

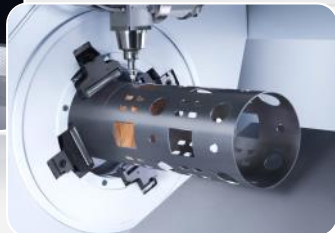


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MACHINES SPECS 2018-2019

CNC Tube Laser Machine Detail Sheet



Machine:	CNC Tube Laser Cutting
Brand:	Trumpf
Model:	TruLaser Tube 5000
Table Travel :	6500mm
Operation :	Tube cutting
Unit :	1
Max. work piece weight :	20 kg/meter
Max. outer circle diameter :	150 mm
Max. finished part length :	6000 mm
Max. thickness :	Mild steel : 6.4mm , Stainless steel : 4.0mm & Aluminum : 3.0mm
Accuracy :	± 0.10mm

CNC Laser Cutting Machine Detail Sheet



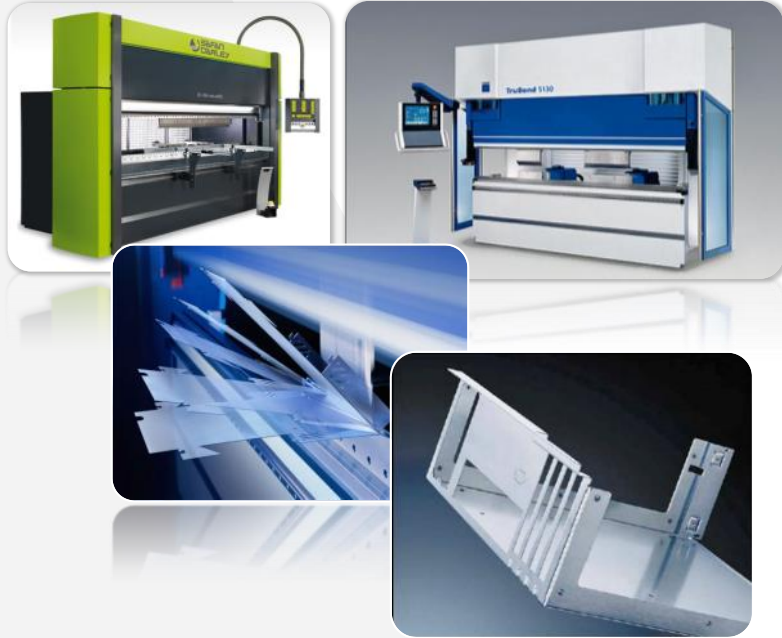
Machine:	CNC Laser Cutting
Brand:	Amada
Model:	LCG3015
Table Travel :	X axis: 3000mm, Y axis: 1500mm
Operation :	Cutting
Unit :	1
Max. Speed :	80-300m/min
Max. thickness :	25mm mild steel
Accuracy :	± 0.10mm

CNC Turret Punch Machine Detail Sheet



Machine:	CNC Turret Punch
Brand:	Trumpf
Model:	TruPunch 5000
Table Travel :	X axis: 3070mm Y axis: 1660mm
Operation :	Punching
Unit :	1
Max. thickness :	5mm for all material
Feed rate :	1600 strokes/min
Max. Speed :	100 m/mi.
Accuracy :	± 0.10mm

CNC Bending Machine Detail Sheet



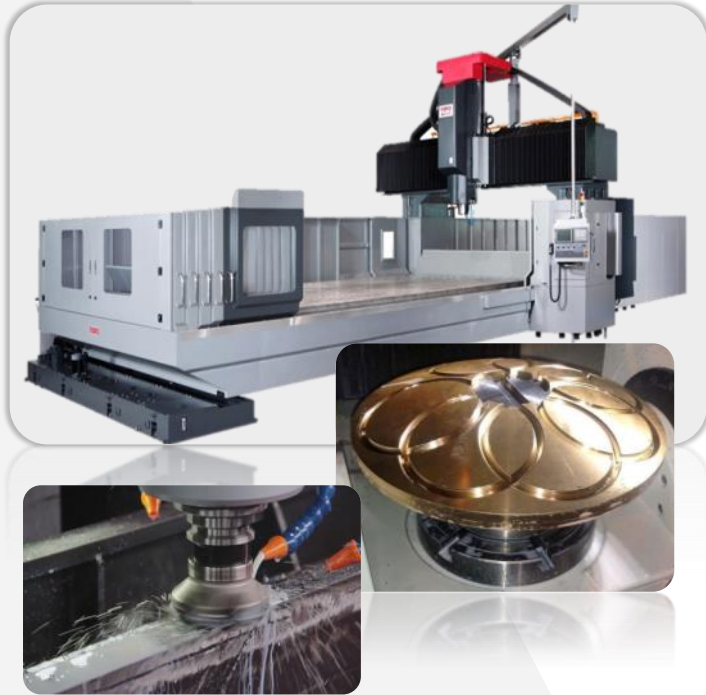
Machine:	CNC Bending
Brand:	Amada, Safan
Model:	HDS 8025 NT, HD 1303 NT, Safan E Brake B100-3100
Overall bending length :	2.5 - 3.1 meter
Operation :	Bending
Unit :	3
Tonnage :	88 - 146 Ton
Accuracy :	± 0.50mm

CNC Vertical Machine Centre



Machine:	CNC Vertical Machine Centre
Brand:	KIRA, HARTFORD
Model:	VTC - 30 Kira Elite, HCMC-2082
Table Travel :	(X) 300 (Y) 250 (Z) 300mm, (X) 2060 (Y) 820 (Z) 660mm
Operation :	Milling
Unit :	2
Spindle RPM :	6000 - 8000
Feed rate :	10.000mm/min
Accuracy :	± 0.005 - 0.010mm

CNC Double Column Vertical Machine Centre



Machine:	CNC Double Column Vertical Machine Centre
Brand:	KAFO, Hartford
Model:	HAS-523EAY, KAFO - 2015
Table Travel :	(X) 2100 (Y) 1500 (Z) 900 mm , (X) 5000 (Y) 3100 (Z) 1200mm
Operation :	Milling
Unit :	2
Spindle RPM :	6000
Feed rate :	10000
Accuracy :	± 0.010mm
Special Feature:	5 Axis Angular Head

Bending Automation



Shown without safety fence

Machine:	Robotic Arms Auto Bending Machine
Brand:	Amada
Model:	HG 1003 ARS
Overall bending length :	Up to 3.1 Metre
Operation :	Automated Bending
Unit :	1
Tonnage :	110 Ton
Special Feature	Auto Tool Changer

Bending Automation



Machine:	Robotic Arms Auto Bending Machine
Brand:	Amada
Model:	EG 6013 AR
Overall bending length :	300mm x 300mm
Operation :	Automated Bending
Unit :	1
Tonnage	0.12 Ton
Special Feature	Auto Tool Changer, Precision Bending Robot, Thickness Detection System



Shown without safety fence

Shown without safety fence

Blanking Automation



Machine:	Automation Combination Machine
Brand:	Amada
Model:	LC 2515C1-AJ
Table Travel :	3048mm x 1500mm
Max . thickness :	6.35mm
Feed rate :	Laser : 500mm/sec Punching : X: 370/min. Y: 280/min. (0.197" stroke, 1" pitch)
Max. Weight	110 lbs. to 330 lbs. (depending on table speed)
Accuracy :	± 2%
Tonnage	20 ton
Special Features	Automated Material Load/Unload System

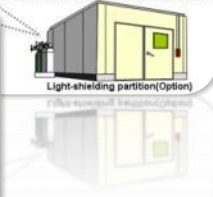
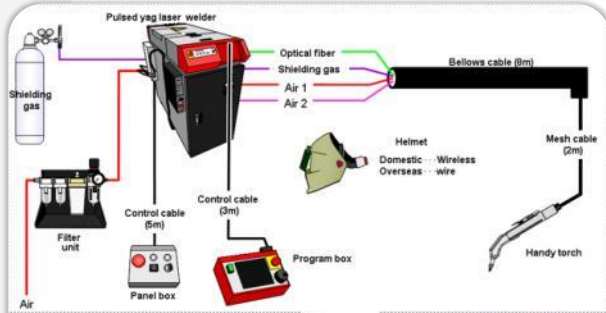
Blanking Automation



Machine:	Material Storage System
Brand:	Amada
Model:	CS/MARS Material Storage Systems
Shelves	10
Columns	6
Special Features	<ul style="list-style-type: none">• Continuous, on-demand production with minimal supervision• Materials is managed and monitored on FMS Server• Able to link with Combi to do I/O smoothly (Automation)• Alarm will go off when material is low



YAG Laser Welding



Machine:	YAG Laser Welding
Brand:	Amada
Maximum rated output	400W
Spot diameter	① : $\Phi 0.9\text{mm}$, ② : $\Phi 0.8\text{mm}$, ③ : $\Phi 0.7\text{mm}$
Peak power	8kW
Pulse Repetition Rate	1~500pps
Thickness	Up to 2.0 mm thick stainless steel sheets
Safety Device	Helmet, Light-shielding partition, Gloves

Alkaline Zinc and Zinc Phosphating



Tank Size :	2600mm x 1590mm (W) x 1520mm (H) with 5000L in volume
Part Size allowed :	2200mm (L) x 800mm (W) 1200mm (H)

Aluminium Chromating (Chemfilm)



Tank Size :	2000mm x 1000mm (W) x 1000mm (H) with 800L in volume
Part Size allowed :	1800mm (L) x 800mm (W) 750mm (H)



Passivation on Stainless Steel



Tank Size :	2000mm x 1000mm (W) x 1000mm (H) with 800L in volume
Part Size allowed :	1800mm (L) x 800mm (W) 750mm (H)

Powder coating conveyor line



Curing Oven :	24 Metre
Part Size allowed :	3000mm (L) x 1000mm (W) 1500mm (H)



Tunnel Box Oven



Oven Size :	4000mm (L) x 3000mm (W) x 3000mm (H)
Number of Oven :	3

Software Sheet



Features	Auto Scheduler integrated with Automation Production Line
	Time & Part Tracking on Shop Floor
	Auto purchasing based on Quotation, Sales Order and Forecasted Order
	Daily Inventory Balancing
	Version Management
	CAD/CAM & Work Center Integration

Quality Tools



Thread Plug Gauge



Digital Caliper



Micrometer



Granite Surface Plate



Measuring Tape (Steel)



Bevel Protractor



Radius Gage Set



Dial Indicator

Quality Tools



L - Square



Surface Roughness Tester



Pull & Push Gauge



Digimatic Height Gauge



Profile Projector



Feeler Gauge Set



Internal Chamfer Gauge



Thread Ring Gauge

Quality Tools



AC / DC Magnetic Meter



Pin Gauge



Coating Thickness Gauge



Faro Arm