

Products **Catalogue**



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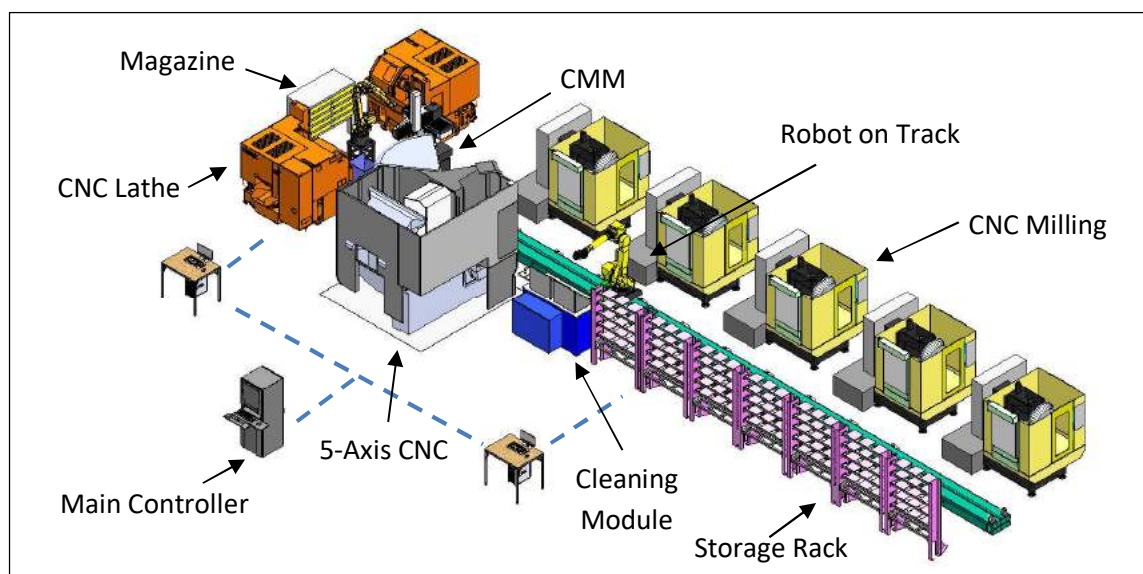


ASTech is an automation system provider, system integrator and design house. We provide engineering solutions, automated machines and total automation turnkey solutions to manufacturing companies to streamline their manufacturing processes, improve productivity and reduce their operations cost.

We specialize in CNC and Die Mould Automation, we partnered with machine tool companies and Robot makers to deploy robotic solutions for machine tending and secondary processes such as quality inspection, verification, deburring, polishing, washing, drying, filtering, marking, MES and other related processes. Our systems are Industry 4.0 enabled with IoT solutions.

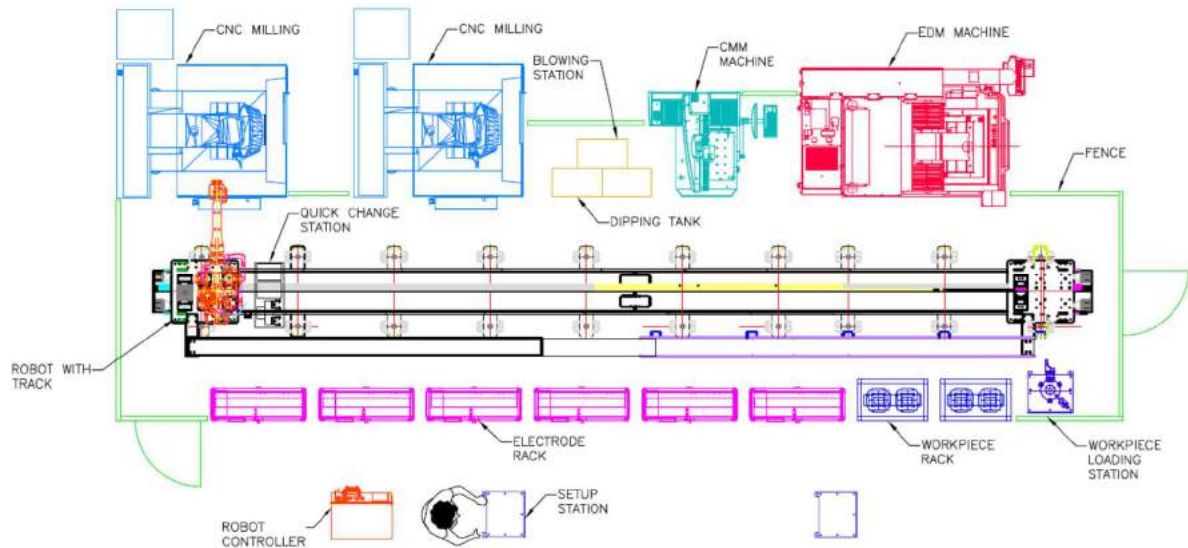
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SMART CNC Automation Line



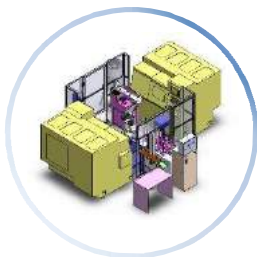
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SMART DIE MOULD Automation Line

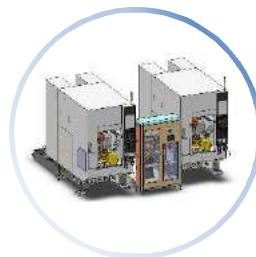


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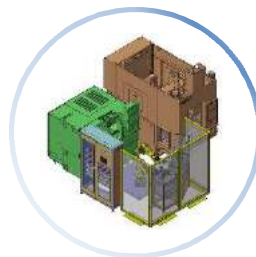
CNC Automation Cell



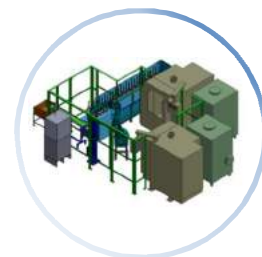
CNC Lathe



CNC Milling



CNC Lathe
& Milling



CNC Deburr

Our Automation Systems Integrate with many World Class CNC Machines

Japanese Brand

Mazak



MAKINO



**FANUC
ROBODRILL**



Europe Brand

DMG MORI



Korea Brand

HWACHEON



Taiwan Brand

WOODWAY



YCM



TRIDENT
We make it better!



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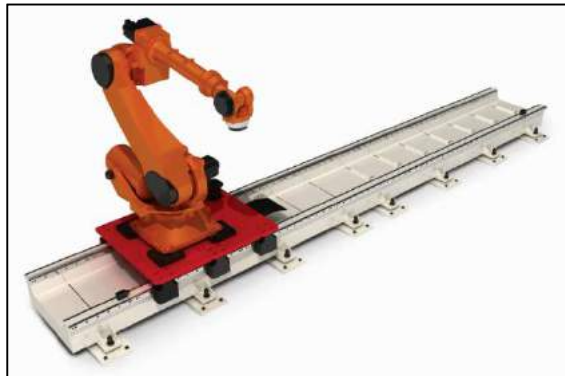
Material Handling System

Robot



Model	ARS-01
Brand	YASKAWA / ABB / FANUC / EPSON / HIWIN / UR
Payload	3 kg ~ 800 kg
Envelop	0.58 m ~ 2.55 m
Gripper	Pneumatic or Hydraulic - Single or Twin Gripper
Application	Load & Unload, Polish, Debur, Clean, etc.

Robot on Track



Model		ARS-02
Track Length		1,000 ~ 10,000 mm
Track Width		200 ~ 500 mm
Drive Type	Drive	Geared Drive
	Lock	Nil
Control Unit		Panasonic / Omron / Mitsubishi / Siemens
Power		AC 415V ± 10%, 50Hz



Gantry Robot



Model		ARS-03
Track Length		1,000 ~ 10,000 mm
Track Width		200 ~ 500 mm
Drive Type	Drive	Geared Drive
	Lock	Nil
Control Unit		Panasonic / Omron / Mitsubishi / Siemens
Power		AC 415V $\pm$ 10%, 50Hz

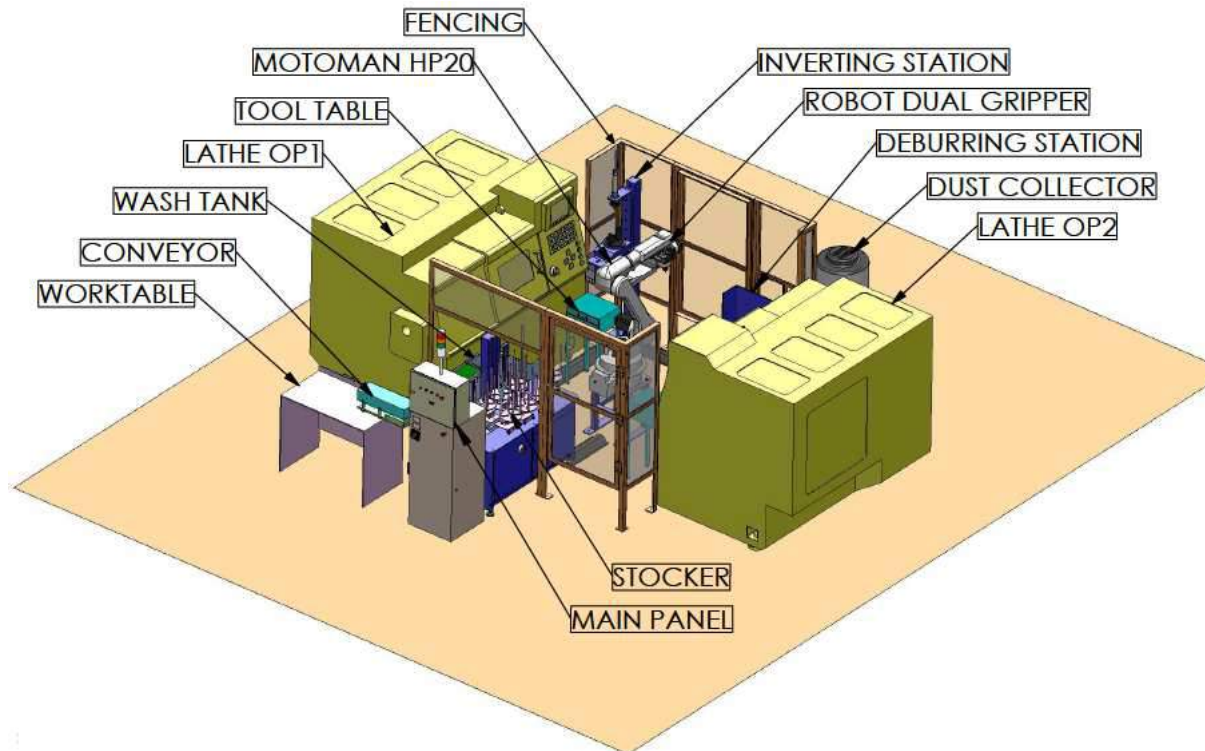
Gantry Loader



Model		ARS-04
Conveyor Length		1,000 ~ 3,000 mm
Conveyor Width		200 ~ 500 mm
Drive Type	Drive	Geared Drive
	Lock	Nil
Control Unit		Panasonic / Omron / Mitsubishi / Siemens
Power		AC 220V $\pm$ 10%, 50Hz



Application - Robotic



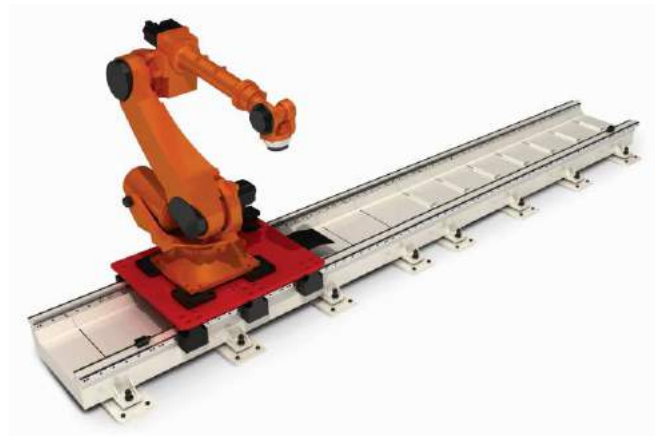
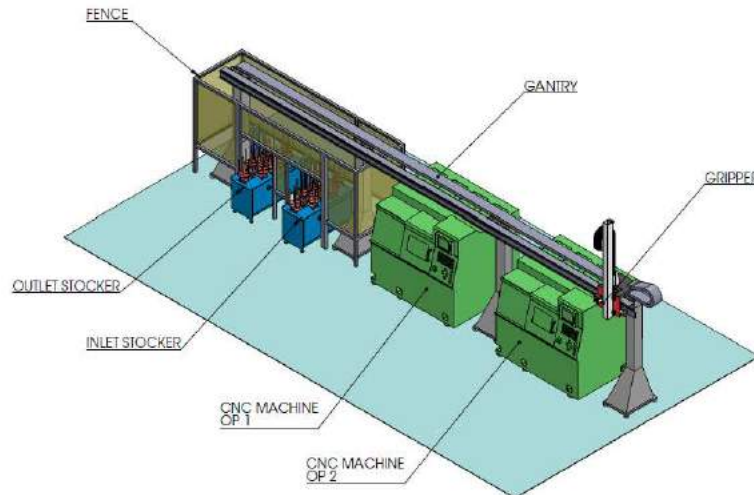
System Specifications

Specifications	Robot
Operations	Picking up the part from Stocker and loading it on machine and finished part will be unloaded on the Conveyor
Control Axis	6 (Vertically articulated)
Payload	5 to 20kg
Repeatability	+/- 0.05 mm
Maximum Envelope	R 1,717 mm
Gripper	Two / Three jaw internal Gripper
Robot Brand	Yaskawa, Epson, Denso, Fanuc, ABB, etc.
Power supply	200V / 50 Hz +/- 10%, +/- 0.5Hz, 2.8kVA
Control voltage	24V DC
Air pressure required by Robot system	5 bar +/- 0.5

* For higher payload, the specifications will varies. Please provide detail of part drawing and weight for more accurate specifications.



Application – Gantry & Robot-on-Track



Gantry & Track Motion System Specifications

Specifications	Gantry & Track Motion System
Operations	Picking up the part from Inlet Stacker and loading it on machine and finished part will be unloaded on the Outlet Stacker
Payload	5 ~ 25 kg
Gantry Stroke	
Y axis (horizontal)	10,000 ~ 50,000 mm
Z axis (vertical)	1,200 mm
Speed of Y & Z	90 m/min & 60 m/min
Acceleration Y & Z	2m/s sq.
Robot	6-Axis Robot
Construction	Timing Belt with LM Guide / V guide with Rollers, Carriage, etc.
Drive	Servo Electric & Pneumatic for Gripper
Gripper	Two / Three jaw internal Gripper
Control	Mitsubishi / Omron PLC
Power supply (voltage)	200V / 50 Hz +/- 10%, +/- 0.5Hz
Control voltage	24V DC
Air pressure required by Gantry system	5 bar +/- 0.5

* For higher payload, the specifications will varies. Please provide detail of part drawing and weight for more accurate specifications.

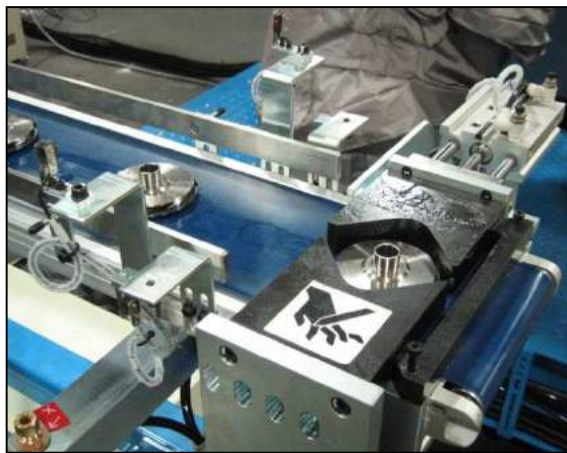


Flexi-Link Conveyor



Model		ACY-01
Conveyor Length		1,000 ~ 3,000 mm
Conveyor Width		200 ~ 500 mm
Drive Type	Drive	Geared Drive
	Lock	Nil
Control Unit		Panasonic / Omron / Mitsubishi / Siemens
Power		AC 220V $\pm$ 10%, 50Hz

Belt Conveyor



Model		ACY-02
Conveyor Length		1,000 ~ 3,000 mm
Conveyor Width		200 ~ 500 mm
Drive Type	Drive	Geared Drive
	Lock	Pneumatic
Control Unit		Panasonic / Omron / Mitsubishi / Siemens
Power		AC 220V $\pm$ 10%, 50Hz



Roller Conveyor



Model		ACY-03
Conveyor Length		1,000 ~ 10,000 mm
Conveyor Width		200 ~ 500 mm
Drive Type	Drive	Geared Drive
	Lock	Nil
Control Unit		Panasonic / Omron / Mitsubishi / Siemens
Power		AC 220V ± 10%, 50Hz

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Storage System

Lifting Rotary Stocker



Model		ASS-01
Pallet Quantity		4~10 Pallets
Stock Quantity		Max. 100 work pieces
Drive Type	Drive	Geared Drive
	Up/Down	Chain
Control Unit		Panasonic / Omron / Mitsubishi / Siemens
Power		AC 220V ± 10%, 50Hz



Stacking Rotary Stocker



Model		ASS-02
Pallet Quantity		User Specified
Stock Quantity		User Specified
Drive Type	Drive	Geared Drive
	Up/Down	NIL
Control Unit		Panasonic / Omron / Mitsubishi / Siemens
Power		AC 220V $\pm$ 10%, 50Hz

Vertical Rack – RoboStore 6v



Model		ASS-03
No. of Level		User Defined
Pallet Quantity		Max. 100 work pieces
Control Unit	PLC	Panasonic / Omron / Mitsubishi / Siemens
	HMI	Hakko / Omron
Pallet Detection		Optional
Power		AC 220V $\pm$ 10%, 50Hz



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Cleaning System

Hot Water Washing & Drying Machine



Model		ACS-01
Cleaning Method	Spray	Hot Water / Pressurized
	Dry	Heater / Air Spraying
Control Unit		Panasonic / Omron / Mitsubishi / Siemens
Features		Auto Drain Dirty Water
Power		AC 220V ± 10%, 50Hz

Solvent Washing & Drying Machine



Model		ACS-02
Cleaning Method	Spray	High Pressured Solvent
	Dry	Air Spraying
Control Unit		Panasonic / Omron / Mitsubishi / Siemens
Handler		Robot
Power		AC 220V ± 10%, 50Hz



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Deburring & Polishing

Brushing Module



Model	ADP-01
Drive Type	Variable Speed
Brush Material	PVC, Nylon, Wire Brush, etc
Control Unit	Panasonic / Omron / Mitsubishi / Siemens
Power	AC 220V ± 10%, 50Hz

3-Axis Buffing Machine



Model		ADP-02
Buffing Spindle	Drive	Induction / Servo
	Type	Brush
Work Piece Holder		XY Table
Control Unit		IAI / Delta /Mitsubishi
Power		AC200V, 3 phase, 50Hz



Gear Deburring Machine



Model		ADP-03
Brushing Spindle	Drive	Variable Speed
	Type	PVC Brush - Air Motor
Work Piece Holder		Rotary Table with Chuck
Brush Material		PVC, Nylon, Wire Brush
Control Unit		Panasonic / Omron / Mitsubishi / Siemens
Power		AC 220V $\pm$ 10%, 50Hz

3-Axis Deburring Machine



Model		ADP-04
Buffing Spindle	Drive	Induction / Servo
	Type	Brush
Work Piece Holder		Rotary Table with Chuck
Control Unit		IAI / Delta / Mitsubishi
Power		AC200V, 3 phase, 50Hz



Robot Deburring Machine



Model		ADP-05
Deburring Spindle	Drive	Variable Speed
	Type	Grinding Tool - Air Motor
Work Piece Holder		Fixed 3-Jaw Chuck
Control Unit		Robot
Power		AC 220V ± 10%, 50Hz

4-Axis Deburring / Grinding Machine



Model		ADP-05
Deburring Spindle	Drive	Servo
	Type	Diamond Wheel
Work Piece Holder		Indexing Table with Chuck
Control Unit		Panasonic / Omron / Mitsubishi / Siemens
Power		AC415V, 3 phase, 50Hz



Debur & Clean Module - DeburClean 340



Model		ADP-06
Features	Deburr	Variable Speed
	Clean	Grinding Tool - Air Motor
Work Piece Holder		Fixed 3-Jaw Chuck
Control Unit		Panasonic / Omron / Mitsubishi / Siemens
Power		AC415V, 3 phase, 50Hz

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Off-Line Measurement

Probe Measurement – RoboMeasure M1



Model		ARM-01
Area of Measure	ID	Internal Diameter Probe
	OD	External Diameter Probe
Work Piece Holder		Fixed Fixture with Locator
Probe Brand		Marposs / Blum / Renishaw
Power		AC415V, 3 phase, 50Hz

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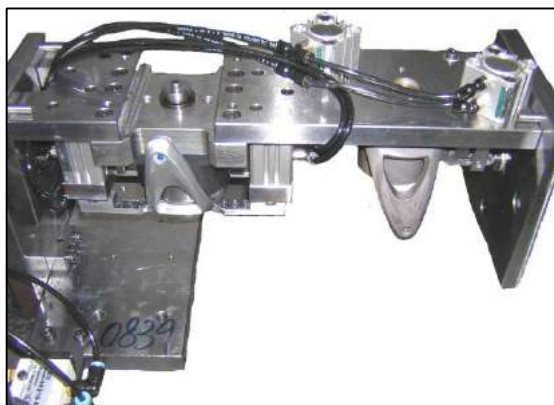
Other Modules

Inverting Unit



Model	ACS-01
Work Piece Holder	Rotary Table with Chuck
Pressure	5 to 6 bar
Control Unit	Panasonic / Omron / Mitsubishi / Siemens
Other Function	Spraying

Fixture - Pneumatic



Model	APF-01
Cylinder	Toggle Clamp / Swing Clamp
Control	Multi Sequence
Pressure	5 to 6 bar



Fixture – Zero Clamp



Model	AZC-01
Brand	Schunk / Erowa / 3R / Hoffmann / Rohm
Accuracy	1 to 10 micron
Pressure	5 to 6 bar

Fixture - Hydraulic



Model	AHF-01
Cylinder	Toggle Clamp / Swing Clamp
Control	Multi Sequence
Pressure	100 to 300 bar



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Controller & HMI

PLC Controller



Model	ACP-01
Type	Programmable Logic Controller
Brand	Panasonic / Omron / Mitsubishi / Siemens
Interfacing	Input / Output / DeviceNet / Profibus

HMI Touch Screen



Model	ATP-01
Brand	Hakko / Proface / Omron / Panasonic / Siemens
Size	5" / 8" / 10"
Screen	Colour or Monochrome



Remote Service System



Model	RSS-01
Control Unit	Panasonic / Omron / Mitsubishi / Siemens
Features	Remote Inspection & Service
	Remote PLC Program Modify
	Remote Improvement Activity
Protocol	DeviceNet / Profibus

11

Wireless Connectivity

Wireless Master Module



Model	VMS-MAS-V01
Control Unit	Computer
Function	Receive and Transmit Data from Wireless Module
Feature	Data will send to PC for processing through USB Port
Protocol	USB Port

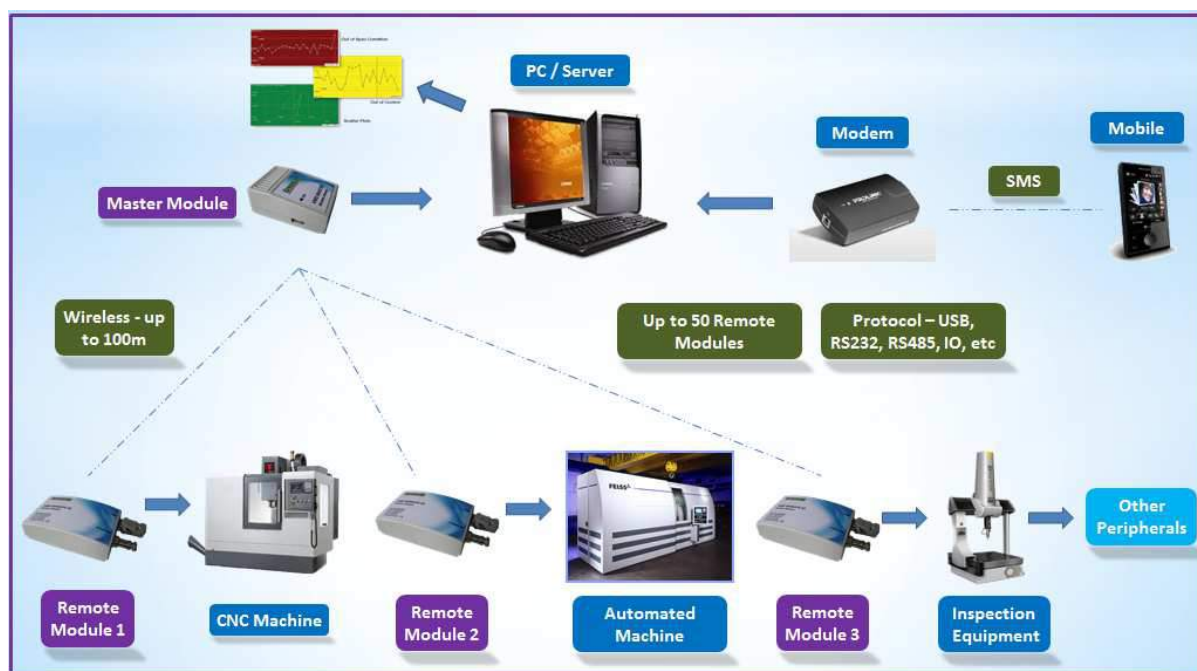


Wireless Master Module



Model	VMS-RIO-V01
Function	Plug & Play to External Peripheral
	Receive and Transmit Data from Wireless Master Module
Features	Programmable 8 Input / Output
	Configurable Analogue or Digital Signal
Protocol	RS232, RS485, USB, Micro USB

Application – Wireless System



12

Manufacturing Execution System



MES capture, process, filter and present of “relevant” data for all stakeholders. Data can be collected by wire or wireless:

- Order data management
- Machine performance data management
- Labor time management
- Quality data management
- Scheduling & Capacity planning
- Material inventory levels / traceability
- Process data
- DNC Data
- Tool Management



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Filtration Solutions

ASTech provides Waste Management Service with filtration products from Sumitomo which includes Magnetic Separator, Paper Filter Separator, Roller Conveyor, etc.



Magnetic Separator



Paper Filter

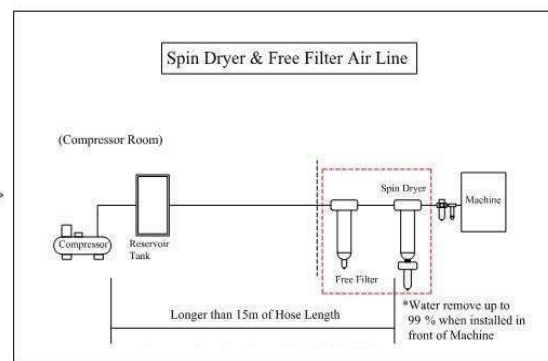
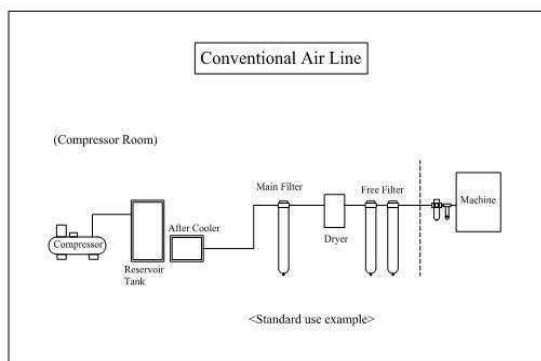


Roller Conveyor

Spin Dryer is an air filtration unit that removes over 99% moisture without any electricity and maintenance.



Spin Dryer



Partner / Representative / Agent

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