



History & Business Focus



Capital of Business Registration : 5,000,000 Baht

Employees : ~ 97 persons (Only Thais)

VT MOVE & SERVICE Company is machine's one-stop service for local and international industry. We are Thai's company provide services of transportation, relocation, unloading, unpacking, installation, maintenance and removal machine including Machine's Utility & Construction, Machine's foundation, Machine's System Wiring, Electricity, Piping for small medium and large heavy industrial machinery such as Press Machine Transfer Line, Automation Line, Packaging Line, Food Line, Line Bruckner BOPP, MDO, TDO, EXTRUDER, Plastic Injection M/C, CNC, Laser Cutting, Industrial chiller, Industrial transformer, Printing M/C, Electric Generator, etc. With skill and experience over than 30 years of moving setting up and installation those machineries which size are 1 to 3,000 ton up.

❑ IMM Application

- Machine Insertion
- Injection molding
- Ultrasonic
- De-flashing
- Flaming
- Clip Assembly

❑ Material Finishing

- Grinding
- Deburring
- Polishing

❑ Press Application

- Automation Press
- Automation Washing
- Spot Welding

❑ Laser Cutting Cell

❑ General Robot Automation

❑ Equipment

- Gripper Equipment for press.

❑ Service

- PLC Programming.
- Robots Programming.
- 3D Design
- Modifier Systems.



Robot For Press Machine



Press Automation

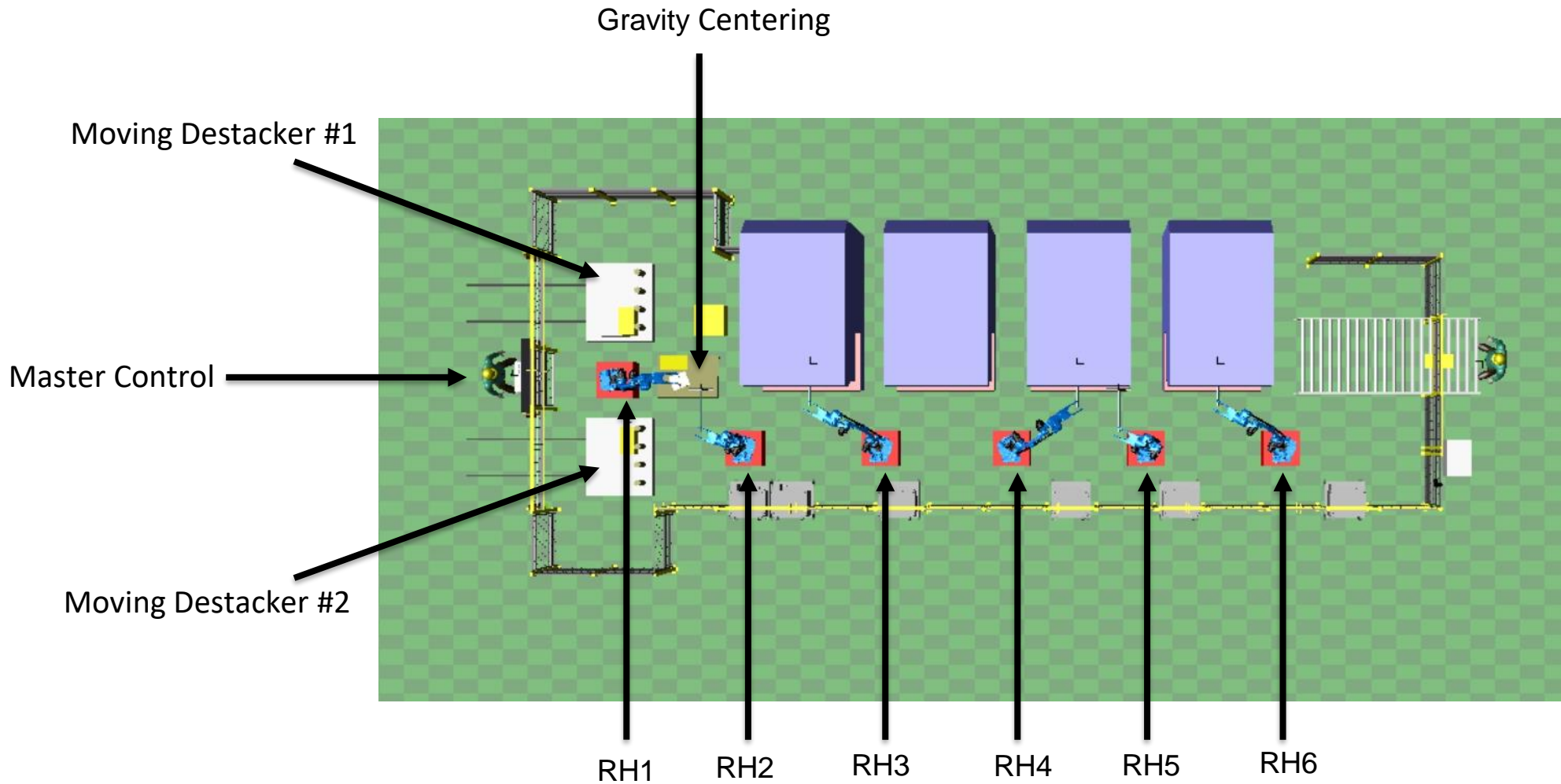
This is a full Robot Automation for tandem press line. There are 7 robots transfer a stamping part between 5 press machine with high speed. Normally, this line is operated by 10 labors / Shift. With Robot Automation, the customer can decrease number of labor but increase productivity.



Robot For Press Machine



System: Overview

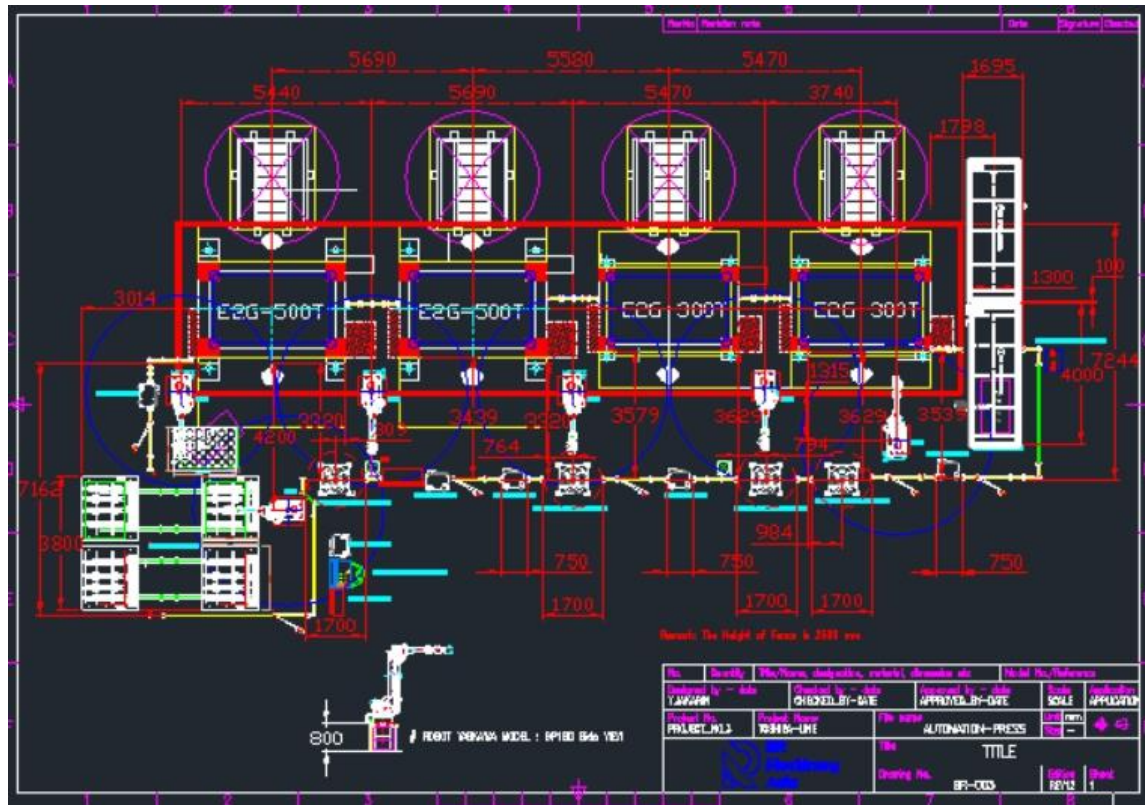


Robot For Press Machine



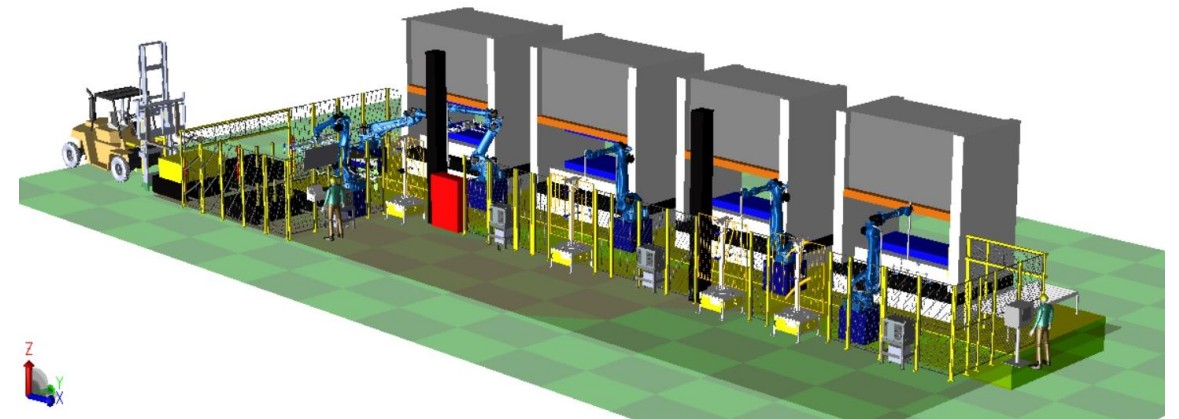
Before selling we provide line layout and simulation for confirm customer to line speed

This line are H type machine but install C-Frame(Small press), So Speed for this line layout is 6-7 spm.

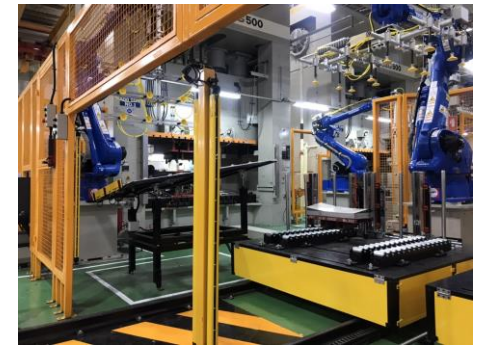
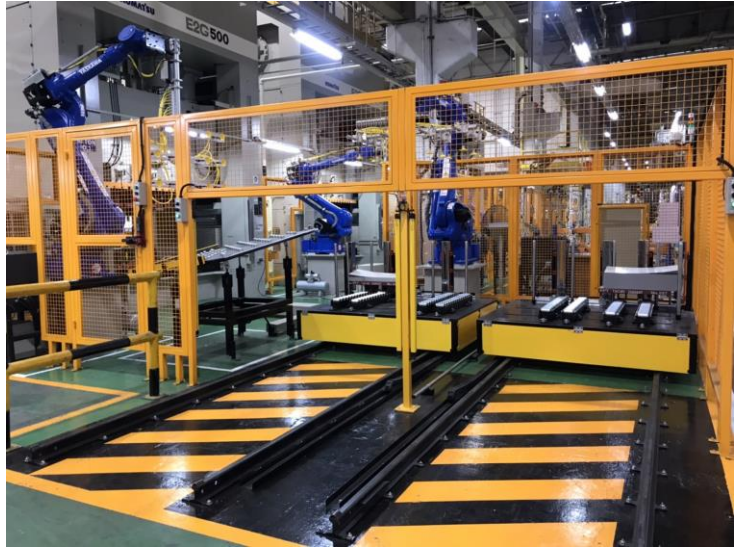


Line specification

- Line speed : 6-7 spm.
- Machine : 600-500-400-400 TON
- Handling Robot : Yaskawa GP180-120(Payload 180 Reach 3058mm)
- Controller : Mitsubishi Q Series
- Function : Rotate Auto Changer
- Blank sheet : 1300x1800 mm.



Robot For Press Machine

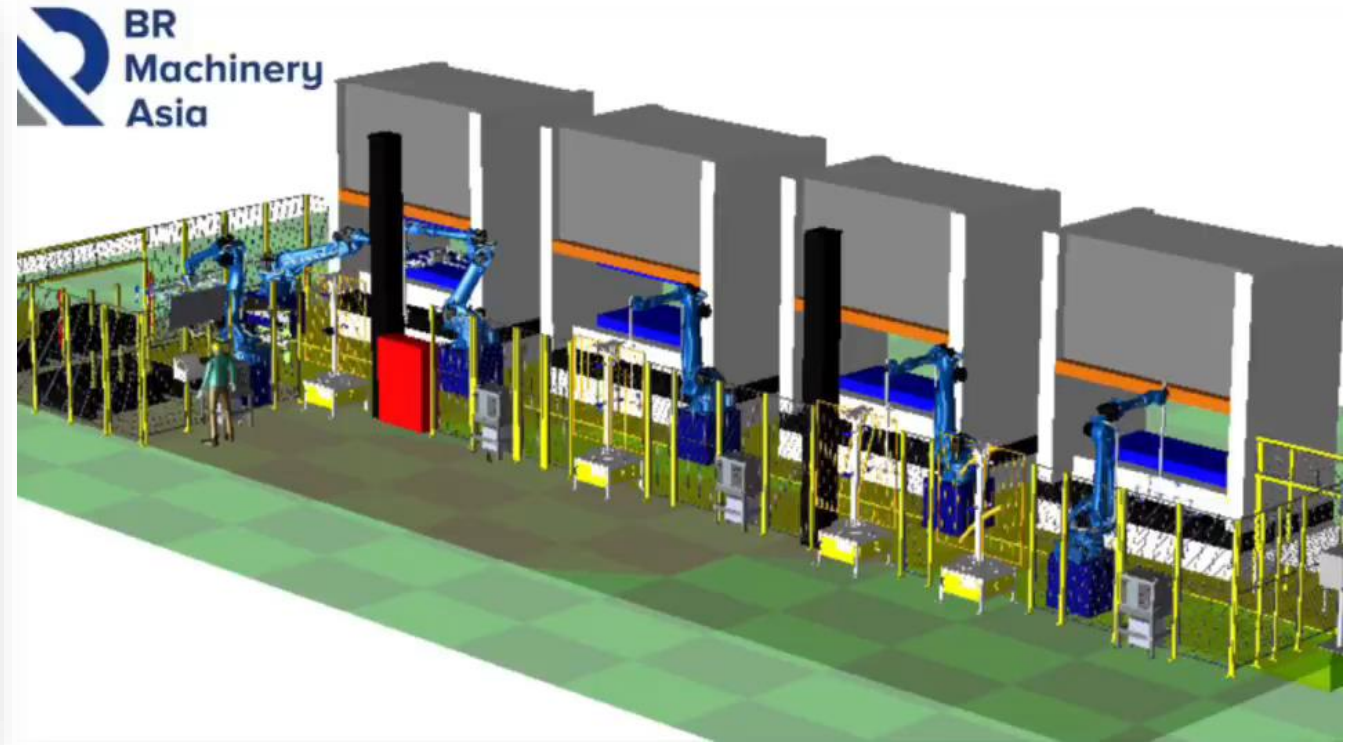


Robot For Press Machine



Ref. Video:

4 m/c With 6 robots Yaskawa – Komatsu line

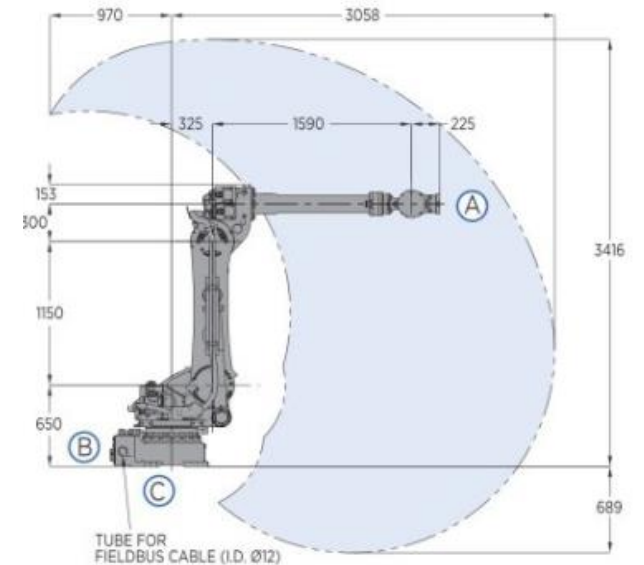


Robot For Press Machine



ROBOTS-YASKAWA GP180-120

Eliminating the need for a liner track, the extended-reach GP180-120 increases productivity for large part, high payload handling applications. A contoured upper arm enables easy access to parts in tight areas, and the reduced interference design accommodates close proximity placement of robots. While a wide wrist motion range eliminates interference, improving application flexibility, high moment and inertia ratings – combined with very fast axis speeds and acceleration capabilities – enable the GP180-120 robot to efficiently handle the toughest material handling project needs.



Applications:
Die Cast, Machine Tending, Material Cutting/Trimming, Material Handling, Part Transfer, Press Tending



120.0 kg
Payload



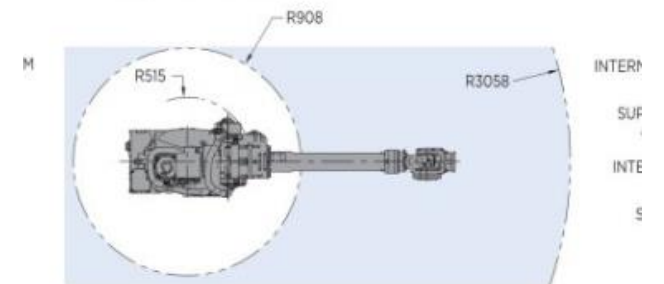
YRC1000
Controller



3058 mm
Horizontal
Reach



4105 mm
Vertical Reach



Item	GP180-120
Controlled axes	6
Maximum payload [kg]	120
Repeatability [mm]	±0.2
Horizontal reach [mm]	3,058
Vertical reach [mm]	4,105
Weight [kg]	1,090
Internal user I/O cable	24 conductors w/ ground
Internal user air line	(1) 3/8" connection
Power requirements	380-480 VAC
Power rating [kVA]	5

Robot For Press Machine



Robot Controller : YRC1000 Controller



Specifications controller YRC1000

Dimensions	598 (W) x 490 (H) x 427 (D) mm (125 l without protrusion parts)
Weight	70 kg max. (possible to control three external axes)
Protection class	IP54
Cooling system	Indirect cooling
Ambient temperature	During operation: 0°C to +45°C / During storage: -10°C to +60°C
Relative humidity	90 % max. (non-condensing)
Power supply	Three-phase 380–440 VAC (+10 %, -15 %), 50/60 Hz (±2 %)
Digital I/Os	Specialized signals: 19 inputs and 6 outputs / General signals: 40 inputs and 40 outputs
Programming capacity	JOB: 200,000 steps, 10,000 instructions / CIO ladder: 20,000 steps
Expansion slots	2 x PCIe or 2 x PCI or 1 x PCI/1 x PCIe
LAN (Connection to host)	2 (10BASE-T/100BASE-TX)
Interface	RS-232C/RS422: 1 ch (used by switching)

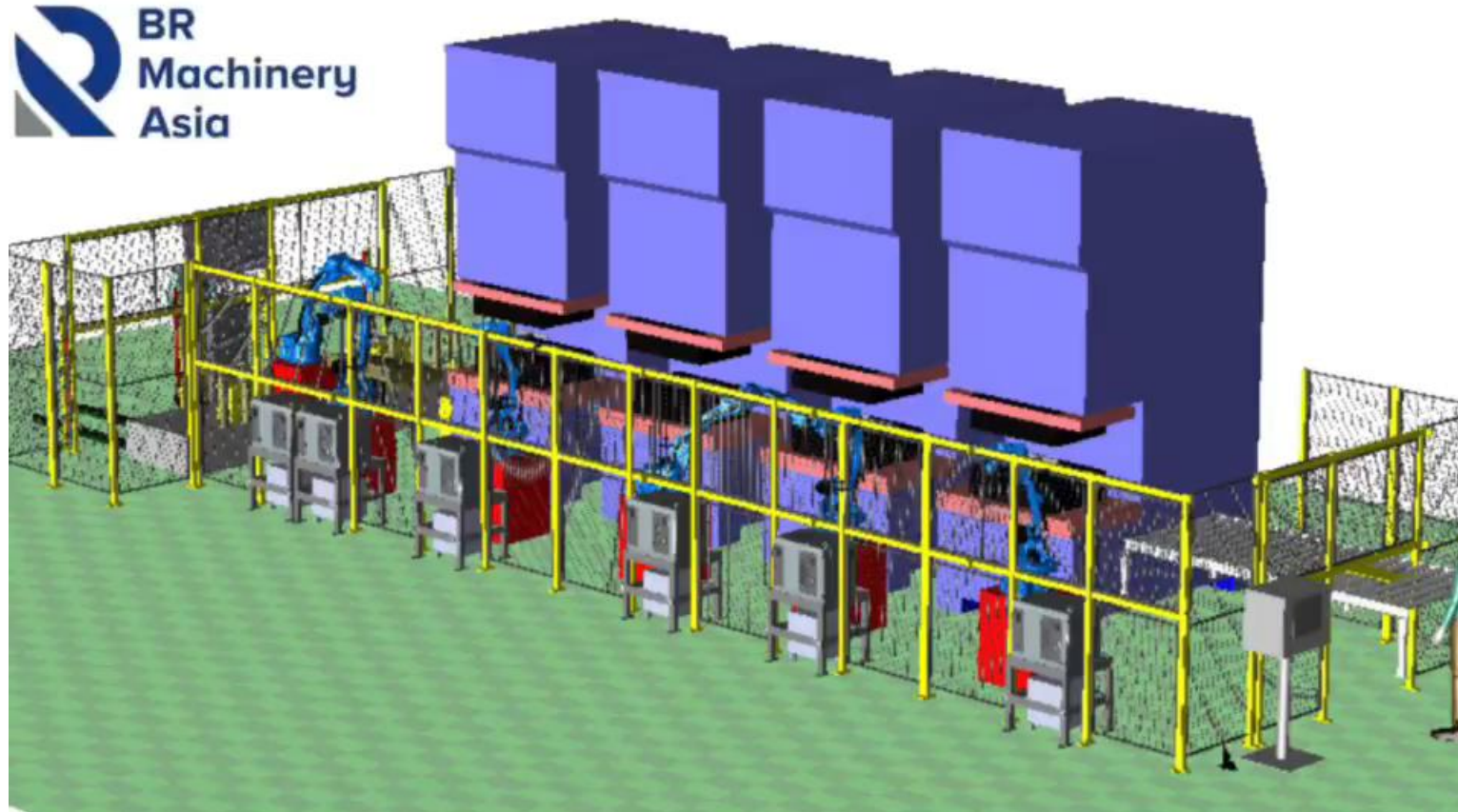
Robot For Press Machine



Robot For Press Machine



Ref. Video: 4 m/c With 6 robots Yaskawa – Aida 200T line



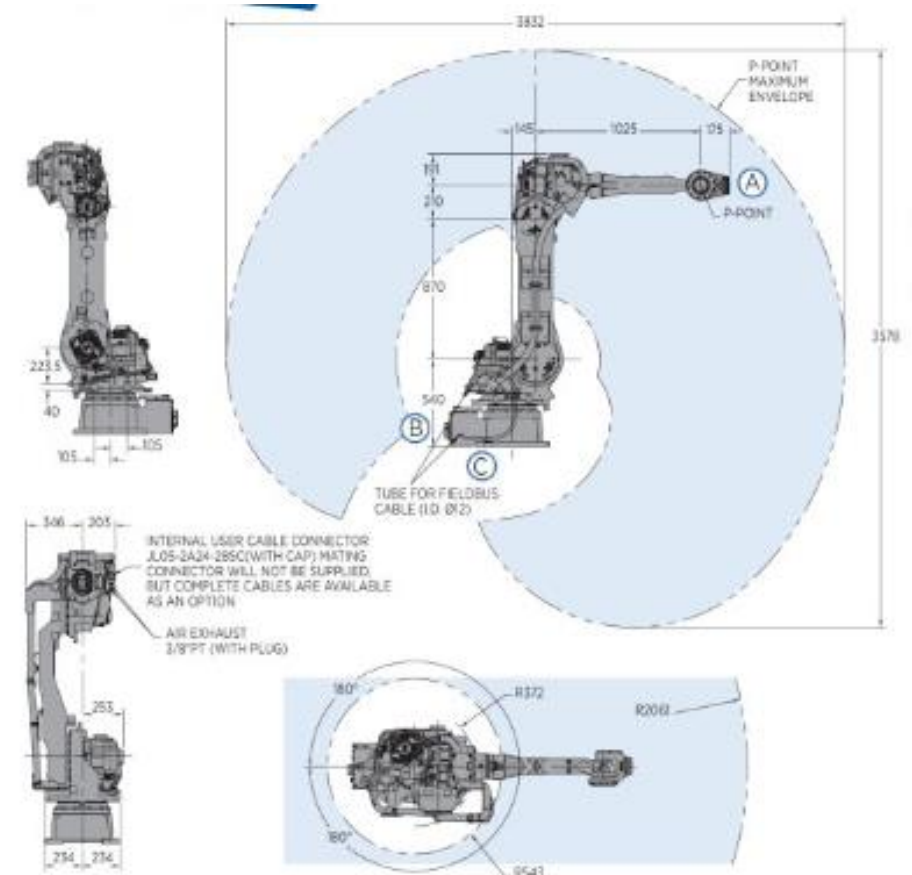
Robot For Press Machine



ROBOTS-YASKAWA GP50

Offering high speeds and mounting flexibility for a large range of applications, the GP50 long reach robot offers outstanding performance for increased production output. Fast axis speeds and acceleration capabilities decrease cycle time, while high moment and inertia ratings support the handling of large and heavy payloads. The reduced interference design allows for high-density robot placement, and a streamlined upper arm provides easy access to parts in tight areas. Engineered for easy operation, the GP50 offers high wrist ratings for better handling capacity and a wide wrist motion range to eliminate interference, improving application flexibility.

Item	GP50
Controlled axes	6
Maximum payload [kg]	50
Repeatability [mm]	±0.07
Horizontal reach [mm]	2,061
Vertical reach [mm]	3,578
Weight [kg]	570
Internal user I/O cable	24 conductors w/ ground
Internal user air line	(2) 3/8" connection
Power requirements	380-480 VAC
Power rating [kVA]	4.5



Robot For Press Machine

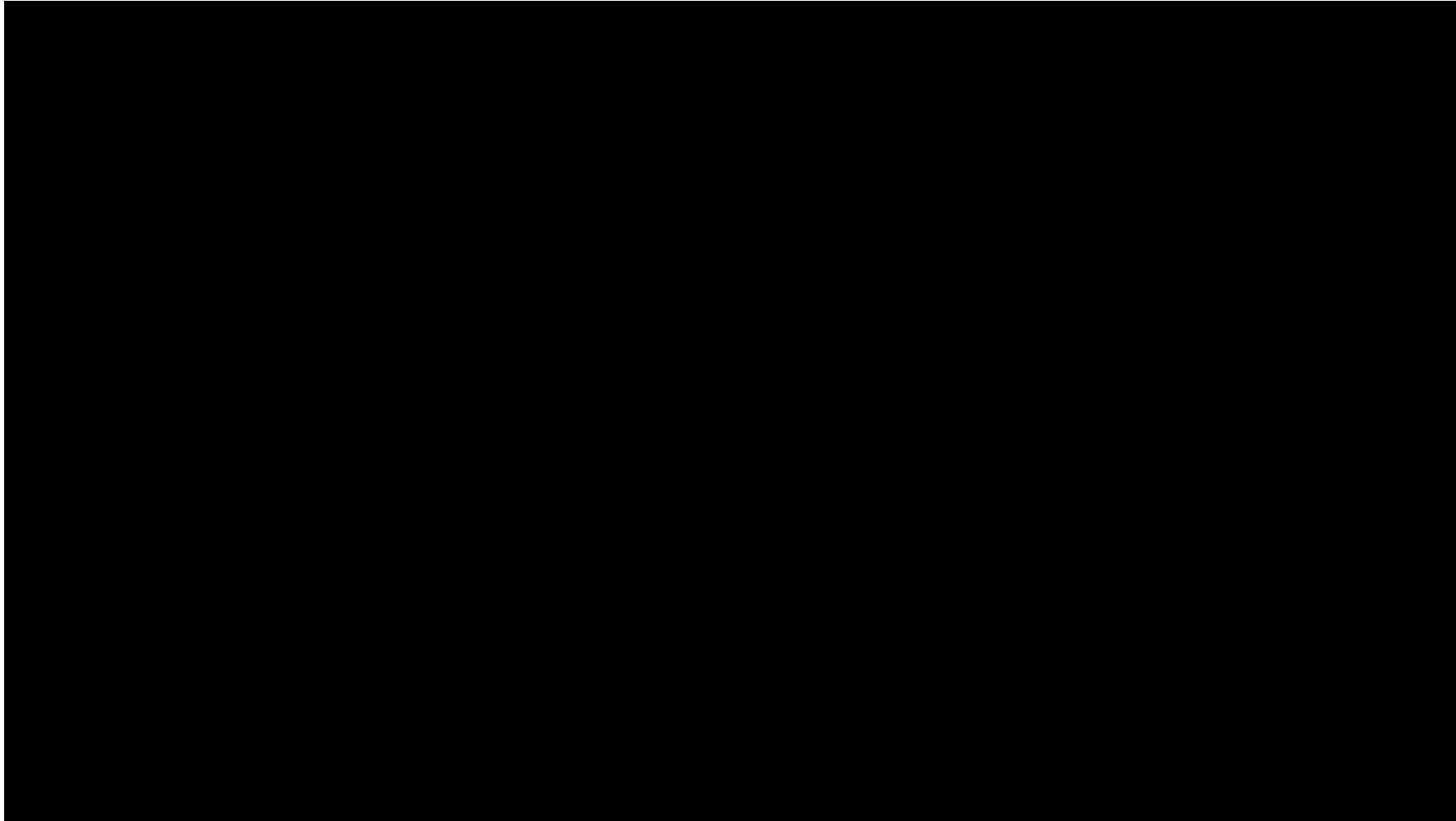


Robot For Press Machine



Ref. Video:

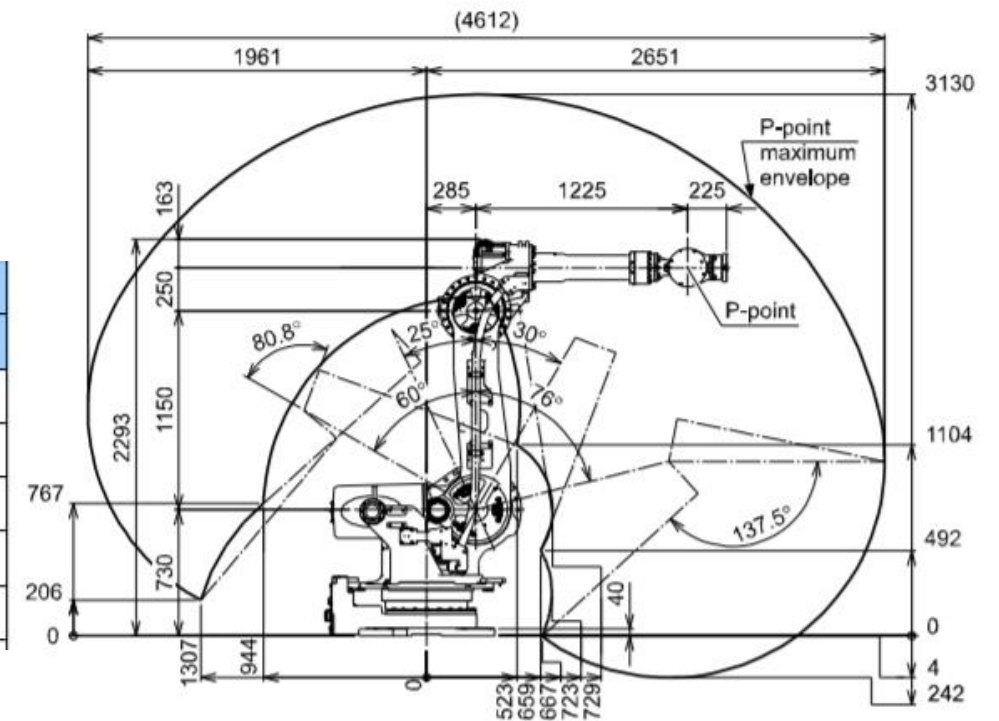
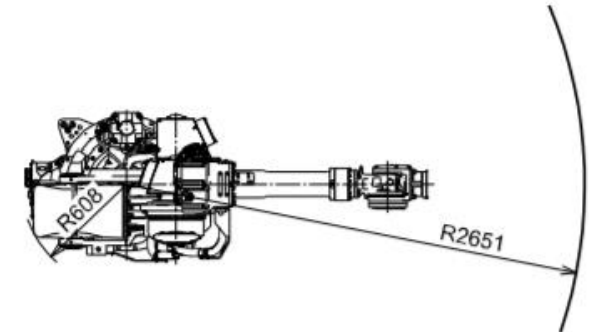
5 m/c With 7 robots Yaskawa – Fukui line



Robot For Press Machine



ROBOTS-YASKAWA PH-130F



Item	Model	MOTOMAN-PH130F
Type		YR-1-06VXF130-A00
Structure		Vertically Articulated
Degree of freedom		6
Payload	Wrist	130 kg
	On U-arm	30 kg
Repeatability <small>Note2</small>		±0.2 mm

Robot For Press Machine

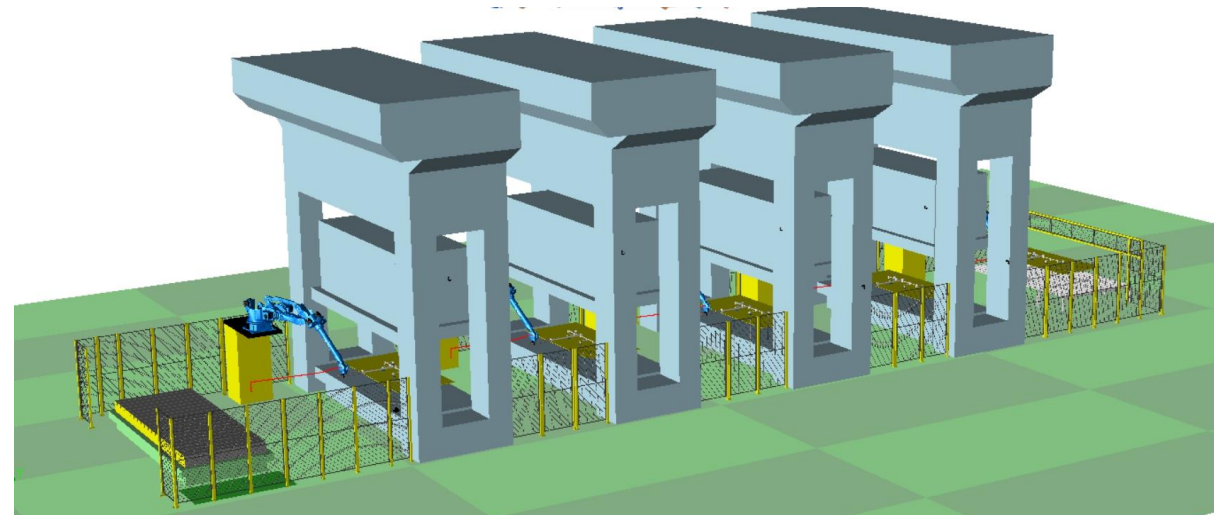
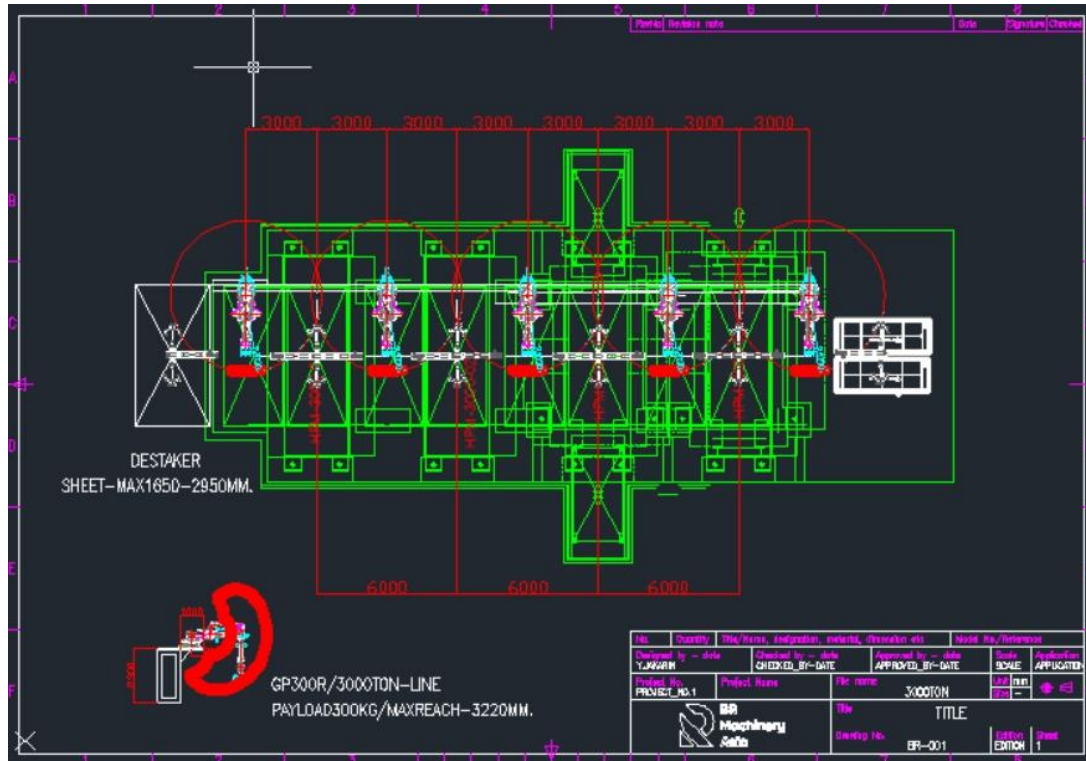


Press Application: Hedylid Tandem Line Type

PH130RF robot is ideal for high duty cycle applications in the press room. While a large work envelope and high moment of inertia ratings accommodate a variety of parts, fast axis speeds and acceleration capabilities decrease cycle time and optimize production output

Line specification

- Line speed : 3- 4 spm.
- Machine : 3000-3000-1600-3000 TON Hedylid press 4 m/c
- Handling Robot : Yaskawa PH130RF(Payload 130 Reach 3400 mm) 6 M/c
- Controller : Mitsubishi Q Series
- Function : Fixed Auto Changer
- Blank sheet : 1800x3000 mm.

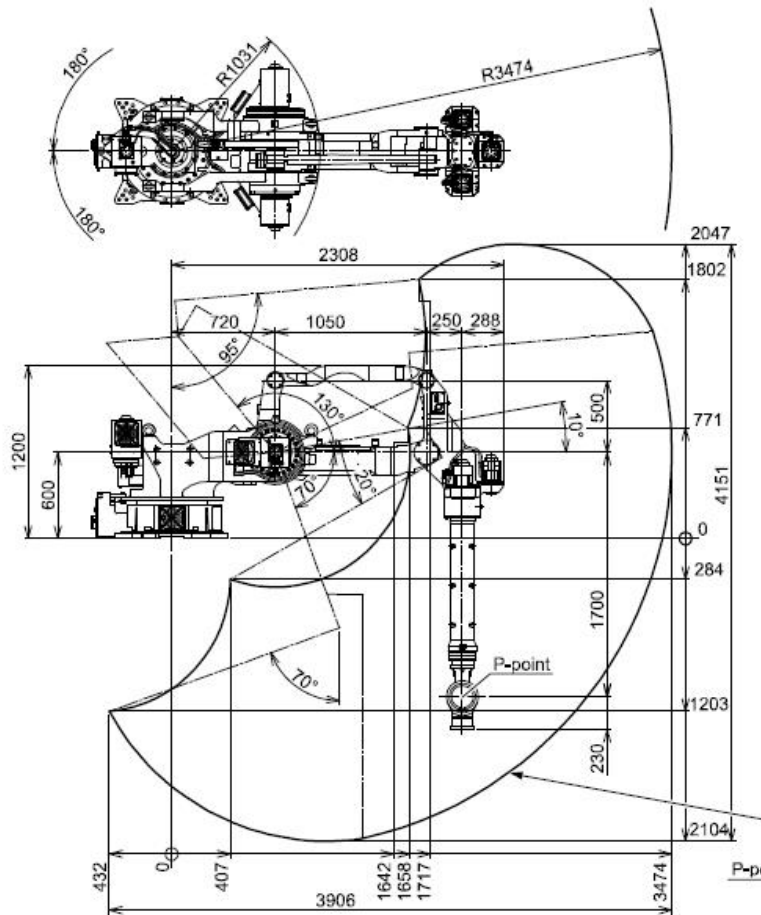


Robot For Press Machine



ROBOTS-YASKAWA PH-130R

Designed for powerful press handling performance, the six-axis PH130RF shelf-mounted robot is a smart choice for “jigless” applications. Built with high-performance drive systems on the S-, L- and U-axes (axes 1, 2 and 3),



Applications:
Material Handling, Press Tending



130.0 kg
Payload



YRC1000
Controller



3474 mm
Horizontal Reach



4151 mm
Vertical Reach

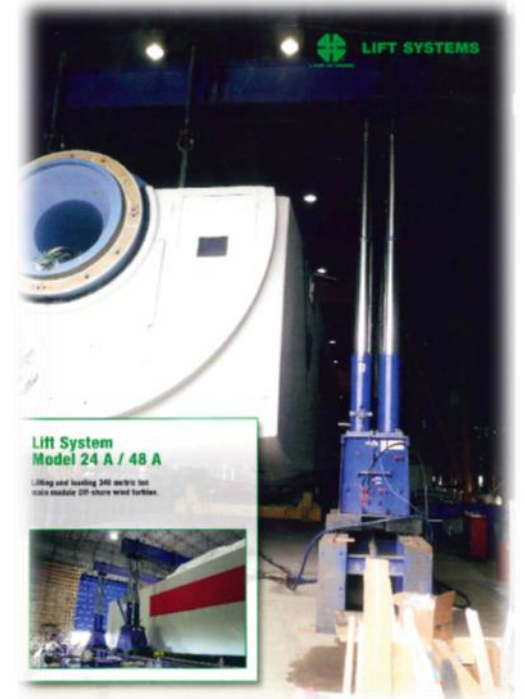
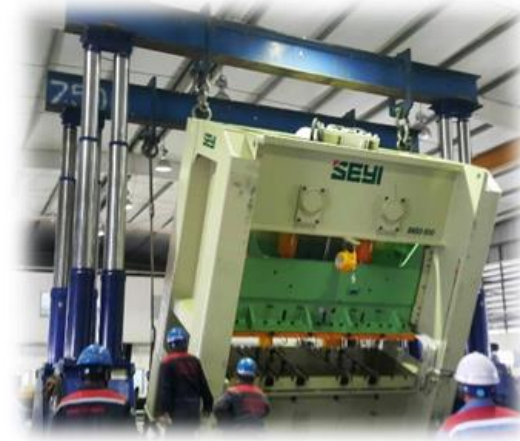
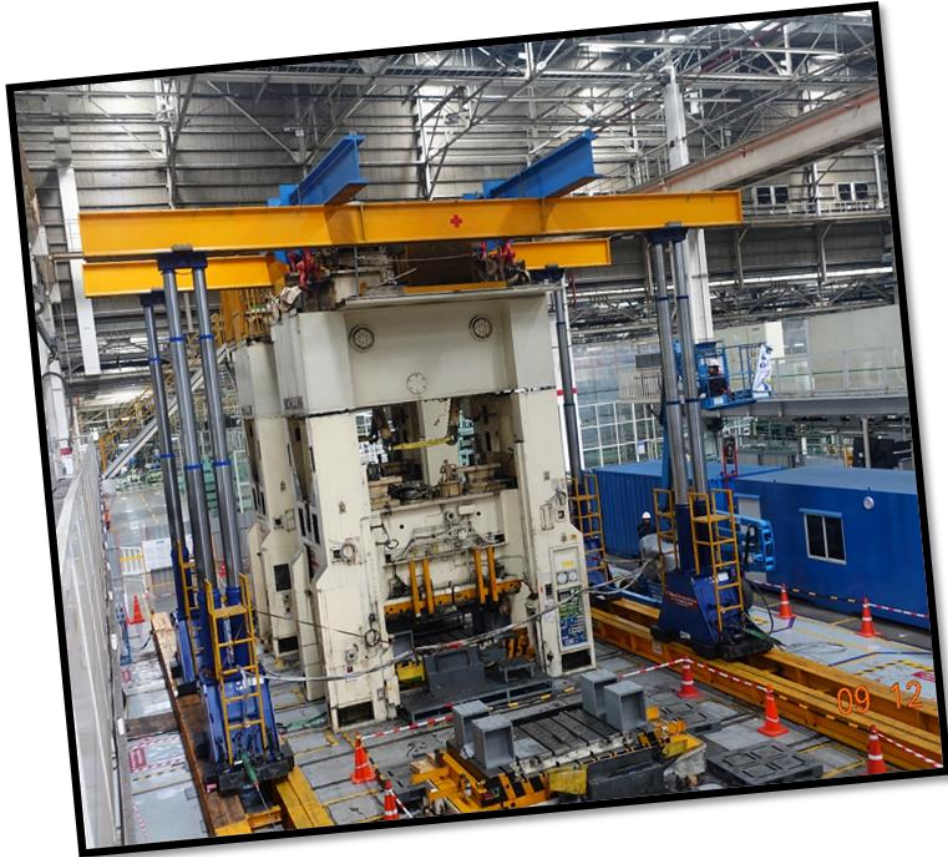
Item	Model	MOTOMAN-PH130RF
Type		YR-1-06VRF130-A00
Structure		Vertically Articulated
Degree of freedom		6
Payload	Wrist	130 kg
	On U-arm	10 kg
Repeatability ^{Note2}		±0.3 mm
Range of motion	S-axis (turning)	-180° - +180°
	L-axis (lower arm)	-130° - +70°
	U-axis (upper arm)	-70° - +95°
	R-axis (wrist roll)	-360° - +360°
	B-axis (wrist pitch/yaw)	-130° - +130°
	T-axis (wrist twist)	-360° - +360°

TEAM INSTALLATION PROFESSIONAL



Lift System Model 24A/48A

Lifting and Loading 340 metric ton main module Off shore wind turbine.



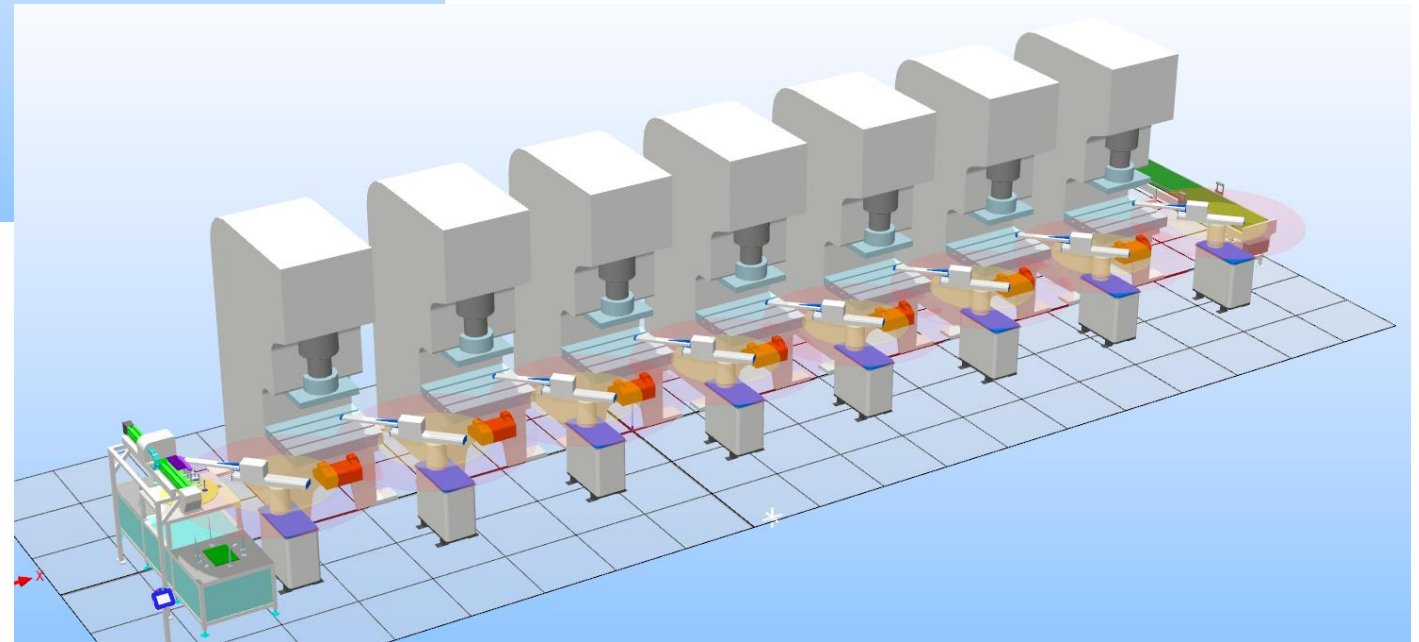
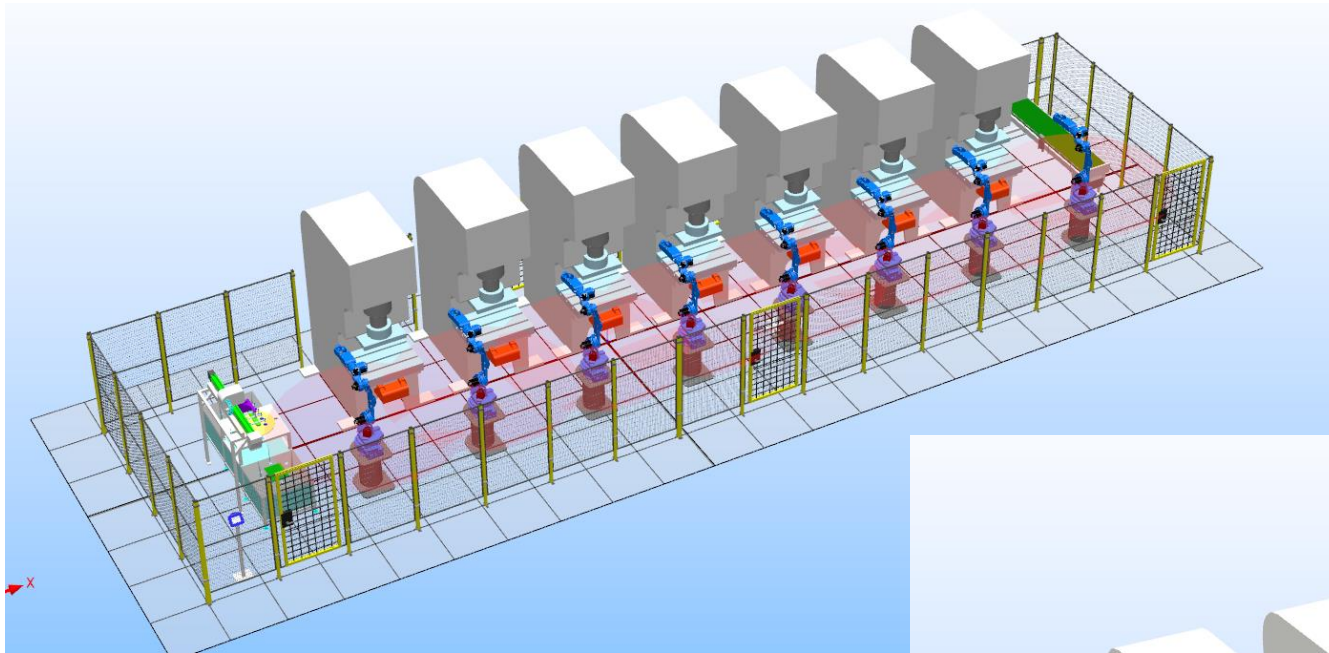
TEAM INSTALLATION PROFESSIONAL



Lift System Model 270 TON



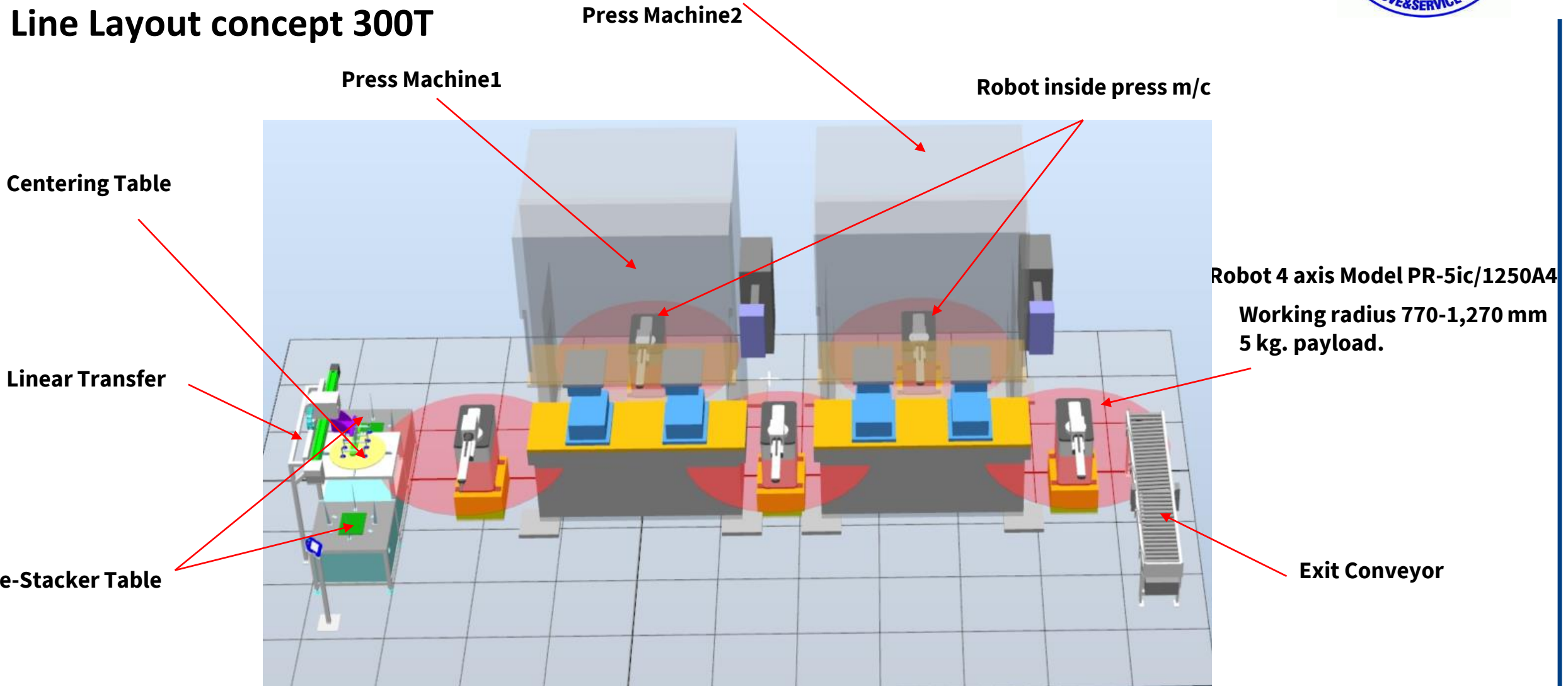
Press Application (4 Axis Robot)



Robot For Press Machine



Line Layout concept 300T



Robot For Press Machine



Technical information

4 axis punching manipulator



PR-5iC/1250A4

SPECIFICATIONS

Model		PR- 5iC/1250A4
Number of axis		4 axis
Load capacity		≤5kg
Repeat positioning accuracy		±0.05mm
Working radius		70-1270mm
Rated power		2.3KW
Stroke	Z(Vertical)axis	290mm
	X(swing arm)axis	±135°
	Y(forward&backward)axis	480mm
	SX (rotation)axis	±180°
	F (flip)axis	-
Maximum speed	Z(Vertical)axis	1m/s
	X(swing arm)axis	230o/s
	Y(forward&backward)axis	1m/s
	SX (rotation)axis	510o/s
	F (flip)axis	-
Net weight		220kg

Moving Destaker



- For Maximum Blank Size 1650 x 650 mm
- Moving Type
- 4 Magnetic Columns
- Stack High Max. 600 mm included pallet
- Load 1000 Kg.



Robot For Press Machine



Centering (Ball Gravity Type with Load Cell)

- Ball Roller Type
- Load Cell 4 point for Double sheet detector.
- Indicator at Operation Panel
- Blank sheet 1600x850 mm



Robot For Press Machine



Component

Gripper for Pick-Place Sleet

- Aluminum body and steel rod.
- Vacuum pad female r3/8
- Spring suspension
- Pipe dia. 40-60
- Cross clamp t-way
- Swivel arm + plate support sprg.
- Mounting plate



Robot For Press Machine



**Auto tool Changer with
Turn Stand Rotate type.**

Control Manual Stand



Tool Master A and B



Gripper



Robot For Press Machine



Robot Base

- Size : W1000 x L1000 x H500 mm.
- Material : Steel with painting
- Fix on Floor by Chemical Bolt



Robot For Press Machine



Vacuum Ejector



Type*	Nozzle size [mm]	Degree of evacuation [%]	Suction rate (max.) [l/min]	Suction rate (max.) [m ³ /h]	Air consumption suction [l/min]**	Air consumption suction [m ³ /h]***	Max. air consumption blow off [l/min]
SXPi	2.5	85	185	11.1	290	17.4	200
SXPi	3.0	85	220	13.2	380	22.8	200
SXMPi	2.5	85	185	11.1	290	17.4	320
SXMPi	3.0	85	220	13.2	380	22.8	320

*The supply voltage for vacuum switches and solenoid valves is 24 V DC

**At optimal operating pressure (4.5 bar)

***At optimal operating pressure (4.5 bar)

Robot For Press Machine



Main Operation Control

Specification

- PLC Mitsubishi Q Series with CC-Link Protocol
- Touch Screen Pro-face 12"
- Safety Relay

Function

- Select Robot Program
- Select Operation Mode (Manual / Auto)
- Start / Stop System
- Clear All Error
- Monitor

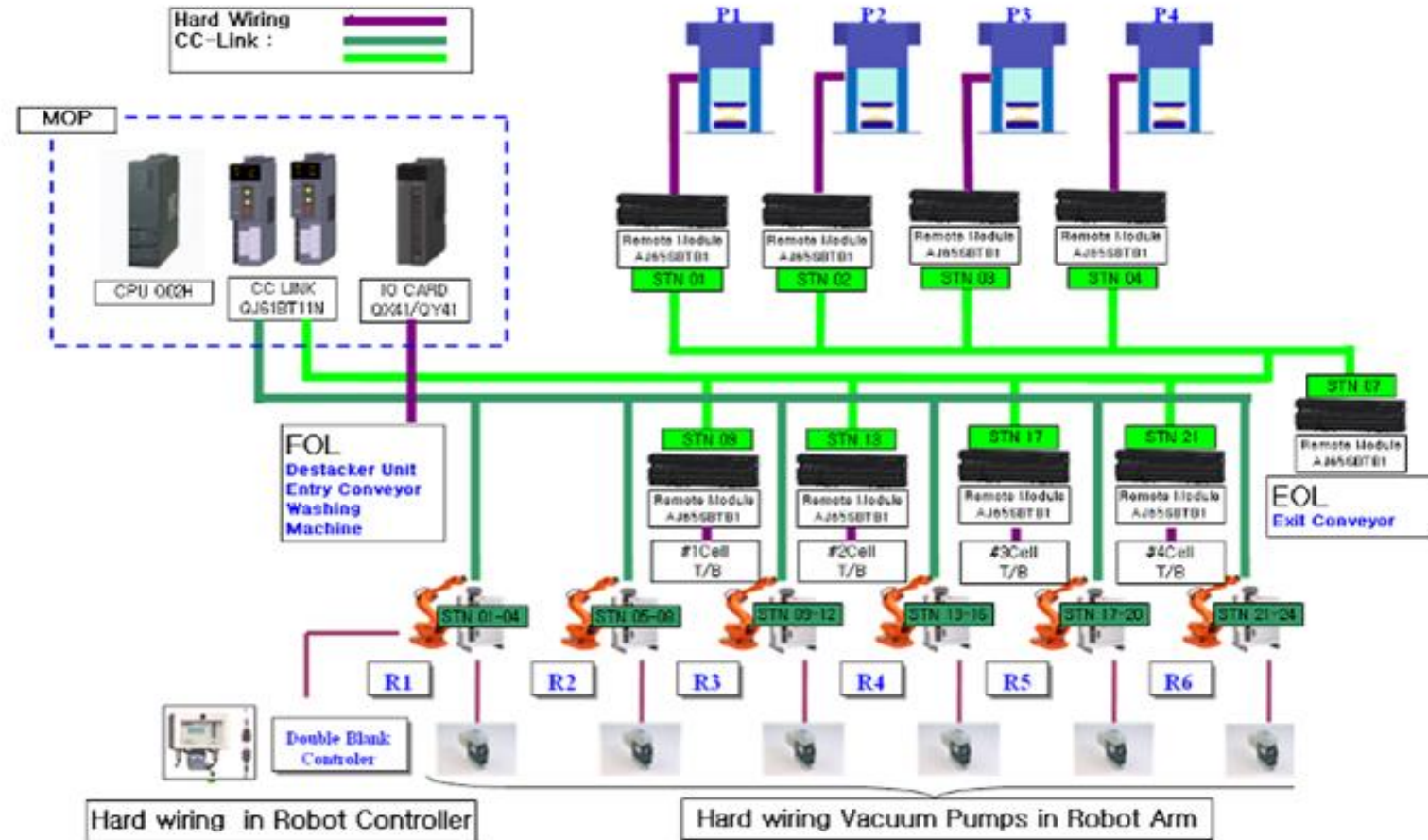


Robot For Press Machine



Control System Configuration

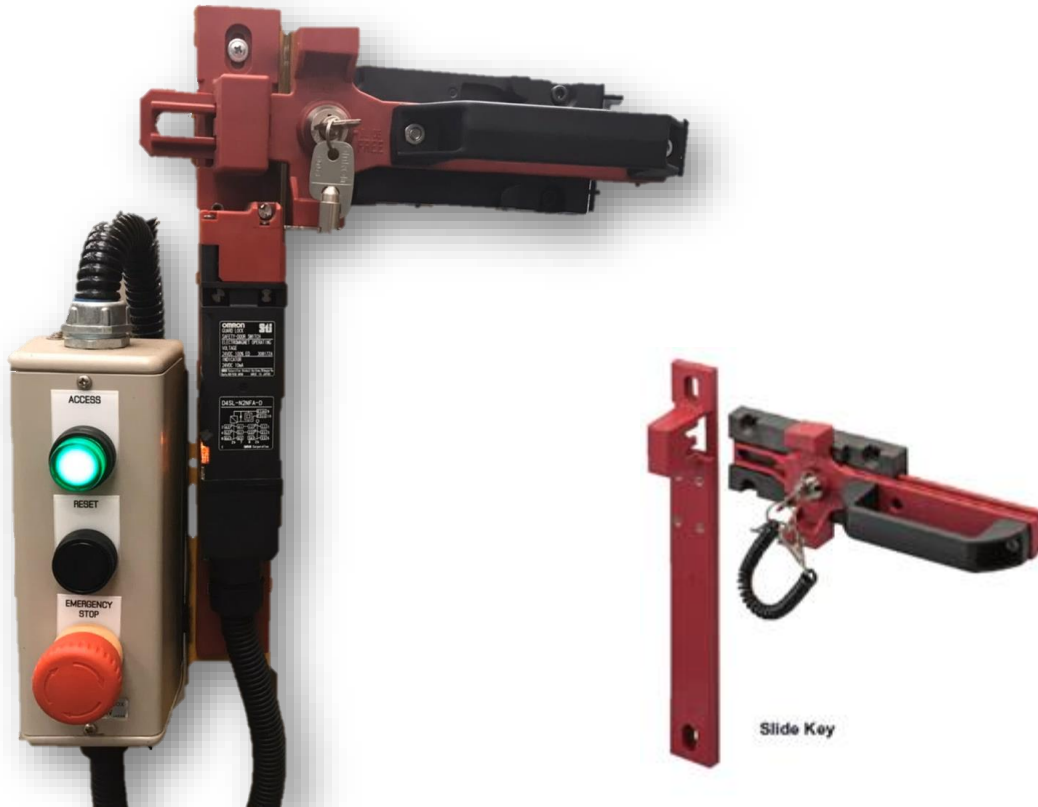
- PLC CPU: Melsec Q
- Touch Screen: Proface



Robot For Press Machine



Guard Lock Safety-door Switch at Service Box



Specifications

Weight: Approx. 0.6 kg
Mechanical durability:
20,000 operations min.

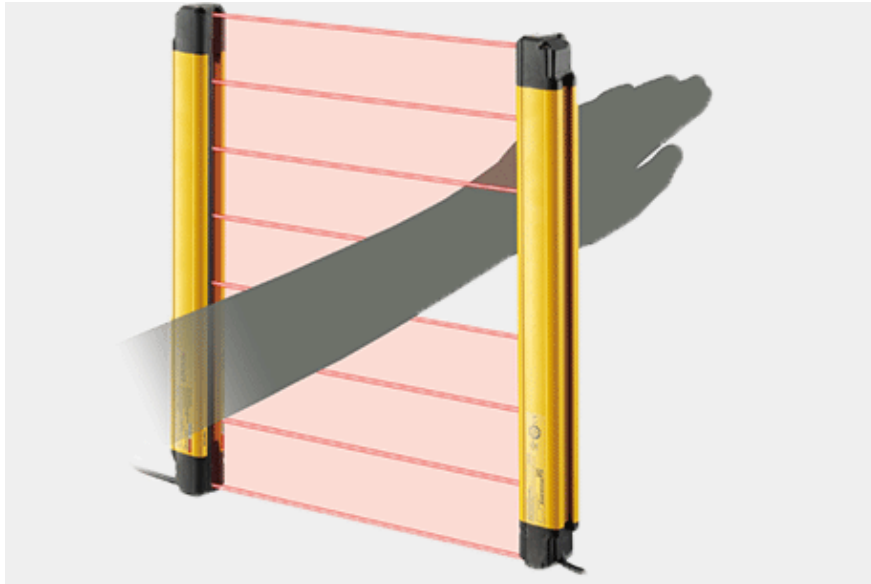
Contents

Slide Key: 1 (not yet mounted)
Inner Lever: None
D4SL-N mounting plate: 1
Door Switch special mounting screws: 3
D4SL-NK1 (operation key): 1
D4SL-NK1 special mounting screws: 2
Lockout keys: 2
Lockout key strap: 1
Caution labels (stickers): 2 sheets
(English and Japanese)

Robot For Press Machine



Safety Guard: Light Curtain Keyence



Units: mm

Model	Beam axes	A: Length	B: Detection height	C: Protection height	D: Beam axis pitch	E	F	G
GL-R14L	14	560	520	605	40	30	42.5	280
GL-R16L	16	640	600	685				320
GL-R18L	18	720	680	765				360
GL-R20L	20	800	760	845				400
GL-R22L	22	880	840	925				440
GL-R24L	24	960	920	1005				480
GL-R26L	26	1040	1000	1085				520
GL-R28L	28	1120	1080	1165				560
GL-R30L	30	1200	1160	1245				600
GL-R32L	32	1280	1240	1325				640

Robot For Press Machine



- Safety Plug
- Safety Relay
- Safety Door Handle
- Area Sensor

Magnetic Switch



Area Sensor



Safety Door Handle

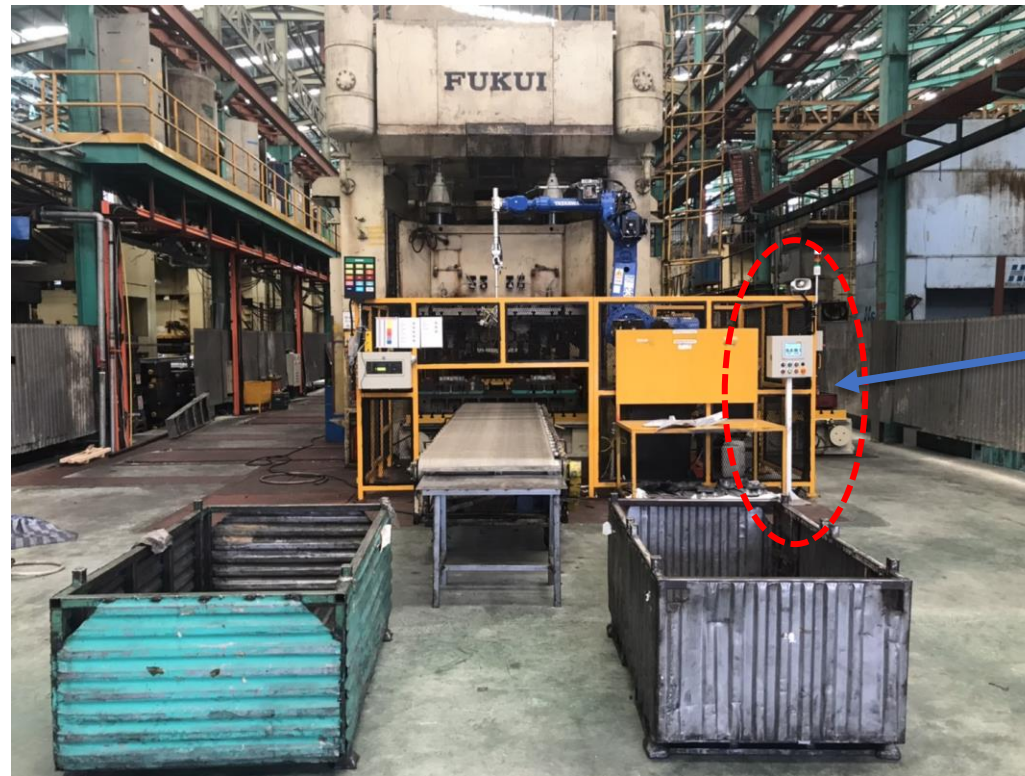
Robot For Press Machine



Sub Operation Control

Specification

- HMI Touch Screen Pro-face 12"
- Function**
- Start / Stop System
- Monitor



Robot For Press Machine



Automation Washing

Washing Raw Sheet

This is a full Robot Automation for wash oil of raw material sheet before used to next process



Robot For Press Machine



Our Customer :



SUMMIT



