

okura®

Robot Palletizer

Models **A1600III** & **A700III**



User Friendly

High Reliability

Low Maintenance

Large Working Envelope

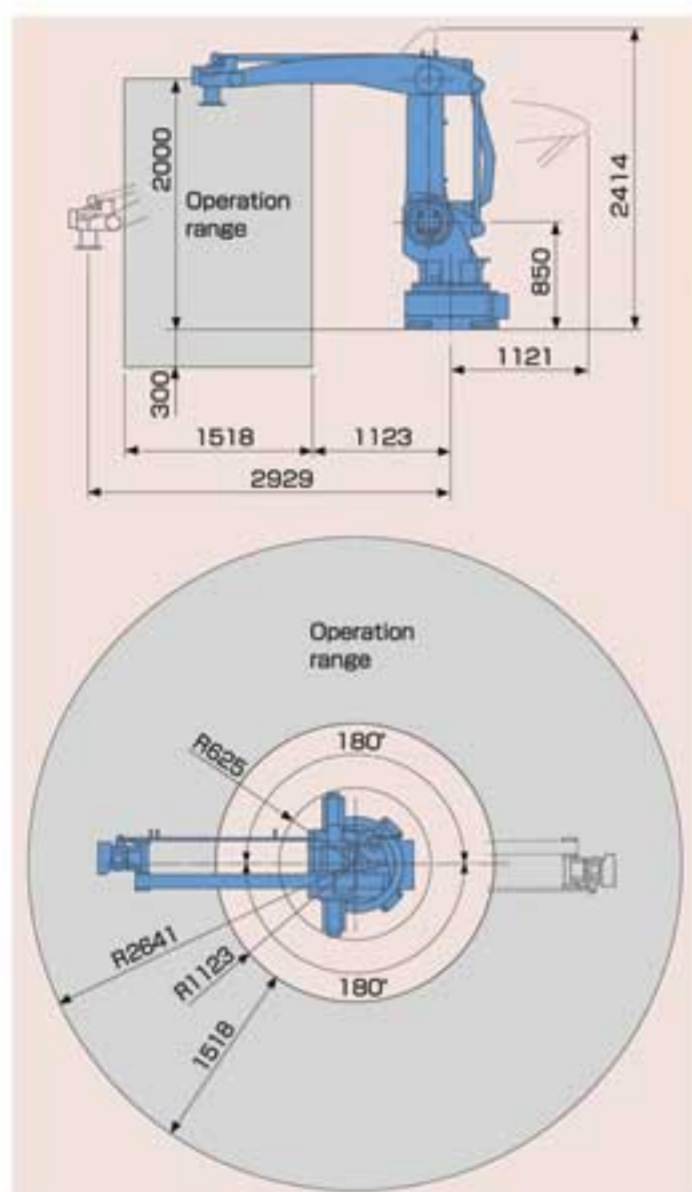
Complete Worldwide Support

Fastest Cycle Times in Robot Class

Quick Programming (Windows-based)



A1600_{III} ROBOT PALLETIZER



ROBOT SPECIFICATIONS

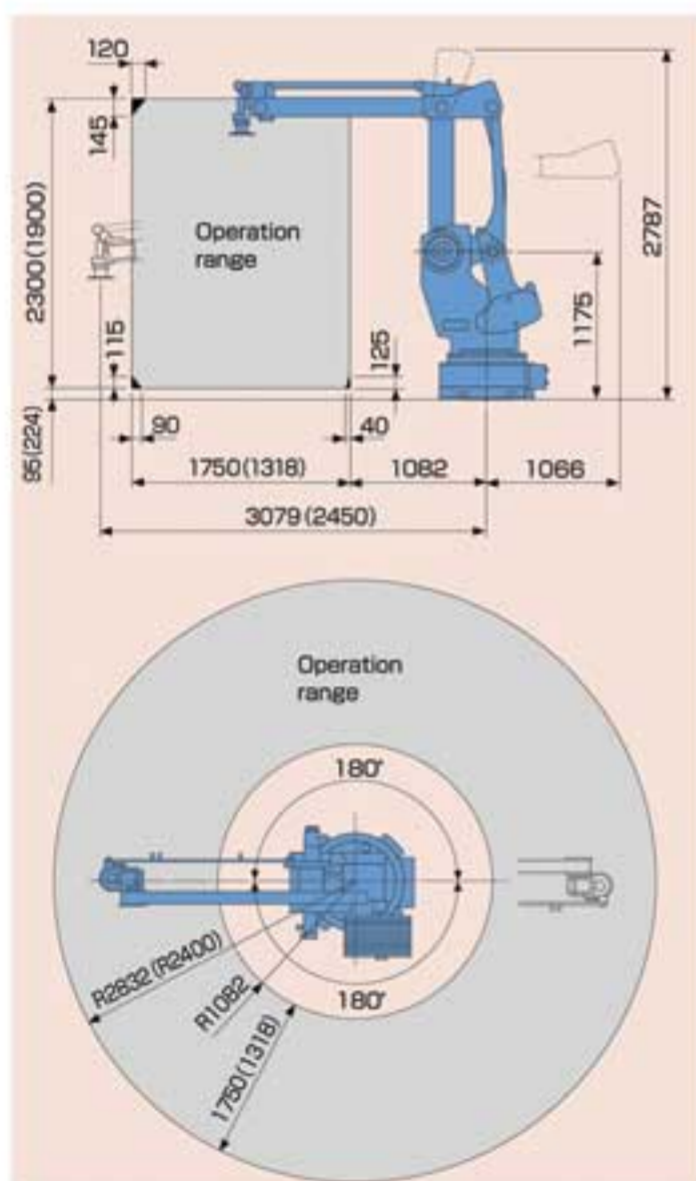
Model	A1600 _{III}
Motion System	Multi-Articulated, Polar Coordinate System
Load Capacity	140 kg (including end effector weight)
Degree of Operation Range	4 axes (R, D, O, T axes) R axes 360° D axes 2300mm O axes 1518mm T axes 440°
Handling Rate	1600 cycles/hour MAX * Stacking capacity varies depending on the layout, multiple gripping and other conditions.
Accuracy	Repeated stop position accuracy ± 1mm
Robot Weight	1160 kg (without end effector)
Pneumatic Consumption	180 l/min (ANR) When equipped with a pallet dispenser 300 l/min (ANR)
Ambient Temp	0-40°C
Relative Humidity	35-85%
Power	AC200V (Three phase) ± 5% 6.5kVA
Standard Colour	Mancell 5Y8/1

STANDARD END EFFECTORS





A700_{III} ROBOT PALLETIZER



ROBOT SPECIFICATIONS

Model	A700 _{III}
Motion System	Multi-Articulated, Polar Coordinate System
Load Capacity	140 kg (including end effector weight)
Degree of Operation Range	4 axes (R, D, O, T axes) R axes 360° D axes 2300mm O axes 1750mm T axes 440°
Handling Rate	700 cycles/hour MAX. * Stacking capacity varies depending on the layout, multiple gripping and other conditions.
Accuracy	Repeated stop position accuracy ± 1mm
Robot Weight	1250 kg (without end effector)
Pneumatic Consumption	180 ℓ/min (ANR) When equipped with a pallet dispenser 300 ℓ/min (ANR)
Ambient Temp	0-40°C
Relative Humidity	35-85%
Power	AC200V (Three phase) ± 5% 2.5kVA
Standard Colour	Mancell 5Y8/1

SPECIAL END EFFECTORS



· Cardboard cases



· Empty box for 6 bottles



· 1.8L empty bottle



· Materials for construction



· Bags



· Poly cases



· Poly container



· Poly cases containing poly bottles



· Pail can

APPLICATION EXAMPLES



The A1600III W version handles **weights of up to 300 kg**. Ideal for full layer palletizing to achieve high capacity!!



The A1600III and A700III robot palletizers feature up to **360° of movement** on their rotational axis, allowing palletizing of **up to 6 pallets** by a single robot palletizer!

BUILT-IN STACKING PATTERNS

CASE



Column pattern
(Columnar stacking)



Interlocking pattern



Interlocking pattern



Interlocking pattern
with gaps



Pinwheel pattern



Special pattern

BAG



Interlocking pattern



Interlocking pattern with gaps



Interlocking pattern with gaps



Pinwheel pattern

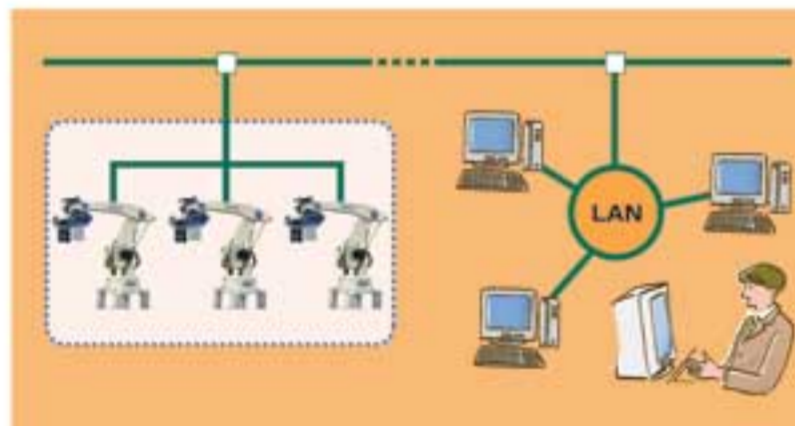


Pinwheel pattern

CONTROL PANEL SPECIFICATIONS



	CE Versions		JIS Versions	
Model	RC 715 (A 1600mm)	RC 725 (A 700mm)	RC 712 (A 1600mm)	RC 722 (A 700mm)
Dimension	900 ^W * 640 ^D * 1250 ^H mm		800 ^W * 640 ^D * 1150 ^H mm	
Weight	250 Kg	210 Kg	140 Kg	165 Kg
Power	Robot 6.5kVA	Robot 2.5kVA	Robot 6.5kVA	Robot 2.5kVA
	AC380/400/415V (Transformer) ±5% 50/60Hz, Three Phase		AC200V/220V ±5% 50/60Hz, Three Phase	
Ambient Temp	0-40°C			
Relative Humidity	35-85%			



The Okura robot palletizer control panel can be connected to any **Local Area Network** (optional), such as a client's production control computer systems, to enable **Real Time Monitoring**. This allows for the monitoring of the robot palletizer capacity and status in real time.

PERIPHERAL EQUIPMENT

Infeed Conveyor

This conveyor feeds workpieces accurately onto a stage conveyor at a fixed interval.



Conveyor with Bag Flattener

This belt conveyor with bag flattener is set up in systems where bags are transferred. The bags, spaced at a fixed interval on the conveyor, are flattened and supplied to the station conveyor.



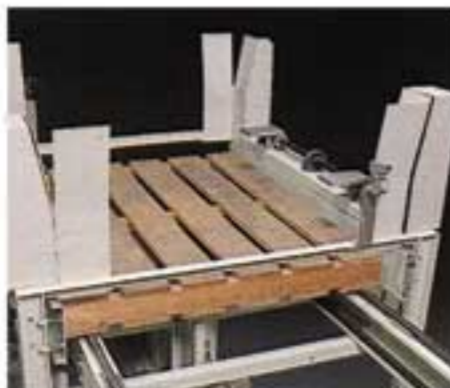
Station Conveyor

This conveyor positions workpieces properly for secure gripping and accurate lifting by the robot hand.



Pallet Dispenser

The pallet dispenser is used for stacking and storage of empty pallets. When necessary, the stored pallets are supplied to the pallet conveyor one at a time.



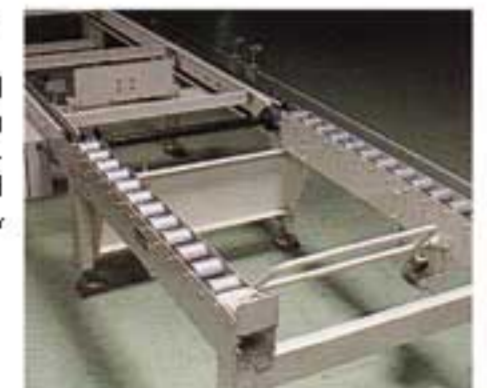
Pallet Conveyor

This conveyor positions and stops pallets discharged from the pallet dispenser, and waits for palletizing to finish before transferring loaded pallets to the Pallet Accumulation Conveyor.



Discharge Conveyor

This conveyor receives full pallets for which palletizing is complete, and temporarily stores the pallets until they are taken away by forklift.



Pallet Accumulation Conveyor

This conveyor acts as a temporary storage for loaded pallets until they are sent to the shipment or storage process.



Guarding

This encloses the robot's operating range to ensure the safety of the workers and other personnel.



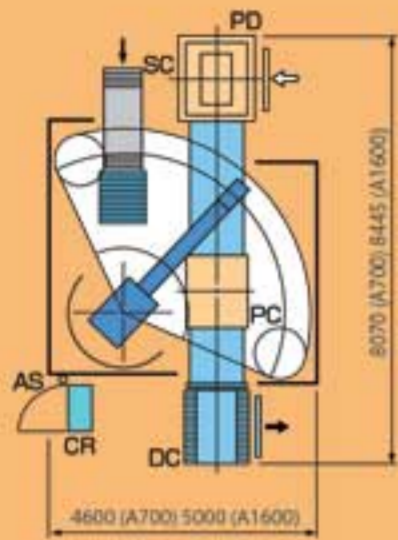
Indicator Light

This lamp is mounted on the safety fence for the indication of the robot operation status, and acts as a vital safety feature.

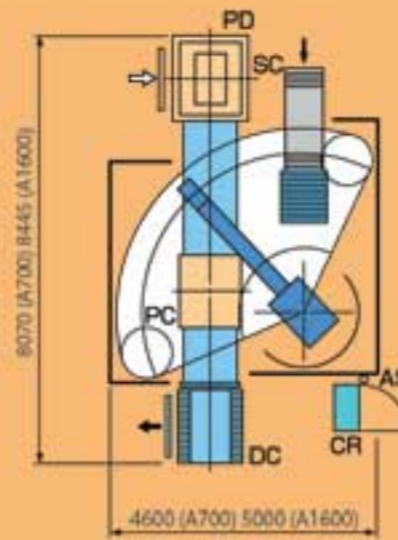


ROBOT PALLETIZER STANDARD LAYOUTS

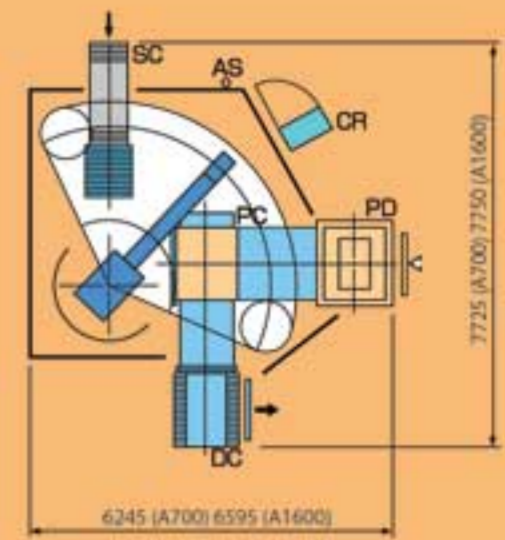
Automatic Pallet Supply Layouts



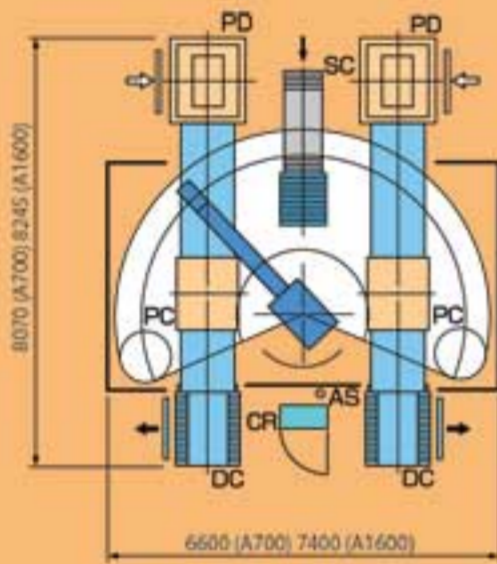
One Pallet
Layout No. P01111



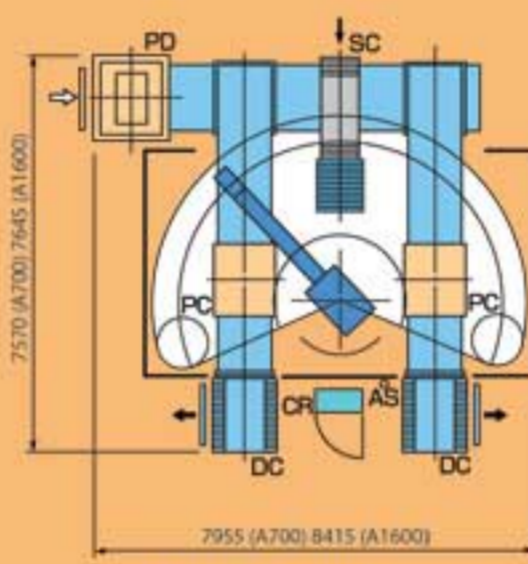
One Pallet
Layout No. P02111



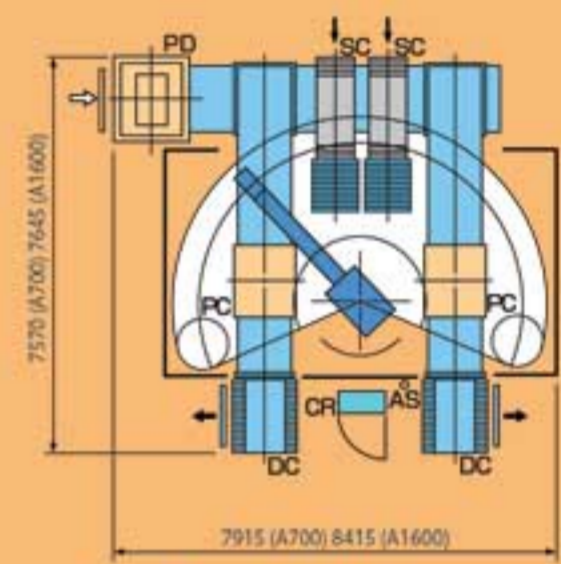
One Pallet
Layout No. P03111



Two Pallets
Layout No. P05122

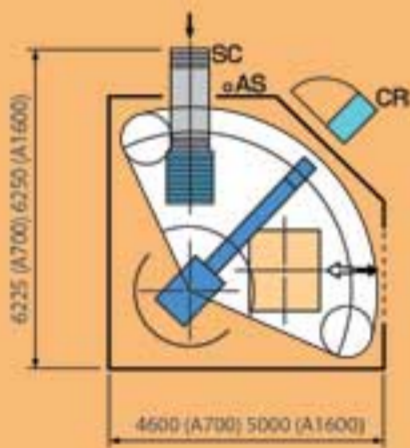


Two Pallets
Layout No. P08122

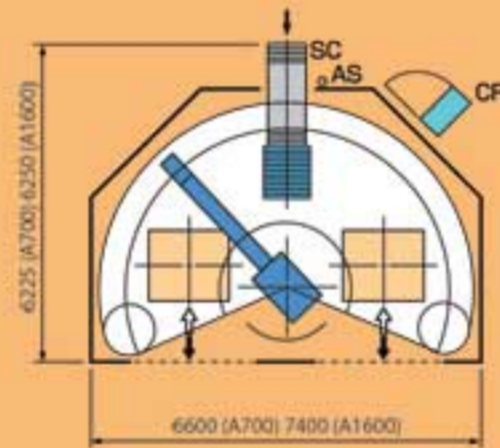


Two Pallets
Layout No. P10212

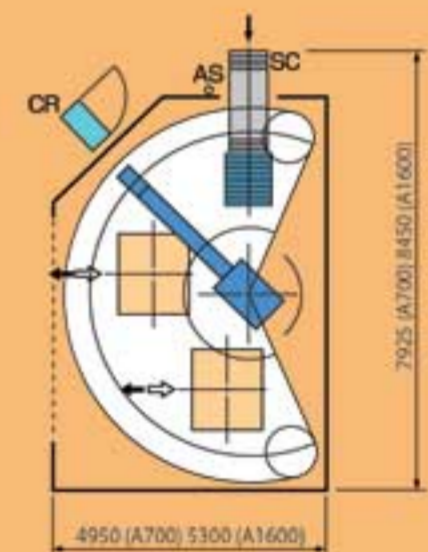
Floor Placement Layouts



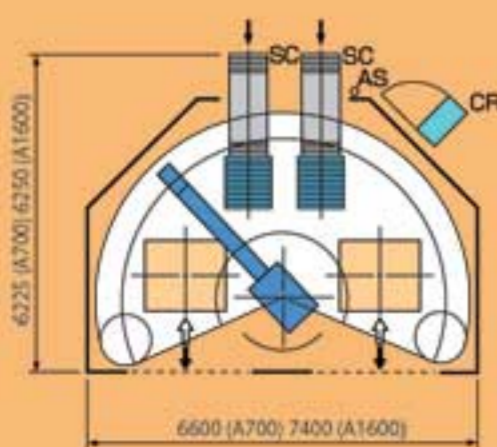
One Pallet
Layout No. F01101



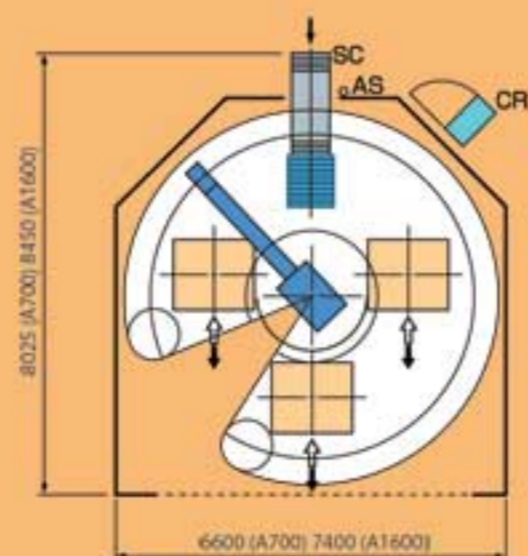
Two Pallets
Layout No. F03102



Two Pallets
Layout No. F05102



Two Pallets
Layout No. F07202



Three Pallets
Layout No. F06103

Abbreviations

SC = Station Conveyor
CR = Control Panel
PD = Pallet Dispenser
PC = Pallet Conveyor
DC = Discharge Conveyor

→ = Materials
⇨ = Empty Pallet
⇩ = Loaded Pallet



Why Okura?

In business since 1927

More than 3,000 installations world-wide

Gripper designs for a wide range of applications

Total maintenance and after-sales service

We provide SOLUTIONS, not just products.

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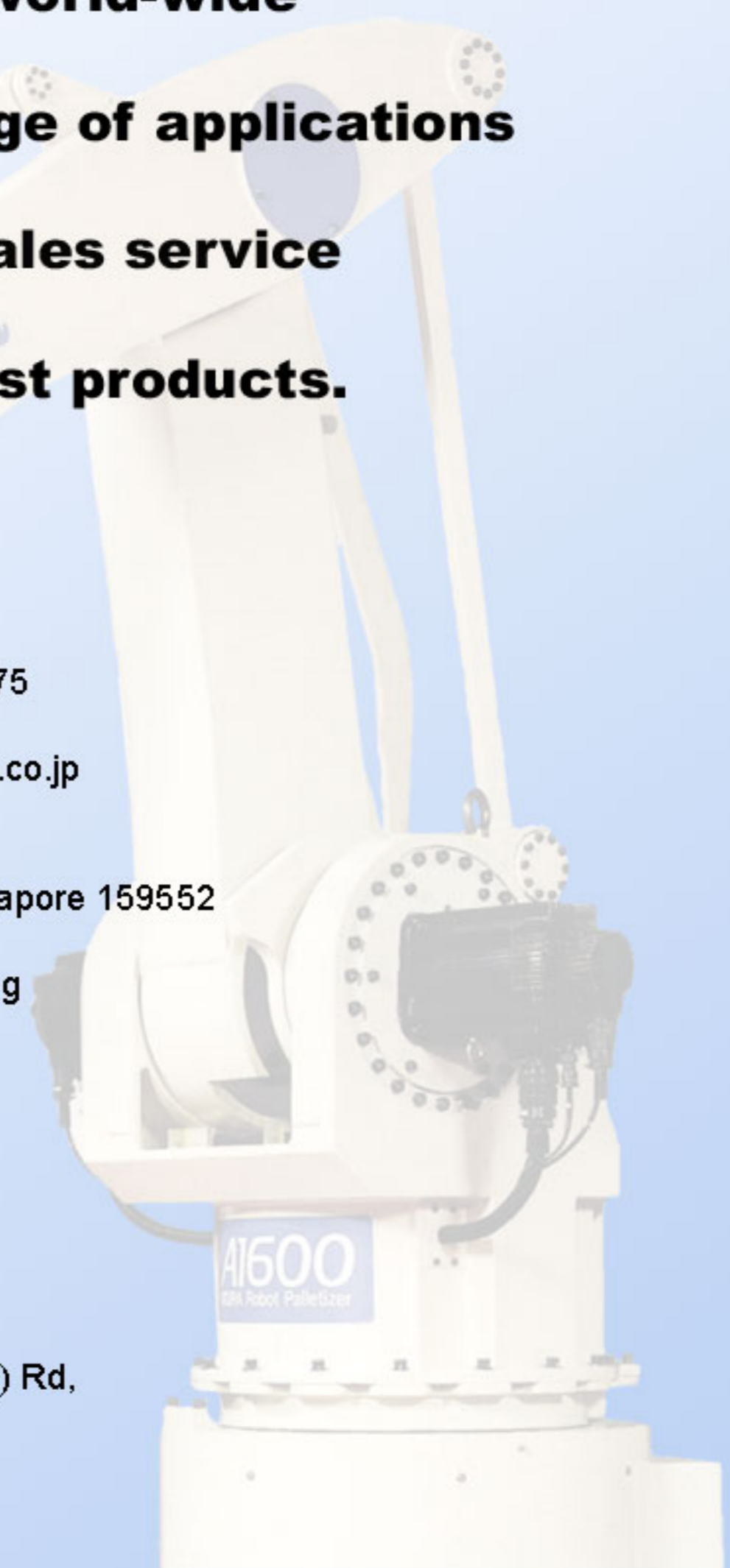
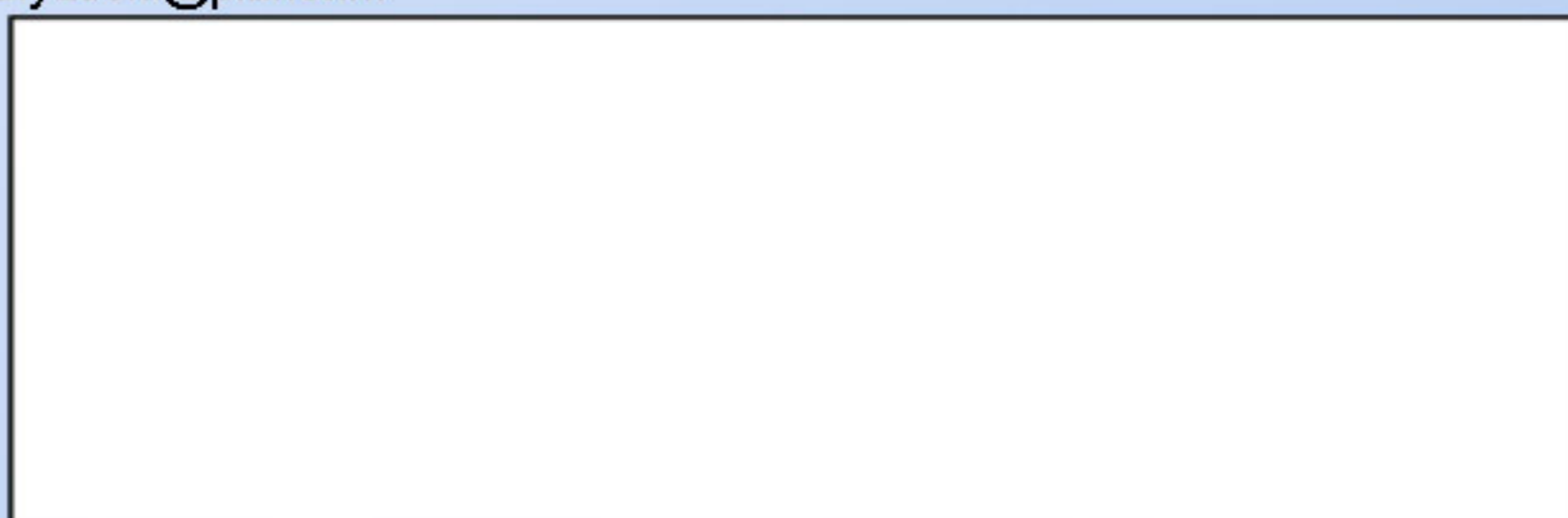
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