


BAHETI SILICONES & METALS PVT. LTD.

LEADING MANUFACTURER OF COPPER & COPPER ALLOYS

A wide-angle photograph of a massive open-pit mine at sunset. The sun is low on the horizon, casting a golden glow over the layered rock walls of the mine. In the foreground, two large yellow haul trucks are parked on a dirt road. The background shows the vast expanse of the mine with winding roads and distant hills under a colorful sky.

“We have always believed in churning out new ideas to consistently meet with our customer's needs ie, making their dream come true.”

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What are we?

Unfolding Our Story

Quality at Baheti Silicones and Metals pvt. Ltd. is not just plant and machinery. It is an everyday discipline. It is technology shaped in experience . It is an attitude that masters the challenges of growth and change. Change in consumer's perception about product and new aspiration arising from a highly volatile ends changing market.





Technologically driven and inspired by innovation, we, at BSM, work tirelessly to improve ourselves to meet the needs of the dynamic industry. Every product offered reflects the effort of the team that has endeavored to evolve the best the industry could receive.

Our maestro



Rajesh Baheti
Managing Director



Sanjay Baheti
Managing Director



Satyadeo Purohit
Technical Director



Vedant Baheti
Marketing Director



Shridhar Baheti
Marketing Director

They are the power source that drives the energy of BSM. They are involved in planning, implementing, and integrating the strategic direction of the organization. They have always been passionate about finding smart ways and innovative ideas for the growth of the company as well as delivered best quality products for the customers.

Glorious years

2011

Started in 2011, with only one melting furnace and semi continuous casting machine to produce cast and machine rods.

2014

Started production in 2014 and gradually added various alloys and customers indigenously.

2016

To up-lift plant and product range added hot extrusion and cold drawing plant with heat treatment facilities .

2019

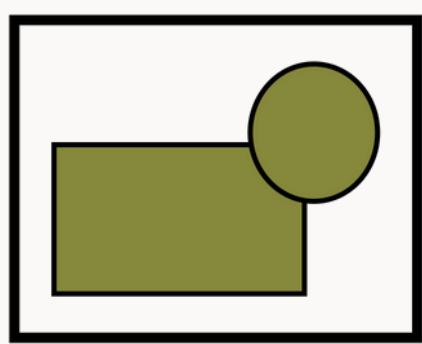
Took step towards sustainable development. Giving something back to the society and leaving something more than we found for the future generation.

2021

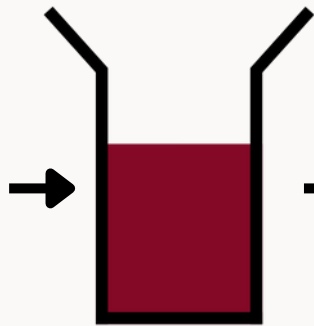
Became a reliable producer of world-class quality copper alloy and became a global player in the business.

2022

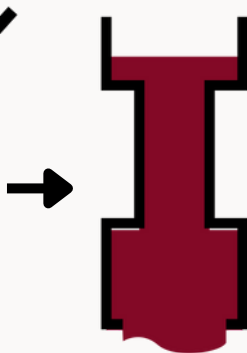
Expanding the existing furnace plant to new lands and retaining a position of delivering a wide range of products across country and neighbouring nations.



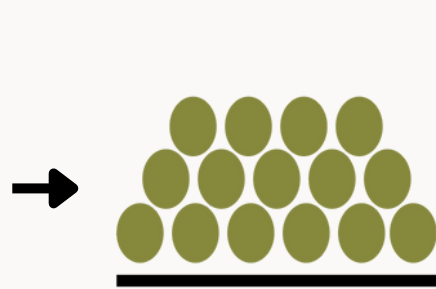
Raw Material



Melting



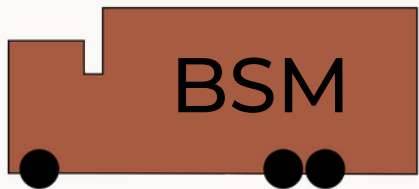
Billet Casting



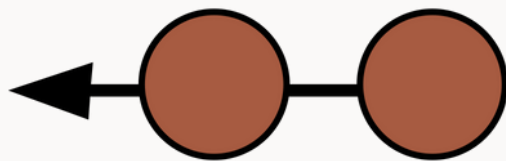
Turning



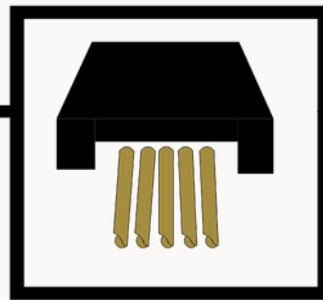
Cutting



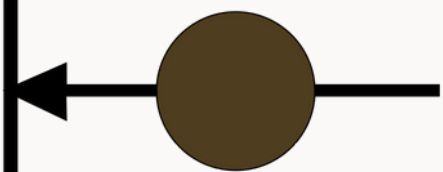
Dispatch



Loading



By Packing

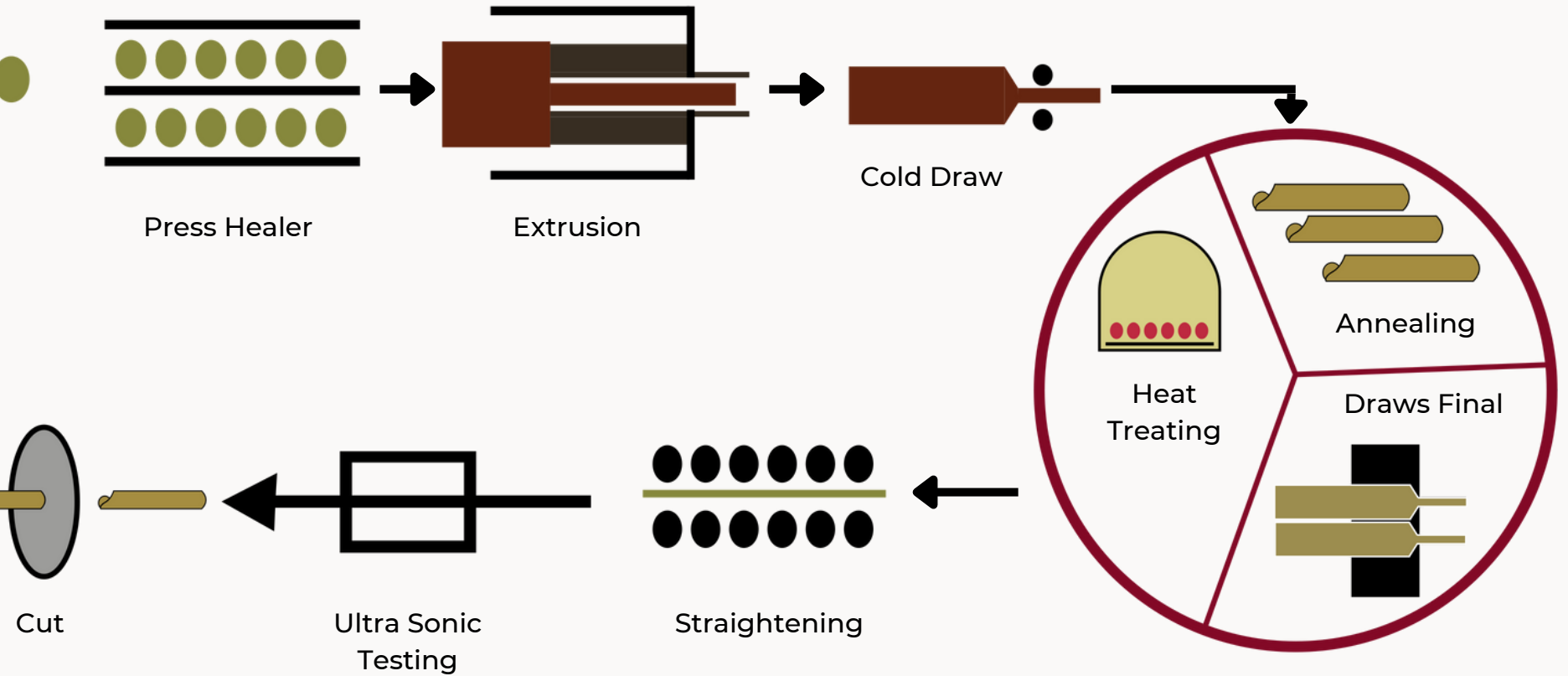


Final Testing



Final

Process Flow Chart





Casting Process



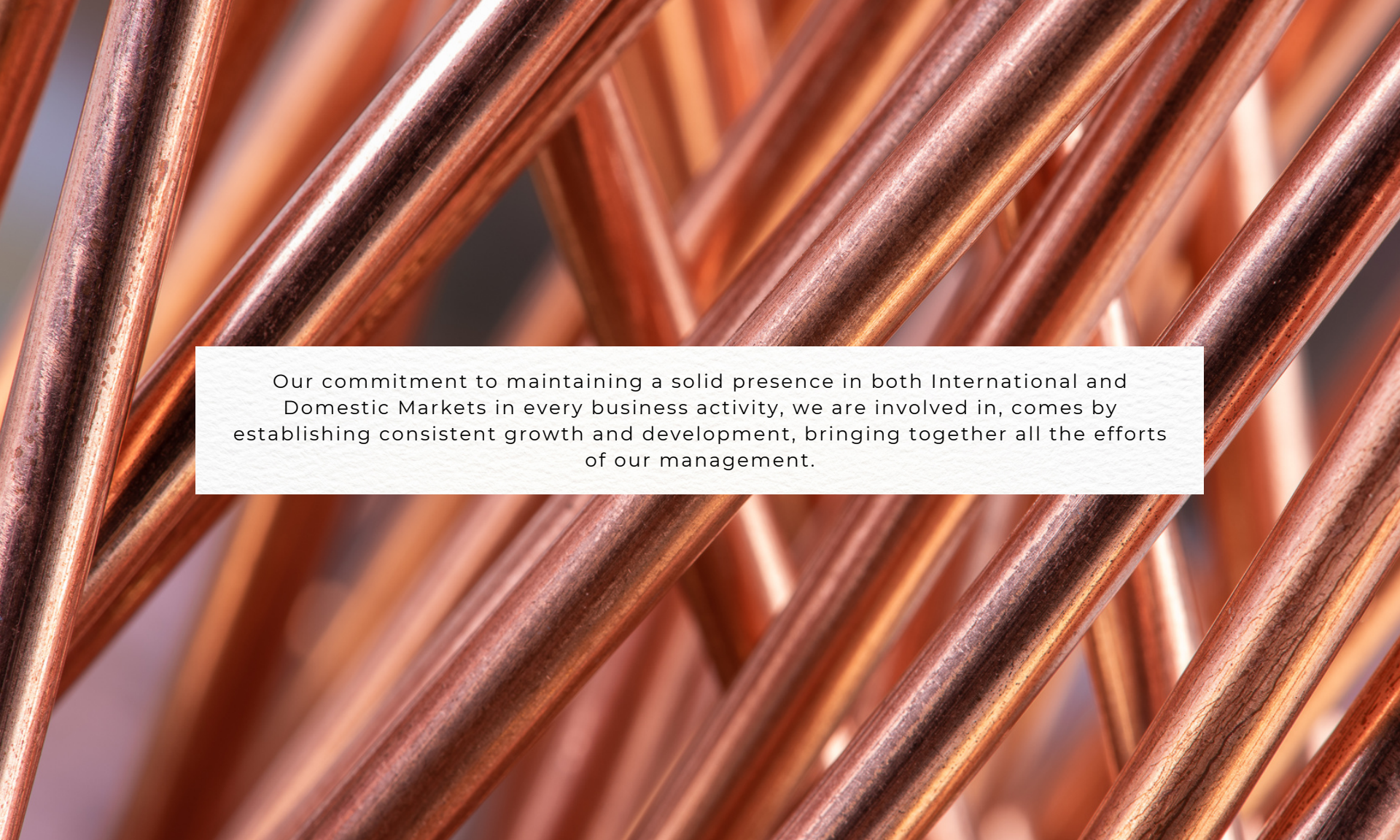
Extrusion Process



Draw Bench Section

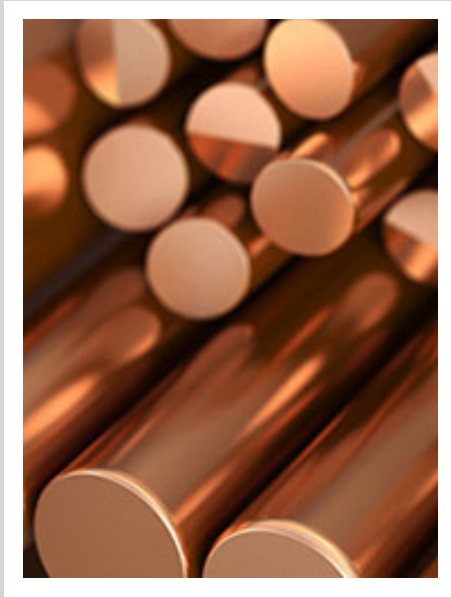


Final Inspection



Our commitment to maintaining a solid presence in both International and Domestic Markets in every business activity, we are involved in, comes by establishing consistent growth and development, bringing together all the efforts of our management.

Extruded products



COPPER

A soft, malleable, and ductile metal with very high thermal and electrical conductivity .Copper is used as a conductor of heat and electricity, as a building material, and as a constituent of various metal alloys.

ALUMINIUM BRONZE

Aluminium bronze is a type of bronze in which aluminium is the main alloying metal added to copper, in contrast to standard bronze (copper and tin) or brass (copper and zinc).

COPPER NICKEL

An alloy of copper that contains nickel and strengthening elements, such as iron and manganese. The copper content typically varies from 60 to 90 percent.

SILICON BRONZE

Silicon bronze offers added strength in conjunction with the self-lubricity of silicon for excellent bearing and load properties. This is especially useful when silicon bronze is used for bearing cages, raceways and spaces specifically for the aerospace industry.

Continuous casting products



PHOSPHORUS BRONZE

Phosphorus bronze is a member of the family of copper alloys. It is composed of copper that is alloyed with 0.5–11% of tin and 0.01–0.35%.

GUN METAL

Gunmetal, also called G Metal, variety of bronze, formerly used for ordnance. Modern admiralty gunmetal is composed of 88 percent copper, 10 percent tin, and 2 percent zinc and is used for gears and bearings that are to be subjected to heavy loads and low speeds.

LEADED BRASS

Lead brass is used for its high machinability and atmospheric corrosion resistance. The machinability of brass is increased by the addition of lead because it acts as a microscopic chip breaker and tool lubricant. The leaded brasses are used for copper base screw machine material. The alloys have excellent machinability, good strength and corrosion resistance.

Copper

Copper			
Tellurium Copper	C14500	C109	CW118C
Sulphur Copper	C14700	C111	CW114C
Cadmium Copper	C16200	C108	-
Chromium Copper	C18200	CC101	CW105C
Leaded Copper	C18700	-	CW113C
Copper Chromium Zirconium	C18150	CC102	CW106C
Copper Nickel Silicon Chromium	C18000	-	CW111C
Copper Zirconium Cobalt Chromium	C17500	C112	CW101C
Copper Zirconium	C15000	-	CW120C

Copper nickel

Copper Nickle			
90/10 Cu Ni	C70600	CN102	CW305H
70/30 Cu Ni	C71500	CN107	CW307H

Round			Hex		Square	
Extruded & Drawn	Extruded	Cast & Turned	Extruded & Drawn	Extruded	Extruded & Drawn	Extruded
15 MM To 80 MM	>80MM To 100MM	100MM To 500MM	20MM To 75 MM	>75MM To 100MM	20MM To 75MM	>75MM To 100MM
15 MM To 80 MM	>80MM To 100MM	100MM To 500MM	20MM To 75 MM	>75MM To 100MM	20MM To 75MM	>75MM To 100MM

Aluminium bronze

Aluminium Bronze			
Al. Bronze 1	C62300	CA103	CW305G
Al. Bronze 2	C63000	CA104	CW307G

Round			Hex		Square	
Extruded & Drawn	Extruded	Cast & Turned	Extruded & Drawn	Extruded	Extruded & Drawn	Extruded
8 MM To 60 MM	>60MM To 100MM	80MM To 500MM	20MM To 60 MM	>60MM To 80MM	10MM To 50MM	>75MM To 100MM
8 MM To 60 MM	>60MM To 100MM	80MM To 500MM	20MM To 60 MM	>60MM To 80MM	10MM To 50MM	>75MM To 100MM

Silicon bronze

Silicon Bronze			
Low Silicon Bronze	C65100	-	CW109C
High Silicon Bronze	C65500	-	-
Aluminium Silicon Bronze 1	C64200	CA107	CW302G
CUN12Si	C64700	-	CW111

Round			Hex		Square	
Extruded & Drawn	Extruded	Cast & Turned	Extruded & Drawn	Extruded	Extruded & Drawn	Extruded
10MM To 80MM	>60MM To 100MM	80MM To 100MM	15MM To 75 MM	>75MM To 100MM	15MM To 75MM	>75MM To 100MM
10MM To 80MM	>60MM To 100MM	80MM To 100MM	15MM To 75 MM	>75MM To 100MM	15MM To 75MM	>75MM To 100MM
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10MM To 80MM	>60MM To 100MM	80MM To 100MM	15MM To 75 MM	>75MM To 100MM	15MM To 75MM	>75MM To 100MM

Continuous casting products

Phosphorus Bronze			
95/5	PB102	C52100	C451K
92/8	-	-	-
90/10	-	PB-1	-
88/12	-	PB-2	-

Round	Hollow	Hex	Square
10MM To 300MM	10MMID - 130MMOD	10MM To 80MM	15MM To 75MM
10MM To 300MM	10MMID - 130MMOD	10MM To 80MM	15MM To 75MM
10MM To 300MM	10MMID - 130MMOD	10MM To 80MM	15MM To 75MM
10MM To 300MM	10MMID - 130MMOD	10MM To 80MM	15MM To 75MM

Gun Metal

85/5/5/5

LG-2

-

-

85/7/3/3

LG-4

-

-

Leaded Brass

C31400

-

-

-

Round	Hex	Square
10MM To 300MM	10MM To 80MM	15MM To 75MM
10MM To 300MM	10MM To 80MM	15MM To 75MM
10MM To 300MM	10MM To 80MM	15MM To 75MM

If control is to make efficiency work better, then the elements of supervision and guidance should be supportive rather than being authoritative.

Scan to know more
about our products



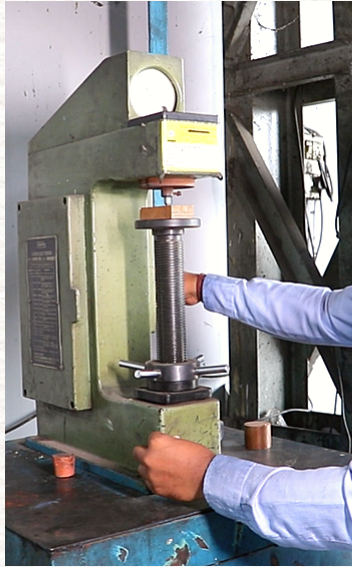
Manufacturing machines

- A. RAW MATERIAL PREPARATION MACHINES:** 1. Bailing press 2. Hand magnet and scraping tools
- B. MELTING:** 1. Coreless medium frequency melting furnace with two pots.
350 KW, 500 HZ, DUAL TRACK.
2. Coreless medium frequency furnace 100 KW with 500 HZ
- C. CASTING:** Direct Chill type semi continuous casting machine duly PLC controlled.
Can cast from 100 mm to 500 mm diameter up to length 3.0 meter but max weight 1.0 ton
- D. CONTINUOUS CASTING:** From 15 mm to 135 mm diameter solid , 7 mm and above thickness with 130 mm outer diameter hollow and 7 mm and above thickness with 125 mm width flats.
- E. BILLET CUTTER**
- F. BILLET SAWING MACHINES**
- G. LPG GAS FIRED BILLET HEATER**
- H. HOT EXTRUSION:** Hot extrusion press of capacity 1800 ton/ 250 ton piercing fully PLC controlled.
- I. PICKLING:** Acid tank and heating further rinsing tank.
- J. POINTING MACHINES:** Two swaying and four roller pointer with one flat pointer.
- K. COLD DRAWING:** Two cold drawing draw benches with 100 ton and 50 ton pulling load,
- L. STRAIGHTENING AND LENGTH CUTTING:** Two roll concave/ convex type and multi roll round straightening machine up to 110 mm , square/ hex/ rectangular bar multi roll straightening machine
- M. HEAT TREATMENT FURNACE:** 120 KW up to 900 deg centigrade and 2 ton per batch with auto heat treat cycle control system via PLC



Testing equipments

1. Emission type spectrometer CCD base
2. Electrical conductivity meter.
3. Ultrasonic testing machine.
4. Dye penetration tester.
5. Macro etching testing facilities.
6. Universal testing machine (tensile strength, yield strength, proof strength, % elongation, compressive strength, bend test, shear strength stc-40 ton.
7. Vickers cum brinell hardness tester.
8. Rockwell hardness tester, HRF, HRB, HRC
9. Impact strength testing machine.
10. Metallurgical microscope.
11. Fracture testing machine.
12. Mercurous nitrate testing facilities.
13. Ammonia vapor testing facilities.
14. Dezincification testing facilities.
15. Dimensional cheking equipments like verniers, micrometers etc.



Sustainability



Solar Energy

At BSM, we believe that energy is both an enabler and a bottleneck for business growth. While it largely remains as an inimitable resource, the demand-supply deficit may cause hiccups in the long-term business continuity. Over the years, we have been successful in improving our energy productivity by investing in energy efficient processes and practices.



Water Plant

Efficient treatment & recycling mechanisms Well-thought-out conservation projects. We understand that water is not something that can be completely substituted in the manufacturing process in the foreseeable future, but it can be consumed more judiciously and responsibly.



Air Purifier

The implications of use, overuse, and abuse of energy are not just hindering the environment but also the business and the society. With implanted white smoke chimney in the premises, that purifies more than 80% of the fumes coming out of the industry.

Being customer driven, we are constantly committed to keep powering ahead with the spirit of innovation to significantly enhance our abilities and optimize our potential to offer only the best to our customers.

Scan to e-visit
our industry

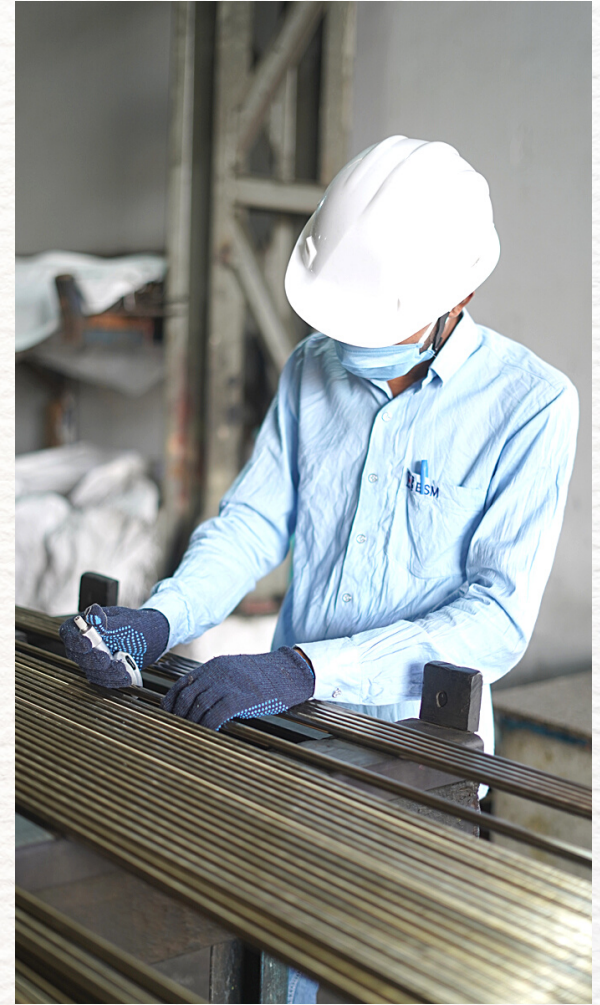


Craftsmanship

handmade in India

What is beautiful is increasingly difficult to come by in a world where a premium is placed on speed, and things are made to be disposable. We often sacrifice real craftsmanship at the altar of expediency. While we are still capable of recognizing the value of something that has been expertly constructed, we often choose the cheap and easy option instead. Here at BSM, we focus on workforce ability and perfection.





Certifications & registration



Contact

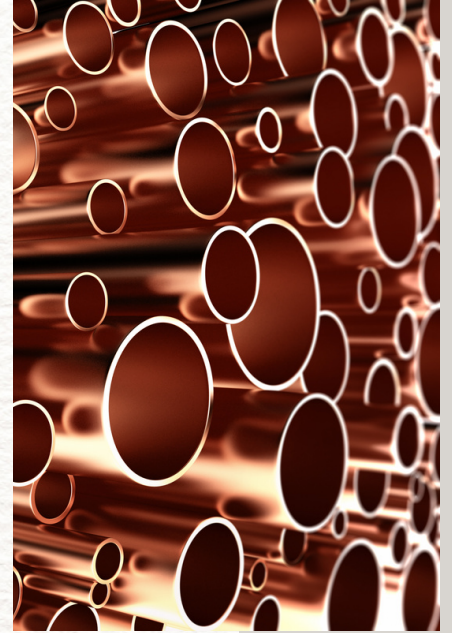
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