%	0   0%	2200   100%	1	28   2520	28   100%	0 / 0 0%	28 / 28 100%	2520	28   28
Sales Order Tracking	TCD-20C01	14,317.36	12.2	2020-03-27	2020-05-18	2020-05-27	2020-05-14	39020	41834   107.21%	475   1%	0   0%	41359   87%	10	310   41140	310   100%	11 / 11 100%	299 / 299 100%	39020	299   310
Dashboard	TCD-20A02	43.20	0.0	2020-06-04	2020-06-04	2020-06-04	2020-06-04	0	0   0%	0   0%	0   0%	0   0%	0	1   90	1   100%	1 / 1 100%	0 / 0 0%	0	1   1
(PreCal) Trophy Shipment Dashboard	STI-20L02	7,048.36	6.9	2020-03-28	2020-06-30	2020-07-07	2020-06-26	7990	7166   89.69%	1820   23%	1800   23%	3546   39%	1	214   14628	214   100%	132 / 132 100%	82 / 82 100%	6960	124   214
Trophy Shipment Dashboard Compact	STI-20C01																		
Trophy Shipment Dashboard (PIM) Detail																			
Trophy Shipment Dashboard (FG) Detail																			
Dashboard OEM (PreCal)																			
Shipment Loading Scanning																			
Experimental																			
ERP Export																			
Maintenance																			
Scanning Archive																			

Auto time stamped communication log to track and improve effectiveness of team members communication

## Customers & Partners



# Contact Us

Chester **Chin** – Managing Director

[Chester.chin@rpaplus.com.my](mailto:Chester.chin@rpaplus.com.my)

+6017-4978729

Louis **Ooi** – Technical Director

[Louis.ooi@rpaplus.com.my](mailto:Louis.ooi@rpaplus.com.my)

+6017-4242270

**RPaplus Sdn. Bhd.**

**No. 7, Lorong Endah 4, Gelugor, 11700,**

**Penang, Malaysia**





Thank You