## Metal Processing and Powder Coating Unit

Delivering Precision Through Technology





## MAKING IN INDIA SINCE 2011



### » COMPANY BACKGROUND

At **Finewood**, we design and develop quality Modular Furniture to serve homes, offices, retail spaces, institutions and beyond. Our journey began in 2011 with a team of 17 people, and today, our team has grown to more than 250 professionals.

### » INFRASTRUCTURE

We operate three state-of-the-art manufacturing facilities spread over 100,000 sq. ft. in Nagpur - MIDC Industrial Area, Hingna. Our factories are equipped with precision machinery from leading global manufacturers, handpicked to deliver superior quality.

- K-14 & K-32 Wooden Modular Furniture for residential, office and institutional use
- K-9 A dedicated unit for Metal Processing and Powder Coating









## Metal Processing and Powder Coating Unit

**K-9** is equipped with advanced technology for:

- Mild Steel, Stainless Steel & Aluminium fabrication and conveyorized Powder Coating
- High-precision metal shearing and CNC Fiber Laser cutting
- MIG / Spot / Fiber Laser welding
- Power Pressing systems for punching, forming
- NC Pipe Bending & Press Brakes
- Drilling & Tapping Systems
- Custom metal solutions for industrial applications

### **Annual Capacity:**

Metal Processing: >4,500 Tonne

Powder Coating: >35 Lac sq. ft.

Metal Processing and Powder Coating at K-9 and full-scale manufacturing of Wooden Modular Furniture at our existing factories, enable us to deliver integrated solutions involving both wood and metal components.



## Certifications













14001:2015



	Machine	Manufacturer	Origin	Qty
1	Hydraulic Shearing Machine	Nugen Machineries Ltd	Ahmedabad, India	1
2	CNC Fiber Laser Cutting Machine	DNE (Bystronic Group)	Switzerland	1
3	NC Press Brake (100 Ton)	AMADA	Japan	1
4	NC Press Brake (35 Ton)	AMADA	Japan	1
5	NC Spot Welding Machine (Rocker Arm)	Nash Robotics	Nashik, India	1
6	NC Spot Welding Machine (Gun Station)	Nash Robotics	Nashik, India	1
7	Fiber Laser Welding Machine	DNE (Bystronic Group)	Switzerland	2
8	MIG Welding Machine	ESAB	USA	2
9	Aluminium Extrusion Cutting Machine	Elumatec	Germany	1
10	Aluminium Copy Router Machine	Elumatec	Germany	1
11	Power Press 63 Ton	SEW	Rajkot, India	1
12	Power Press 45 Ton	SEW	Rajkot, India	1
13	Pipe/Rod Cutting Machine	Jet Machines	Bhavnagar, India	1
14	NC Pipe Bending Machine	Sunita Engineering	Nashik, India	1
15	Pillar Drilling Machine	HMP Ramato Machine	Rajkot, India	2
16	Bench Drilling Machine	HMP Ramato Machine	Rajkot, India	2
17	Pneumatic Tapping Machine (Tap Master)	Flex Arm India	Faridabad, India	1
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### 1. Hydraulic Shearing Machine

Nugen Machineries Ltd

#### **Features:**

- Precise straight shearing of sheet metal
- Fixed Rake Angle NC Hydraulic Shear
- Capacity: 3.15mm x 2500mm



### 2. CNC Fiber Laser Cutting Machine

**DNE Switzerland** 

- High-speed precision cutting (MS, SS, Alu)
- 1500W Laser Power, IPG Laser Source
- Bed Size 1500mm x 4000mm
- Cutting Ability: 0.5 16 mm (MS), 0.5 8 mm (SS), 5 mm (Brass)
- Laser Wavelength: 1070 (+ 10) nm





# 3. NC Press Break (100 Ton)4. NC Press Break (35 Ton)

Amada, Japan

#### **Features:**

- Precision sheet bending and CNC control
- Max Bed Length 3100 mm & 1200 mm
- Stroke Length 100 mm, Approach Speed 70 mm/s
- Bending Speed 13 mm/s, Return Speed 52 mm/s



# 5. NC Spot Welding - Pneumatic Rocker Arm6. NC Spot Welding - Single Arm Gun Station

Nash Robotics

- Clean welds for mild steel & aluminum
- Repeatable spot welds for production lines
- Capacity 4mm
- Water cooled, Fully epoxy moulded
- Radiator with cooling tank







### 7. Fiber Laser Welding Machine

DNF Switzerland

#### **Features:**

- High precision with repeatability in the range of ±0.002" to ±0.004"
- 1500W Laser Power, Laser Source Raycus
- Speed Range 0~120 mm/s
- Capacity 0.5-3 mm (MS/SS), 0.5-2 mm (Aluminum/GI)
- Laser Wavelength 1070 (+ 10) nm



### 8. MIG Welding Machine

ESAB, USA

- High speed welding on thin sheets with a separable wire feeder
- 10 step single knob voltage control
- Stepless speed control, wire feed speed up to 22 m/min.
- Suitable for 0.8 1.2 mm wire
- 2 / 4 stroke welding.





### 9. Aluminium Extrusion Cutting Machine

ELUMATEC, Germany Double Meter Saw

#### **Features:**

- Integrated turn table and optimal profile support for cutting to length with angular accuracy
- Cutting Length 3000 mm, Saw Blade Dia. 380 mm
- Continuous Pivot Adjustment 0-45 Degree Left & Right
- Pivot Location 15, 30, & 45 Degree



### 10. Aluminium Copy Router Machine

ELUMATEC, Germany Single Spindle Copy Router

- Router Spindle Speed 1200 RPM
- Max Routing Capacity 300x120 mm
- Routing Capacity by Template 290x110 mm
- Clamping Capacity 150x130 upto 400 mm adjustment





### 11. Power Press Machine – 63 Ton 12. Power Press Machine – 45 Ton

SEW, India

#### **Features:**

- Capacity 63 Ton and 45 Ton
- Variable Stroke
- Pneumatic Die Cushion



### 13. Pipe Cutting Machine

JET Machines, India Semi-Automatic Pipe/Bar Cutting

- Semi Automatic,
- Feed Hydro Pneumatic
- Clamping Pneumatic

<b>Cutting Capacity</b>	@ <b>90</b> °	@45°
Round Pipe	115 mm	90 mm
Square pipe	100 x 100mm	90 x 90mm
Round Bar (MS)	50 mm	30 x 30mm





### 14. Pipe Bending Machine

Sunita Engineering, India

#### **Features:**

- NC Hydraulic Semi-Automatic Pipe Bending Machine with 5 Cylinders
- Bending Capacity Dia. 50 x 3 mm
- Bending Degree Up to 190 Degree
- Bending Speed 6-9 RPM



### 15. Pillar Drilling Machine

HMP Ramato Machines, India

- 20MNCr5 steel, Spindle
- Drilling Capacity 40 mm
- Eight Spindle Speed 100 2435 RPM
- Spindle Travel 250 mm
- Spindle Center to Column 380 mm







### 16. Bench Drilling Machine

HMP Ramato Machines, India Rack & Pinion Pillar Drilling Machine

#### **Features:**

- Drilling Capacity 13 mm
- Four Spindle Speed 650 2400 RPM
- Spindle Travel 100 mm
- Spindle Center to Column 150 mm





MODEL NO: HMP - 06

### 17. Tapping Machine

Flex Arm (Tap Master), India

- Pneumatic Tapping Machine
- Tapping Capacity: 3 12 mm
- Spindle Speed 400 RPM
- 1100 mm Working Stroke





## Powder Coating Plant Machines

	Machine	Manufacturer	Origin	Qty
1	Pre-treatment Plant	Global Energy System	Mumbai, India	1
2	Pre-treatment Chemical Process	Atotec	USA/Japan	1
3	Conveyorized Powder Coating Plant	Global Energy System	Mumbai, India	1
4	Automatic & Manual Powder Coating Booths	Global Energy System	Mumbai, India	2
5	Powder Spraying Unit With Gun	Gema	Switzerland	1
6	Oven – LPG Fired	Global Energy System	Mumbai, India	2
7	Lot Cylinder Manifold System	Global Energy System	Mumbai, India	2
8	RO+ DM Water Treatment Plant	Aagum Chemicals	Nagpur, India	1
9	Effluent Treatment Plant	Ecologix	Nagpur, India	1



### 1. Pre-Treatment Plant

- 11 Tank Pre-Treatment process
- Tank Volume 5,500 Liter
- Tank Size (mm) –3500L x 1200 W x 1500H
- Water Drying Oven (Temperature 120 Degree)
- Fully Automated PLC Controlled
- 5 Baskets, Size (mm) –3200L x 900W x 1200H









### 2. Pre-Treatment Chemical Process

Stage	Process	Material	Time (Min)	Chemical	Temp.
1	Degrease-1	Aluminum	10	Uniprep SP1 EU Activator B2	40 C
2	Degrease-2	Steel	10	Uniprep D 315 LL Activator B2 Activator B5	40 C
3	Water Rinse-1	Steel/Alu	1	Industrial Water	Ambient
4	Water Rinse-2	Steel/Alu	1	Industrial Water	Ambient
5	De-rust/ De-scale	Steel/Alu	5	Uniprep SA 15D Uniprep ACD 105 R Uniprep ACD 105	50 C
6	Neutralization	Steel	1	Uniprep RND 15	Ambient
7	Water Rinse-3	Steel/Alu	1	Dm Water	Ambient
8	Conversion Coating	Steel/Alu	2	Interlox 5705 A Interlox 5705 R	Ambient
9	Water Rinse-4	Steel/Alu	1	Dm Water	Ambient
10	Sealer	Steel	1	Interprep RP 54	Ambient
11	Drying		10		120 C



### 3. Conveyorized Powder Coating System

### 4. Automatic & Manual Powder Coating Booths

#### **Features:**

- For Sheet Metal & Tubular Sections
- Max. size 3000mm (L) x 600mm (W) x 1200mm (H). Max Weight 65 Kg
- Conveyer Speed 1.2 m/min
- Conveyorized Powder Baking Oven 20 Min @ 205-210 Degree in Powder Coating (EMT– 180 Degree for 10 Min)

Booth Type: 1 Back-to-Back Automatic Booth & 1 Manual Booth

- Size 6350(L) x 1380(W) x 2450 (H) mm & 4100(L) x 1300(W) x 2450 (H) mm
- Booth Material SS 304 (1.2 mm Thick)
- Cyclone Single Cyclone with Split Design
- Common Post Filter for Auto & Manual Booth









### 5. Powder Spraying Unit with Gun

Gema, Switzerland

- 110 KV powder charging capacity
- Manual Electrostatic Powder Coating Equipment
- OptiStar 4.0 Manual Gun Control Unit
- Gun PRO GM 04 Manual Powder Gun with Integrated Remote Control







### 6. Powder Baking Oven

Floor Mounted Conveyorized Oven

#### **Features:**

- Heating Source LPG Fired Heat Exchanger
- Design Temp 180 Degree C For 10 Min EMT
- Temperature Controller Digital Single Set Point Control with PT-100 Sensor
- Size 13300 (L) x 3600 (W) x 2750 (H) mm U
  Type
- Centrifugal Hot Air Circulation
- Centrifugal Air Curtain



### 7. Lot Cylinder Manifold System

- Vaporizer Coil Type, 50 Kg/Hours 2 Set
- Gas manifold 12 Cylinders 2 Set





### 8. RO + DM Water Treatment

Floor Mounted Conveyorized Oven

#### **Features:**

- Capacity 2000 LPH
- TDS 0 5 PPM
- Conductivity 0 10 Microsiemens
- Hardness 0 PPM
- PH Adjust 6.5 7
- Turbidity 0 NT
- Complete RO unit controllable by mobile with monitoring software



### 9. Effluent Treatment Plant

#### **Features:**

Capacity – 12 KLD



### **LET'S BUILD TOGETHER**

Our team is ready to collaborate and deliver integrated Wood and Metal solutions tailored to your needs.

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