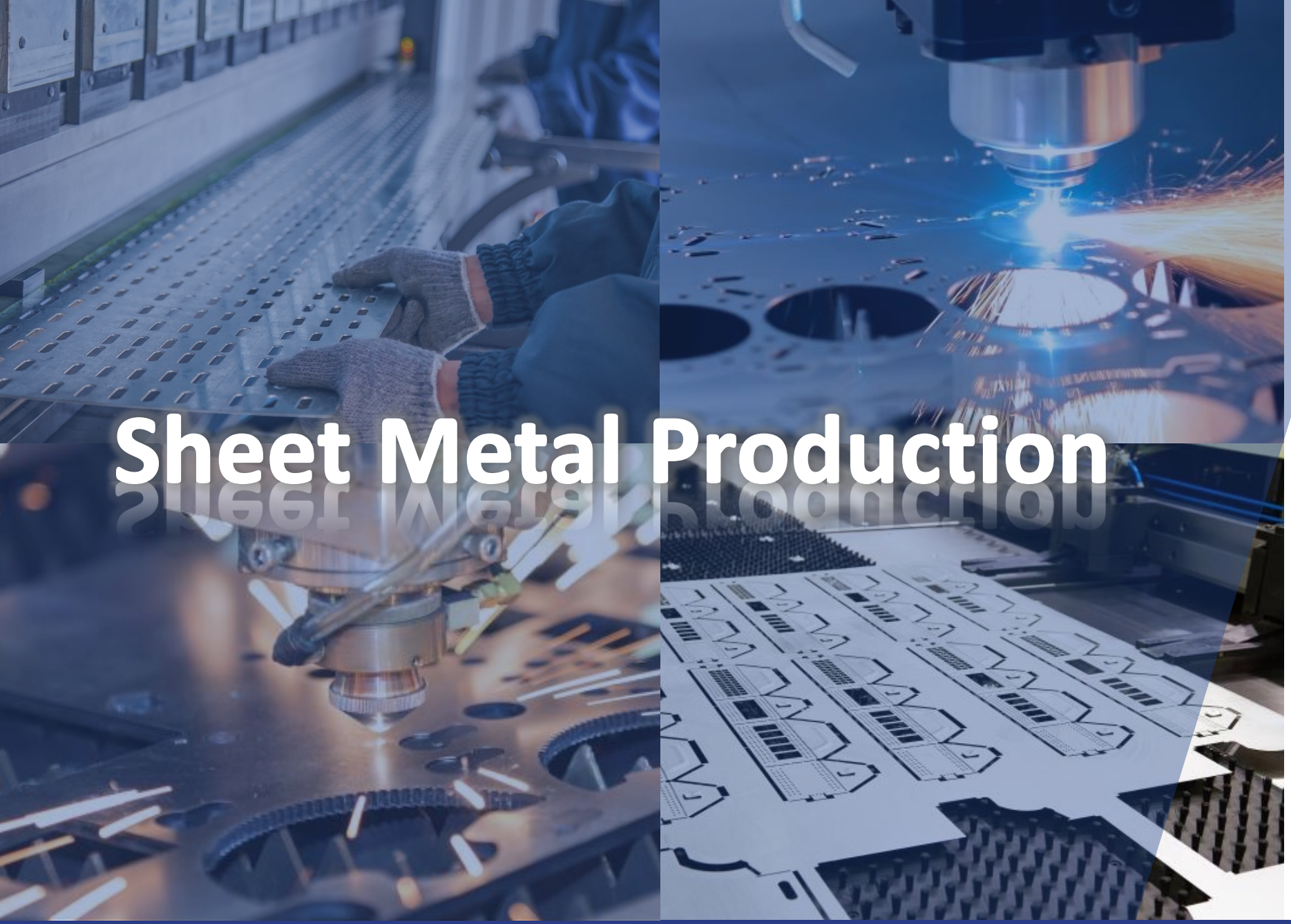


Sheet Metal Production

COFAN THERMAL

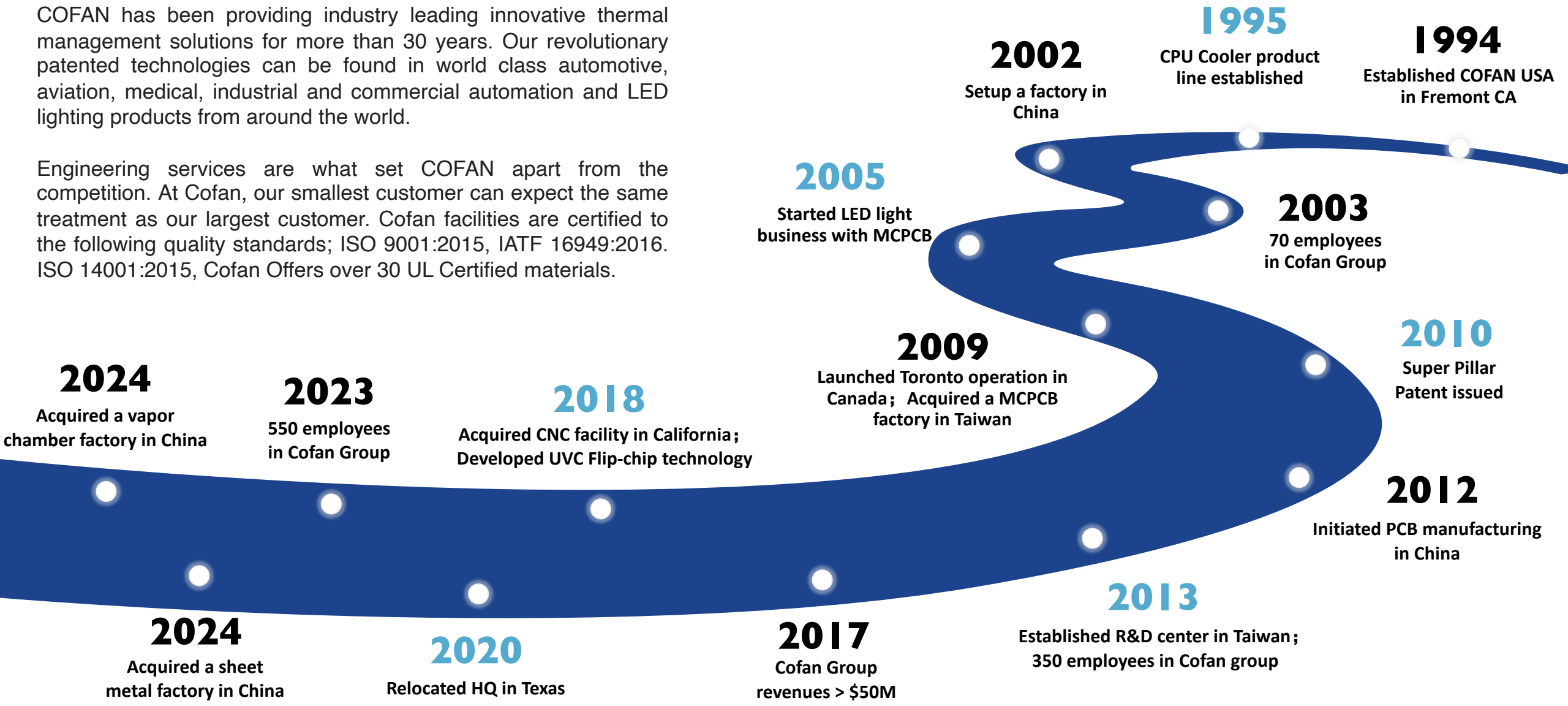
30 YEARS

Rev. 2024

Company Overview

COFAN has been providing industry leading innovative thermal management solutions for more than 30 years. Our revolutionary patented technologies can be found in world class automotive, aviation, medical, industrial and commercial automation and LED lighting products from around the world.

Engineering services are what set COFAN apart from the competition. At Cofan, our smallest customer can expect the same treatment as our largest customer. Cofan facilities are certified to the following quality standards; ISO 9001:2015, IATF 16949:2016. ISO 14001:2015, Cofan Offers over 30 UL Certified materials.



Sheet Metal Factories

Dongguan Cofan Electronic Technology CO., LTD

Address	1 Street, Shujiu Industrial 2nd Road, Changping Town, Dongguan City, China
Establish year	2003
Building size	150,000 sqft

Cofan Sheet Metal Manufacturing

Address	57 Shunfeng Rd, Sanzhong Xiawei Dist, Qingxi Town. Dongguan City, China
Establish year	2011
Building size	28,000 sqft

Sheet Metal Machines List

Machine Name	Brand
Laser Cutting	Mitsubishi ML3015
NCT	AMODA AE2510
Bending	FMB-4015 M5012 Sm-1680
Riveting	Local brand x 4 ea
Welding	Local brand x 1 ea
Drill	ZQ4113 ZQ4116
Tapping	SWJ-6
Press	HTH-300 x 2 ea SPEC.JH-100
Laser Engraving	DP-FC-20-JM
Painting	Out-sourcing

Concepts of Sheet Metal Processing

NCT Punching

Stretching

Chamfering

Argon Welding

Curing

Laser Cutting

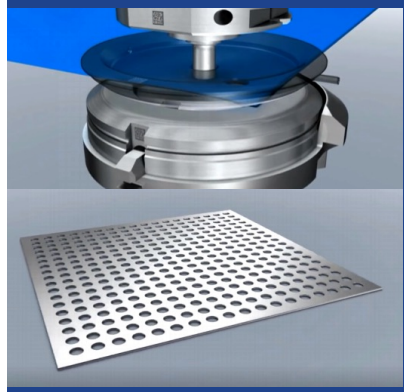
Rivet Install

Bending

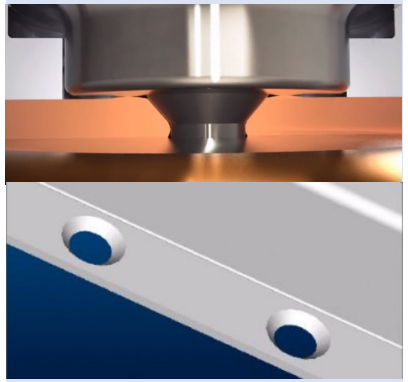
Powder Coating

Finished Product

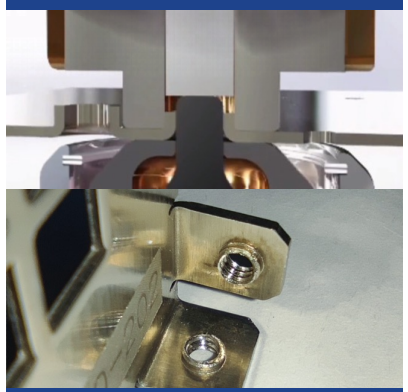
How does NCT process work?



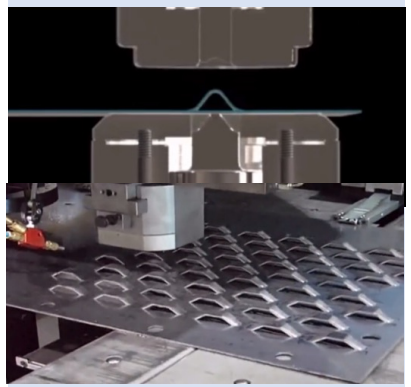
Hole Punch



Tapered Counterbores

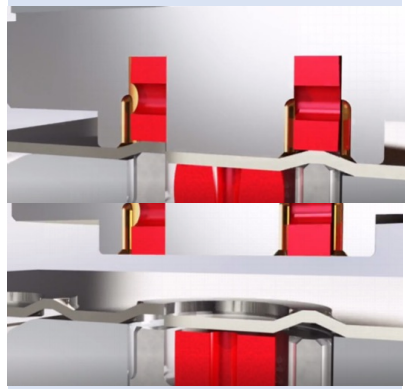


Extruded tapped hole



Stamping

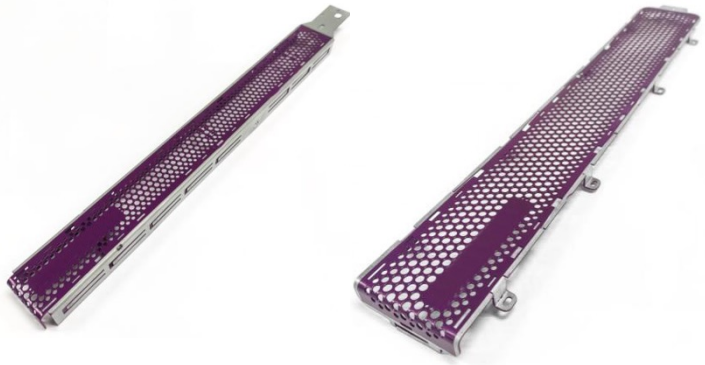
Snap

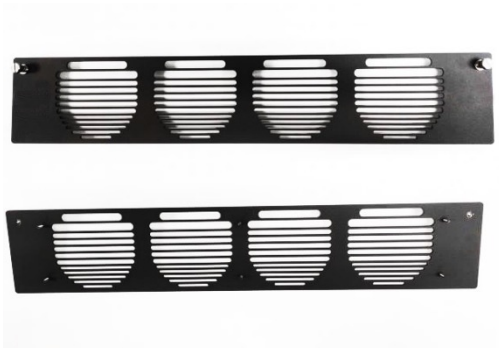


Die Cut

*Processes such as machining stamping and snap require customized special tools.

Product Samples





Machines

NCT Machine: AMADA AE-2510NT

Machine name	Amada AE-2510NT
Punching capacity (KN)	200
Driving mode	AC servo drive
Travel length (mm)	42
Maximum machined plate thickness (mm)	3.2 (Brush table) 6.4 (High-density brush) * Optional
Axismovement (mm)	1270 x 2500
Maximum axis movement speed (m/min)	X : 80, Y : 60
Maximum workpiece mass (kg)	50 (F1), 150 (F4)
Punching speed (min^{-1})	X : 50, Y : 280 (Stroke = 5 mm, spacing = 25.4 mm)
Engraving (min^{-1})	900
Machining accuracy (mm)	±0.1 (Softmode 0.07)
Turret rotation speed (min^{-1})	30
AI rotation speed (min^{-1})	60
NC device	AMNC/PC
Power supply capacity (kVA)	19
Average power consumption (kW)	4.5
Maximum airconsumption (NL/min)	750
Machine weight (kg)	12500

Laser Machine: MITSUBISHI ML3015LVP-35CF-R

Machine name			Mitsubishi ML3015LVP-35CF-R
Moving mode			Flight path (3-axis light movement)
Control mode			X-Y-Z simultaneous 3 axis (Z-axis can be copied control)
Indicators / Performance	Maximum workpiece size (mm)		3050 X 1525
	Table bearing weight (kg)		690
	Job support height (from ground level) (mm)		850
	Switching table		Yes
	Travel length (X / Y / Z-axis) (mm)		3100 / 1550 / 120
	Speed	Max. positioning (m/min)	Max 85 (X, Y single axis)
		Max. machining positioning (m/min)	30
	Accuracy	Positioning accuracy (mm)	0.050/500 (x, y-axis), 0.1/100 or less (Z-axis)
		Repeated positioning accuracy (mm)	±0.010 (X,Y-axis)
	Machining head (machining lens) (mm)		Φ50.8 (Φ2.0") *f190.5(f7.5")
Configurable vibrator			ML35CF-R
Power required (kVA)			8
Net weight (KG)		Processing machine body	About 9900
		Switchboard section	About 1800

Machines

Bending Machine: OSM OG-100II

Machine name	OSM OG-100II
Pressure KN (tons)	1000 (100)
Bending length (mm)	3100
Table travel (mm)	100
Number of cylinders	3
Rising speed (mm/s)	50 ~ 63
Bending speed (mm/s)	1 ~ 13
Decreasing speed (mm/s)	52
Fuel tank capacity (L)	80
Motor power (KW)	7.5 KW
Total Motor power (KW)	8.5 KW
Input wire (mm^2)	10
Machine weight (kg)	6800

Bending Machine: HAIGEI EG3613

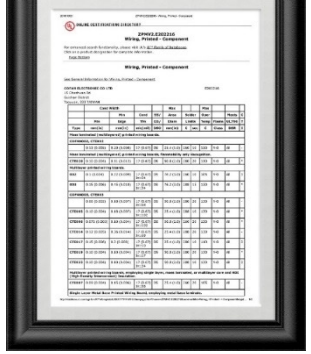
Machine name	HAIGEI EG3613
Bending pressure	360KN (36T)
Pressurized drive mode	Servo motor + heavy load lead screw
Machine bend length	1300 mm
Countertop height	870 mm
Throat depth / height	300 mm / 420 mm
Total bend stroke	150 mm
Width of the inside of the rack	960 mm
Number of machine axes	6
D-axis descent/ascent speed	0 ~ 120 mm/s
D-axis pressurization speed	0 ~ 100 mm/s
L-axis travel / speed	500 mm / 0 ~ 200 mm/s
Z-axis travel / speed	130 mm / 0 ~ 200 mm/s
Backstabbing refers to the number	2
Control system	Bending & HAIGEI
Display controls	10 inch TFT
Power capacity	220V 13.5 KW
Device form factor	2000 x 1400 x 2350
Total equipment weight	3.3 T

Specification

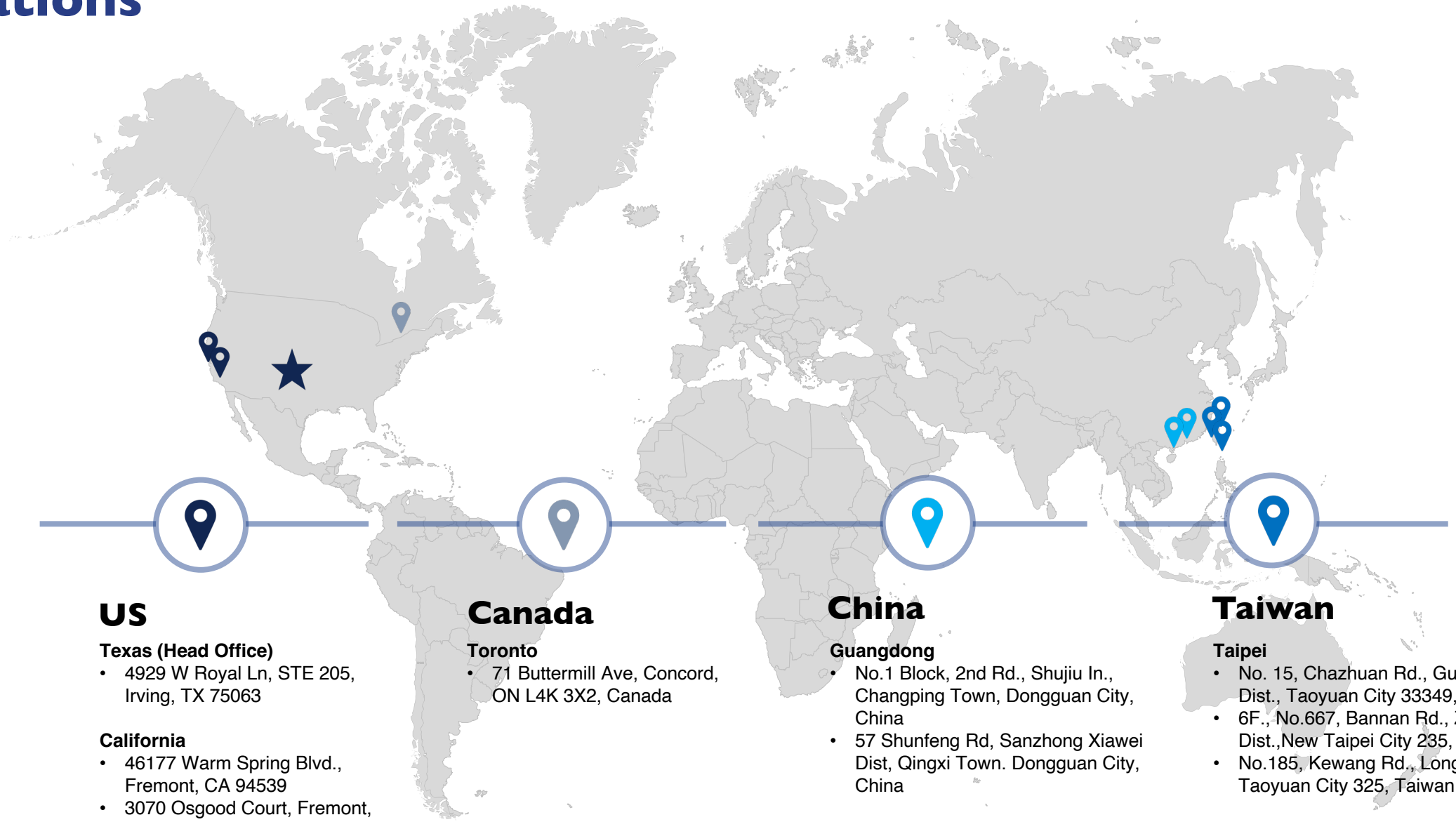
Item	Desc.		Remark
Materials	Aluminum Steel Brass Stainless Steel		The sense copper cannot be processed by the laser machine due to reflection of copper mirror.
Thickness range	NCT	Aluminum : 5.0 mm Steel : 3.0 mm SUS : 2.0 mm Copper : 3.0 mm	All thicknesses are the maximum thickness that can be machined.
	Laser	8.00mm	
Size range	NCT	1250 X 2500mm	
	LASER	3000 X 1500mm	
Height of the convex point (height to thickness ratio)	Small round convex hull	5 : 1	
	Vertical convex hull	3 : 1	
	Square convex hull	10 : 1	
Minimum machining tolerance	NCT	±0.05 mm	
	LASER	±0.03 mm	
Bending radius range	599mm		
Minimum bending tolerance	±0.05mm		
Available welding methods	Resistance spot welding Argon welding Laser welding		
Minimum assembly tolerances for upper and lower cover	±0.20mm		
Minimum Welding assembly tolerances	±0.40mm		
Inspection equipment	2.5 Dimension Projector Height gauge Digital caliper Vernier caliper		
Painting Thickness	Powder	60 ~ 100 um	The existing manual spraying method can only meet the above data requirements.
	Liquid	15 ~ 30 um	

Certifications

- IATF 16949:2016
- UL (over 30 materials)
- ISO 9001:2015
- ISO 14001:2015
- ISO 45001:2018
- OHSAS 18001:2011
- IPC-4101B
- IPC-6011
- IPC-6012B
- ANSI/IPC-A-600
- CSA



Locations



US

Texas (Head Office)
- 4929 W Royal Ln, STE 205, Irving, TX 75063

California
- 46177 Warm Spring Blvd., Fremont, CA 94539
- 3070 Osgood Court, Fremont, CA 94539

Canada

Toronto
- 71 Buttermill Ave, Concord, ON L4K 3X2, Canada

China

Guangdong
- No.1 Block, 2nd Rd., Shujiu In., Changping Town, Dongguan City, China
- 57 Shunfeng Rd, Sanzhong Xiawei Dist, Qingxi Town. Dongguan City, China

Taiwan

Taipei
- No. 15, Chazhuan Rd., Guishan Dist., Taoyuan City 33349, Taiwan
- 6F., No.667, Bannan Rd., Zhonghe Dist.,New Taipei City 235, Taiwan
- No.185, Kewang Rd., Longtan Dist., Taoyuan City 325, Taiwan