



go Green



40 + YEARS OF EXCELLENCE

WE PROVIDE
INDUSTRIAL
SOLUTION TO YOUR
ROLLING
MILL



Established 1998

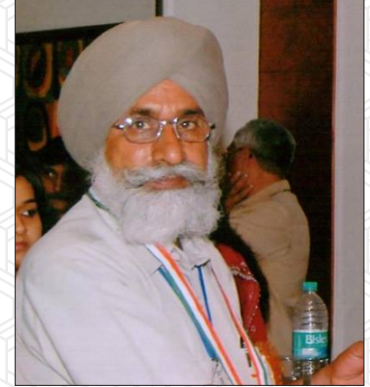
ERECTION / COMMISSIONING OF
ROLLING MILL PLANT

UP-GRADATION OF
OLD PLANT

PROJECTION OF
PLANT

www.bsprecisionmachines.com

Director Message



However vehement the situation turns out be what keeps a tenacious mind going and growing is preparedness, sense of for thoughtness and strategic planning.

These three when blends together directs us towards the process of magnification taking the operational quality to a whole next level. We, at BS GROUP (MANDI GOBINDGARH) bid to be one of the most competitive companies in the business accenting efficiency in the operations, trustworthiness for our customers and thrust on over all working.

We are a blend of combinations like strong management team work and more stronger team management with our professional and persistent work face lead by a clear vision to establish a medium, a platform that provide unique specialized services to the various vital business sectors. This being our paramount concern. The key to our success can briefly be summarized with our absolute, resolute efforts to create a magnum opus in each of our job. Our company's sights are on the future, but we are diligently aware of their customers' needs in the present.


Babbir Singh
Director

WELCOME TO BS GROUP (MANDI GOBINDGARH)

BS GROUP was started its group concern " B.S. Mechanical Works" in 1998, by S. Balbir Singh, which is engaged in exporting and supplying a wide range of Rolling Mill Stands, Straightening Machines, Gear Boxes, Gear Hobbing Machines, Shearing Machines and different types of Steel Rolling Mill Spares & Parts. To check the quality of the products various tests are applied at different stages of production process and it continues till the time of shipment.

Quality

We lay equal emphasis on the quality of our products and to achieve our objective we strive towards improvement and effective implementation of our quality management system. Our company also complies to all statutory and regulatory requirements of the industry. The organization is managed with professional and experienced quality people who have vivid experience in the relevant field. They conduct routine checks both during and after production that helps us to eliminate the faulty pieces and also repair them.

WHO WE ARE

A team of most experienced people , who know your demand

B.S. Group (Mandi Gobindgarh) is a well-known Erection, Commissioning, Manufacturing & Exports any types of Steel Rolling Mill Machinery, Parts and Accessories. Our Group concern BS Mechanical Works is known for Section Straightening Machines, Shearing Machines, Rolling Mill Stands, Universal Gear, Gear Box, Reduction Gear, Rotary Shear and all types of Steel Rolling Mill Plant & Machinery.

The company has become known for its robust machines that can stand harsh environment and perform well under pressure. The machines manufactured by the company are highly durable and easy to use.

Engineers : 6, Skilled Staff : 30, Consultant : 3

To manufacture these products as per the requirement of our esteemed clients, we are having highly experienced professionals. Our products are manufactured under the proper guidelines of these experts, they constantly check the quality at every level of production and create healthy and friendly environment to work efficiently and effectively. We are highly concerned about the quality of the product. The team consists of expert designers, market executives and quality controllers.

Good Financial Position & TQM : Large Production Capacity

- Technically qualified & professionals team
- Market experience
- Products in confirmation with International standards
- Strong market networks
- Timely deliveries
- On-demand quality inspections
- Prompt response to all Requests For Quotations (RFQ)
- Product Sourcing & competitive Pricing
- Quality Control to ensure Goods are in compliance with Client specifications & other requirements.



INNOVATION & ADOPTION **TECHNOLOGY**

We have adopted World class technology to meet the quality of International Standard.

1

CNC Machines

We have involved CNC Lathe machines & other Heavy Duty CNC machines to meet the standard.

Inhouse Designing

We have in-house Autocad & Solidwork Software to design for continuous development in look & better performance.

2

3

Award & Recognitions

Due to our continuous consideration on Quality & Commitment, we have awarded many times with numbers of Govt. & Industrial bodies in india and abroad.

A Strong Casting Unit

We assure you about the quality of raw material which we use to manufacture our machine. We have our associates to give best quality of material.

4

MILL STAND

- MILL STAND WITH FIBRE BEARING 1
- HOUSINGLESS MILL STAND 1
- VERTICAL MILL STAND 1

SHEARING MACHINES

- SCRAP CUTTING MACHINE 2
- BLOOM CUTTING / SHEARING MACHINE 2
- HOT/COLD END SHEARING MACHINE 3
- ROTARY SHEARING MACHINE 3
- HYDRAULIC COLD SHEARING 3
- FLYING SHEARING MACHINE 4
- CONTINUOUS SHEARING MACHINE 4

GEARS & GEAR BOXES

- GEARS 5
- REDUCTION GEAR BOX 5
- GEAR COUPLING 5
- PINION GEAR BOX 6
- SPEED INCREASER 6
- ROLL FORMING MACHINE 6

ALLIED MACHINERY

- FURNACE EJECTOR 7
- HYDRAULIC PUSHER 7
- SHUTTER PROFILE MACHINE 7
- STRAIGHTENING MACHINE 8
- TUBE MILL 8
- V-BELT PULLEY 8
- TAIL BREAKER 9
- HYDRAULIC POWER PACK 9
- BAR BUNDLE BENDING MACHINE 9
- TMT QUENCHING BOX 10
- ROLL BARS 10
- HOT SAW MACHINE 10
- ROLLER GUIDE BOX 11
- PINCHROLL 11
- TWISTER PIPES 11
- HEAVY FLYWHEEL 12
- COOLING BED 12
- TWIN CHANNEL 12

MATERIAL HANDLING EQUIPMENTS

- MATERIAL TRANSFER TROLLEY 13
- CONVEYOR 13
- E.O.T. CRANE 13
- E.O.T. CRANE TECHNICALITIES 14

A NEW TECHNOLOGY OF

ROLLING MILL



ERECTION & COMMISSIONING OF **HOT ROLLING MILL**



BS Precision Machines Pvt. Ltd. (BSPM) is engaged in manufacturing, supply, erection and commissioning of steel rolling plants on a turn key basis. Designed using sophisticated production techniques and superior quality equipment, our steel rolling mill plants are known for their high performance & utility. Stable and robust in design, our range of steel rolling mill plants are designed in compliance with international quality standards and provided with several safety features to ensure operational safety and efficiency.

Our technical group team consists of highly skilled professionals and experienced engineers and grass root level staff who have undertaken and commissioned a number of projects successfully in India and abroad. Having a flawless record of delivering turnkey Project solutions on time, we provide process solutions which helps to improve productivity, reduce manpower requirement, reduce breakdown time & operating cost.

- TMT Rolling Mill Plant on Turnkey Basis.
- Section Rolling Mill Plant on Turnkey Basis.
- Strip Rolling Mill Plants on Turnkey Basis.
- Upgradation / Automation of Rolling Mill Plants.

TMT / BAR ROLLING MILL PLANT



We Manufacture & Supply Complete Bar & Rod Steel Rolling Mill Plants. These Mills Are Also Called TMT Rolling Mills. The Finish Product of These Mills Are Bar, Rod, TMT Bars, Deformed Bars Used In Construction Sector. Rods usually rounds from 5.5 to 9 mm and TMT Bars from 8 to 40 mm in diameter are produced in bar and rod Mill.

Three types of mills are employed in rolling rods: Open Train, Semi-Continuous and Continuous. The selection of the layout in any case depends upon the tonnage required, the volume of production and the required quality of the finished product and their rolling speeds which reaches 22m/sec. and even higher. The continuous rod mill consists of Roughing mill train, first intermediate mill train, second intermediate mill train and finishing mill train with D.C. drive.

BASIC FEATURES OF TMT ROLLING MILL:

- Annual Capacity of Mill 20,000 TPA to 600,000 TPA.
- Finish Product 8mm to 40mm Diameter Re-bars.
- Fully Automated Production Line.
- Automatic Binding & Packing Line.
- High Speed Rolling Up to 22 Mtr. per Sec.
- Tandem / Continuous or Cross Country Type Mill Arrangements.
- TMT Quench Line For Producing High Strength TMT Bars.

SECTION ROLLING MILL PLANT



Our section metal rolling mill gadget is a product of Reheating Furnace , Roughing, Intermediate & Finishing Mill Complex For Rolling Billet Into Different Shapes & Sizes, Automatic Cooling Bed With Automatic Transfer & Cutting Machines, Online Section Straightening & Packing & Binding Equipment.. It integrates the electric, hydraulic, and lubrication era. And you could set it to guide and automatic control mode. Our system is designed to produce undeniable carbon steel consisting of perspective metallic, channel metallic and formed metallic, and so on. What's more, the optimized layout is offered in keeping with clients' necessities and specific conditions. The company aims in providing high-quality products for the complete satisfaction of clients.

BS Precision Machines Pvt. Ltd. (BSPM) makes the complete design of the section mill to meet customer's manufacturing requirement.

The mill composition is made such that manufacturing program can be done with the minimum labor & with less production cost.

Quality Enhancement & Production Volume Increase. The precision of the measurements of the shaped steel being manufactured can be enhanced through the combination of a high-rigidity mill, various roll chock locking devices, roll position adjustment functions and optional functions.

- Universal rolling mill with hydraulic roll gap control
- Universal rolling mill with mill pass line adjuster
- Universal rolling mill with vertical roll offset device
- Vertical roll drive universal rolling mill
- Universal rolling mill capable of UE rolling
- Can handle large-size shaped steel (up to H1100)
- Can also handle sheet piling (U-type and Hat type)

HOT STRIP MILL

HIGHEST PERFORMANCE FOR NEW AND EXISTING STEEL MILLS



The demand for hot rolled strip is growing in multiple ways. To remain competitive, new and existing mills must meet this challenge in the best possible way. The production of hot strip is a key element of steel production. Since close to half of all steel produced is hot-rolled to strip, mills require maximum throughput and availability combined with geometrical precision and the ability to create optimum material properties. You'll appreciate hot strip mills from **BSPM** as all-round plants for high-quality hot strip. They are designed to produce flat steel from thin strip with a minimum final gauge of 1.2 millimeters to high-strength pipe steels up to 25.4 millimeters thick, including stainless steel grades. Implemented here are many technologies that ensure excellent hot strip quality as well as high cost efficiency and availability.

Technology Involved.

- Slab sizing press (SSP)
- Advanced Coil Box
- Differential Speed Crop Shear
- Advanced Pair Cross Mill
- Work Roll Shift Mill
- Online Roll Profiler (ORP)
- Looper Shape Meter (LSM)
- Power cooling (Enhanced strip cooling system)
- Advanced Coiler.

UPGRADATION & AUTOMATION OF HOT ROLLING MILL



Fully integrated electrical and automation solutions for upgrading your plant to higher productivity, quality and availability. More than 40 years of process know-how in hot rolling mills results in better accessibility and higher productivity for your mill. Using the latest technology we help metals manufacturers to fulfill their product demands in both greenfield and modernization and upgrade projects. The BSPM control and power system is adaptable to various thicknesses and widths, as well as soft to high-strength steel grades, special stainless steel grades, high temperature resistant alloys and corrosion resistant alloys. With BSPM's full range of products, from reliable instrumentation, control systems, advanced drive technology and power management to process technology and optimization solutions, we enable our customers' plants to run more efficiently, produce higher-quality products and increase profitability and flexibility.

Our offering:

- Process control and automation solutions
- Collaborative Production Management.
- Performance Optimization Service for long product rolling.
- Measurement & analytics.
- Crane Power & automation solution
- Test System



MILLSTAND WITH FIBRE BEARING

Salient Features :

Compact and simple in design, these are used for the rolling of wire rods, TMT, light medium heavy sections steel up to 50 MT per hour production of ferrous and non-ferrous metals. Available in CI casted, MS casted & steel fabricated, these steel rolling mill stands can be customized as per the client's specific requirements.

- Minimum maintenance and down time
- Longer service life

Technical Specifications :

- Mill Stands Ranging From 6" Pcd To 24" Pcd
- C. I. Casted Stands, Steel Casted Stands
- Steel Fabricated Stands
- 3-hi Stands & 2-hi Stands
- Bearing Type Stands And Gun Metal Type Stands.



HOUSINGLESS MILL STAND

Salient Features :

- High competent rigidity
- Reduced stress path
- Fully automatic operation
- Axial roll adjustment
- Automatic screw- down system

Technical Specifications :

- Mill size ranging for production of : 8 mm to 40 mm mill at 50 ton/hr
- 3 Hi and 2 Hi stand in Horizontal and Vertical configurations
- Material : Steel casting/Cast Iron/Steel fabricated



VERTICAL MILL STAND

Salient Features :

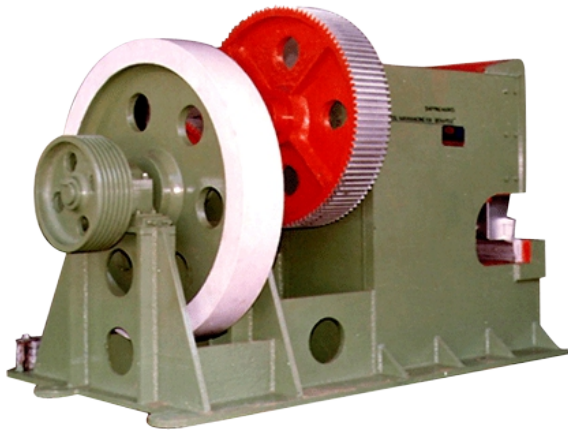
- Sturdiness
- Rust Resistance
- Rugged Construction
- Heavy duty and sturdy design which is suitable to bear overloads

Technical Specifications :

- Material : M.S. Prime Plate, Cast Iron, Graded Cast Iron
- Sizes : Up to 660mm
- Housing : Two Open Housing connected together with standard accessories
- Chocks : Steel Chocks with Vertical stand for Tapered Roller Bearing
- Roll Adjustment : Mechanical Type by means of Bevel Gears
- Roll Dia : As suitable to the Vertical Stand
- Fly Wheel : Graded Cast Iron with Forged Steel Shaft and Spherical Roller Bearing
- Reduction Gear Box : Includes Forged Steel Single Helical Gears with all Accessory
- Uses : Strip Mill, Flat (bar) Rolling Mills, etc.



VERTICAL STAND FOR STRIP MILL



SCRAP CUTTING MACHINE

Salient Features :

Plate Scrap Shearing Machine These are generally heavy duty type machines used for cutting re rollable scrap (plates rails channels rounds angles squares, etc in cold condition These are usually used by scrap mills to prepare rolling stock in suitable shape and size for Re rolling Very useful in induction melting Furnace scrap processing yard to cut Pieces of Pipe angles channels sheets flats and round etc. We manufacturer scrap shearing machine with to minimum capacity of 18 mm to maximum of 75mm(cold metal)

Technical Specifications :

- Type: Heavy Double Gear
- Mouth Open: 2 ½"
- Capacity: 2" Rolling
- Motor: 20 HP
- Stroke: 20/m



BLOOM CUTTING / SHEARING MACHINE

Salient Features :

Billet Cutting machines are fabricated from tested rolled plates from Main Producers , which are mild in composition, but sturdy in performance All the drive gears are manufactured out of forged En-9/19/24 Steel which id duly hardened and grounded. The shaft/Crank is forged En-8/9 steel. All the Bearing are of best quality, etc. Gun Metal Bushes are made with Copper Alloys to last longer life. All the machines are tested here for capacity and performance before dispatch.

Technical Specifications :

- These machines are manufactured to cut various sizes of blooms and slabs.
- The capacity of these machines varies from 50mm to 200mm for blooms & 50mm x 200mm to 125mm x 400mm for slabs.
- Six (6) numbers of gears are provided to facilitate operations with small power.
- The body is made from M. S. (Plates) instead of cast iron to cover the risk of any breakage



HOT / COLD SHEARING MACHINES

Salient Features :

- PH. Bronze bushing on Crank Shaft 6/8 Gears.
- Heavy duty spherical roller bearings
- Steel fabricated rigid body
- 6/8 Gears
- Clutch / Non clutch type
- Strokes per minute 6-10

Technical Specifications :

- 3 Available upto 8" billet cutting
- Slab cutting capacity 14" & 4"



ROTARY SHEARING MACHINE

Salient Features :

- Fixed and Swiveling type Rotary
- Fully Automatic with pneumatic controls, capable of cutting hot ends (front and rear) During Rolling, and fixed Lengths of finished bars.
- Steel Fabricated body
- Circular Blades manufactured from High carbon, high chrome steel.

Technical Specifications :

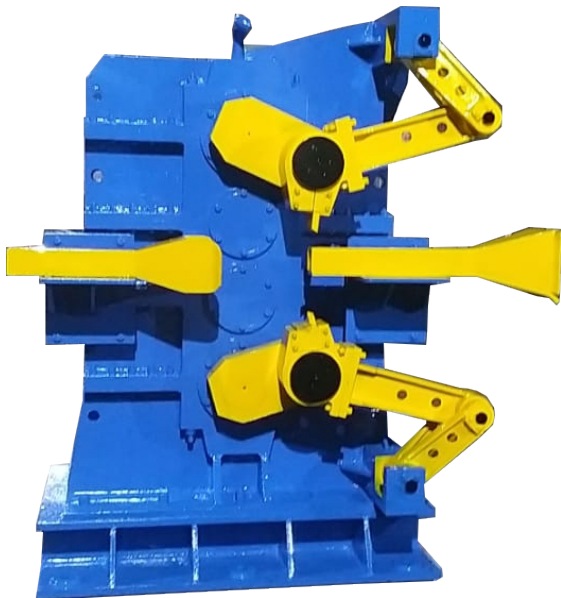
- Cutting Capacity 8 to 25 mm Hot Bars at 800 C
- Ranging Form 300 to 500 mm P.C.D



HYDRAULIC COLD SHEARING MACHINE

Salient Features :

- Expertise in manufacturing shearing machines for all types of bars, rounds as well as other structural products.
- Double bored construction with Pulley-cum-Fly Wheels and Alloy Steel Pinion support.
- Steel fabricated sturdy cased body.
- Fully hardened EN19 gear.
- Tempered carbon steel cutters.
- C.I. casted flywheel.
- Anti friction bearing and gun metal bush.
- Fully Machine EN8 Shafts.
- Centralized oil lubrication system to provide for consistent performance support.



FLYING SHEARING MACHINE

Salient Features :

The Function of the Flying Shear :

As the head and rear part of the rolling parts have some defect or the temperature of steel is too low, the flying shear need to cut the head and rear to insure the quality of the rolling parts before it gets into the finishing mill.

The flying shear will cut the rolling parts immediately if any failure occurs to the finishing mill, then the switch will turn the parts to snap shear to snap.

Technical Specifications :

- Steel to be processed : Carbon Steel, Low Alloy Steel
- Cutting temperature : $\geq 850^{\circ}\text{C}$
- Rolled piece length of cutting head : 150~230mm
- Rotary sword diameter : 800mm
- Overlap of knives : 0.25~0.75mm
- Side gap of knife counterpart : $\leq 0.0278\text{mm}$



CONTINUOUS SHEARING MACHINE

Salient Features :

- Continuous loading of feed
- Automatic operation
- Production capacity of up to 30 tonnes per hour
- Compact and requires a small space to operate
- Blades are made of highest grade of alloyed steel
- No civil foundation required except levelled firm ground

Technical Specifications :

- 8mm to 10mm TMT bar. Single Shear is sufficient for ingot rolling mills.
- The first cut of this shear is not accurate, but the subsequent cuts are very accurate. The material loss of first cut is compensated by the subsequent cuts.
- The motor power is only 65 KW, compared to 90, 130, 175 KW of Start Stop Flying Shear.
- The casing is vertically split to take the separating force during the milli seconds when the cut is executed on the casing profiles instead of parting bolts.
- The blade holder is fitted with double cone torque couplings as a safeguard against the accidental overload.
- The Flywheels are provided to reduce the motor power. The flywheel inertia augments the cyclic cutting load.

GEARS

Salient Features :

The Salient Features Of These Double Helical Gears Are As Follows:



- Smooth Operation
- High Strength In Contact Of The Teeth
- Elimination Of Side Ways Force
- Fully Balanced Thrust Load
- Lower Load On Gear Reducer Housing
- Large Face Overlap Due To Absence Of Axial Thrust
- Excellent And Smooth Transfer Of Torque & Motion at High Rotational Velocities

Technical Specifications :

- Tooth Form : Straight Teeth or Spiral Teeth.
- Gear Center : Center bore
- Pressure Angle : 14.5* / 20*
- Outer Diameter : 100mm To 5000 mm
- Material Used : Cast Iron, Carbon steel, Alloy steel, Bronze etc

REDUCTION GEAR BOX

Salient Features :

- Designed to work efficiently at peak loads case hardened and grinded double helical gears.
- Torisionally rigid steel fabricated body designed to dampen vibrations
- Amply rated bearings.
- Forced Lubrication.
- Splash Lubrication.



Technical Specifications :

- Gear boxes for 100 HP to 2000 HP.
- Single, double & multi stage reduction gear boxes as per requirement.
- Gears in module and DP system.

GEAR COUPLING

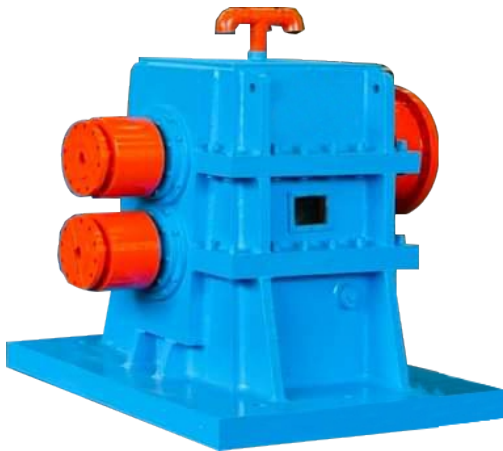
Engineering data for Full Gear Coupling.

Coupling No.	Maximum bore in mm	Maximum Load in H.P.	Maximum Speed in R.P.M
106.1	100	350	2500
107.2	125	550	2100
108.3	140	750	1900
109.4	165	800	1700
110.5	210	1000	1400
111.5	250	1500	1250
112.7	320	2000	1120



Technical Specifications

- Made from Enforged Steel
- Size range no 106 to 112 suitable tor 6" to 24" PCD Rolling Mills



PINION GEAR BOX

Salient Features :

- The bodies of the Pinion Gear Box are accurately machined, totally enclosed, oil tight, having a sufficient lubrication system and dust proof.
- The bodies are made from steel plates to cover the risk of any breakage.
- The gears of Pinion gear boxes are made of En-9, En-19, or En-24, forged steel as per customer's requirements.
- The gears are made in D.P. and module formula with single or double helical teeth.
- The Pinion gear boxes are made 3 hi or 2 hi as per order suitable for 6" to 36" PCD mills.
- Imported double roller (self aligned) bearings imported are used and the oil seals are provided outside the bearings to protect the oil leakage.
- All Parts are checked during and after manufacturing, and a full speed trial is carried out to verify smooth operation.

SPEED INCREASER

Salient Features :

- Speed increaser are certain devices which are used to increase the speed of engine, gearbox, spindle, shaft, input shafts and other machines. These speed increaser equipments and devices are designed with by eminent mechanical engineers using highly advanced technology.
- These different types of speed increasers like engine speed increaser, gearbox speed increaser, spindle speed increaser, shaft speed increaser, input shaft speed increaser, rolling mill speed increaser not only save time, money but also increase the speed, work efficiency and total output.

Technical Specifications :

- The gear material utilized EN-9, EN-24, and High Carbon High chrome according to the requirements. The Speed Increaser Gear Box body is fabricated from M.S. Plates and welded by MIG which flux free and spatter free. The Speed Increaser Gear Boxes are in single stage and multi stage according to he need. These can run 2000 RPM to 4 RPM and can transmit 3000 HP to 2 HP.
- Speed Increaser Gear Boxes are also utilized where high Horse Power to be transferred at very high RPM.

ROLL FORMING MACHINE

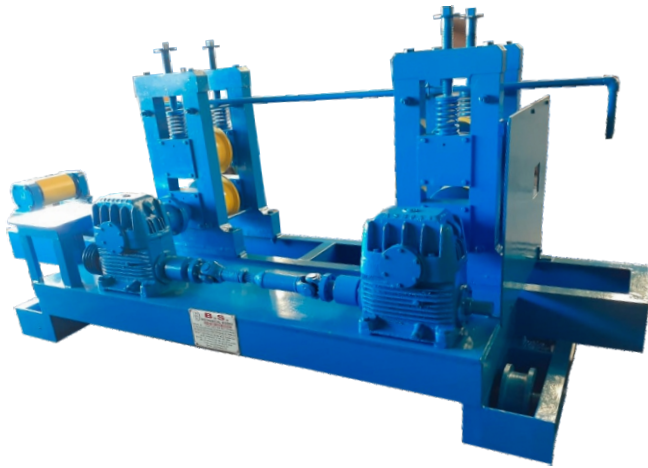
Salient Features :

A roll forming machine (or metal forming machine) fabricates specific configurations out of long strips of metal, most commonly coiled steel. The material is fed into the machine where it continuously makes its way through the stages of each operation, ending with the completion of a final product.

Technical Specifications :

- Power : 12kw
- Capacity : 10m / min.
- Number of Forming Stations : 18 / 21 / 24
- Cutting Type : Hydraulic
- Frequency : 50Hz
- Phase : 3
- Weight : 7 Tons
- Sheet Thickness : 0.30 - 0.80 mm





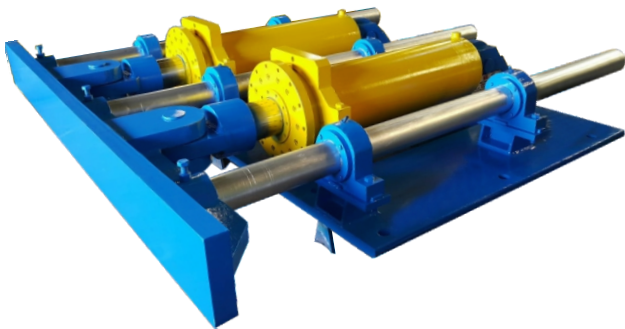
FURNACE EJECTOR

Salient Features :

Our range of furnace ejector is manufactured using quality tested raw material with the help of our cutting edge technology and experienced workforce. These furnace ejectors are appreciated worldwide for its excellent quality, dimensional accuracy and optimum utility. These are in high demand by our client's spread worldwide.

Technical Specifications :

- Suspension plate: Cast steel, ribbed for reinforcement.
- Thrust bearing
- Guide bearings
- Shaft: Alloy steel, grinded and polished
- Impeller: Cast steel, non-clog, one piece, balanced; keyed and locked to the shaft.
- Impeller adjusting nuts: Bronze lock nuts.
- Motor shaft connection: Flexible coupling machined and balanced.
- Vertical, locked to the suspension plate, terminating in a flanged, 45 degrees elbow



HYDRAULIC PUSHER FOR REHEATING FURNACE

Salient Features

A Pulley is a power transmission cum speed controller device which can be used at various places depending on the application and size. In Rolling Mills it is used between motor to flywheel and flywheel to gear box so as to control speed input speed as per the application. It is duly machined and balanced and comes in all groove sizes and bores.

Technical Specifications :

- Sizes Available : 150 mm to 3500 mm Dia
- CI Casted Shaft, Best Quality Bearings & Plummer Blocks



SHUTTER PROFILE MACHINE

Salient Features :

ROLLING SHUTTER SIDE CHANNEL MACHINE

Production Capacity : 2 M. Ton/Hr.

Rolls : EN-31

Pcs. : 16

Technical Specifications :

- Thickness of Forming Sheet: 0.6 ~ 1.2 m/m.
- Forming Speed: 12 ~ 16 M/min.
- Roll Shaft Diameter: 40 mm Dia.
- Hydraulic Motor: 7.5 HP ~ 10 HP
- Roll stands: 10 ~ 12sets of roll in SK2-hard chrome coated.
- Attached with cooling equipment.



STRAIGHTENING MACHINE

Salient Features :

- High Quality Chill/S.G. Iron/Adamite Rolls.
- Heavy Duty Worm Gear Type Screw Down Mechanism.
- Steel Fabricated Body.
- Suitable For Joists Up-to 500mm. Angles upto 200 x 200mm Channels upto 400mm.
- Mechanical / Hydraulic System.

Technical Specifications

- No. of Roll 10/8
- Available in 130mm. Roll Centers to 450mm. Roll Centers
- Suitable for all Types of Sections.



TUBE MILL

Salient Features :

The advance in technology has propelled the developments in the design of ERW tube mills. The requirement for higher production standards are on the increase, together with the greater demand for reliability. BSMW prioritize our technology to produce reliable tube mill lines that matches long term investment plan of mill owner. Reliability translates to smooth running mills with minimum maintenance cost. We design and build whole production line from coil entry to pipe run out / bundling systems ; with automated transfer for pipe finishing operation.

Technical Specifications :

- Pipe Size : 8"
- Tube Out Dia. : 89.1 ~ 219.1
- Thickness (mm) : 3.2 ~ 12.7

V-BELT PULLEY

Salient Features :

V-belt pulleys are solely used for transmitting power between two parallel axels. The most notable difference between a v-belt pulley and other types of pulleys (round belt, flat, etc.) would be the geometry of the groove or grooves located around the circumference of the pulley; these grooves guide and gain traction on a v-belt.



Technical Specifications :

- Product Type : Manual
- Material : Cast Iron
- Brand : BSMW
- Automation Grade : Automatic
- Usage/application : Rolling Mill
- Shape : Flat or V-bolt



TAIL BREAKER

Salient Features :

- Housing will be of steel.
- Pinion body steel fabricated.
- Roll will be of EN-31.
- Gear will be of forged steel EN-9 / 19 / 24.
- Anti friction Spherical Roller Bearing.
- Forged lubrication.
- Efficiently peak load worked design.

Technical Specifications

- Automatic start/stop type.
- Gear will be hardened & grinded for smooth run.
- Transparent & Heat dissipation window.
- Double oil seals to protect any leakage.
- Forged Steel EN-8 fully machined Shaft.



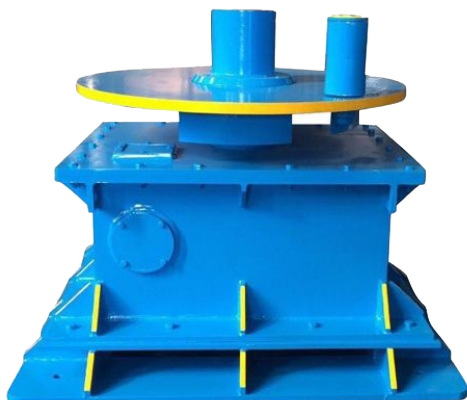
HYDRAULIC POWER PACK

Salient Features :

Hydraulic power packs, specialists in design and manufacturing, BSMW provides a hydraulic power pack for heavy duty industrial applications around the world. Our hydraulic power packs are designed and manufactured in-house using the latest technology, this enables us to be competitive in the world market.

Technical Specifications

- Modularity offers many combinations of hydraulic circuits to suit various requirements.
- Main applications are in industrial automation such as machine tools, the food or textile industry or power engineering.
- 8 optional central block basic circuits see ZB06 (HA0010) data sheet.
- Three-phase motors with power ratings of up to 7.5 kW.
- Tank capacities from 10 to 250.
- Regulated and constant gear pump options.



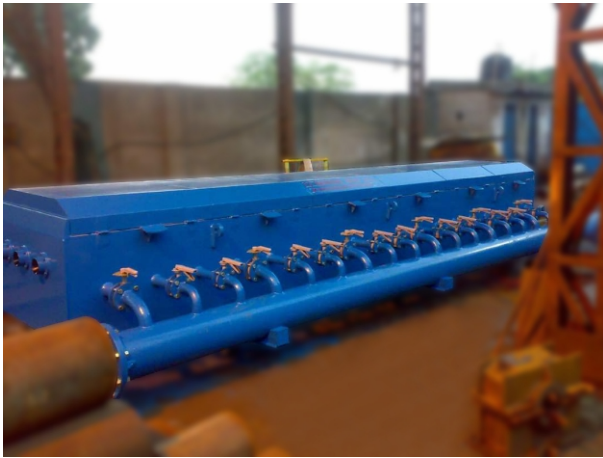
BAR BUNDLE BENDING MACHINE

Salient Features :

- Drastic Reduction in labor.
- Fast processing.
- Accurate bending.

Technical Specifications

- Automatic Grade : Automatic, Semi Automatic
- Voltage : 440 V
- Weight : 2000-4000 kg.
- Rated Power : 7-9 W



TMT QUENCHING BOX

Salient Features :

Our company is engaged in developing prime range of TMT Quenching Boxes that gives multiple entry of water at regular time duration into the nozzles. This is often equip-spaced along the cooling length at specified pressure and volume for the controlled thickness, which reinforces the efficiency of the processing. of the finest TMT Quenching Box manufacturers in India.

Technical Specifications

- Quenching box offered by us is of multiple injector type, high grade quenching boxes that clean the surface through the process of scrubbing.
- The quenching box allows the multiple entry of fresh water at regular time duration that saves the time of quenching process.
- Our designed quenching box has consistency of tensile strength, ability to cut bars accurately.
- Fabricated through CNC profile Cutting Machines and welding machines

ROLL BARS

Salient Features :

We provide a complete solution for rolling mill rolls and we are manufacturer, exporter and supplier of various types of rolling mill rolls which are used for various rolling application as most important component in steel rolling mill. We are manufacturer of rolling mill rolls for various types of rolling mills like Hot rolling mill rolls, Cold Rolling Mill Rolls, Sandzimir Mill / Cluster mill rolls, Tube mill rolls, etc.

Technical Specifications

- We manufacture roughing mill rolls from diameter 300 mm to 600 mm and length from 600mm to 1200mm.
- The hardness of these rolls ranging from 45 degrees to 55 degrees shore C.
- Intermediate Stand Rolls - These rolls are manufactured in the sizes of 250mm to 360mm in diameter and length from 500mm to 600mm.
- The hardness of these rolls ranging from 60 degrees to 65 degrees shore C.
- Finishing Stand Rolls - These rolls are manufactured in the sizes of 250mm to 360mm in diameter and length from 500mm to 600mm.
- The hardness of these rolls ranging from 70 degrees to 75 degrees shore C.



HOT SAW MACHINE

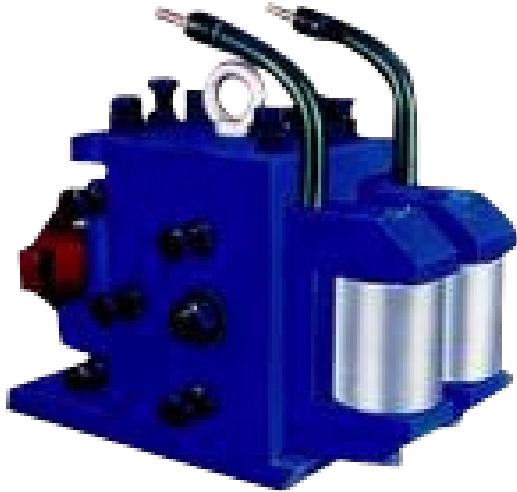
Salient Features :

Simple operating and easy practical applications. Designed for better product quality and higher output rate. Low running cost, dependability and long functional life. Heavy duty construction, quality components and compact design.

Technical Specifications

Hot Saws are used in Hot Rolling to cut desired length and as well as to trim front & Rear End. These Shears are capable of cutting section size ranging from 160 to 600mm (Beam, Channel, Angle) and as well as Square, Racks of 40 to 250mm.





ROLLER GUIDE BOX

Salient Features :

Roller guide boxes are employed in a continuous rolling operation in which the stock being rolled is properly twisted between each two adjacent rolling mills. These boxes are provided with heavy duty taper roller bearing for larger sections. Simple design allows easy installation with smooth operation in different rolling conditions. Our roller guide boxes are available in different specifications at the most competitive prices.

- Cast Iron / Mild Steel / Stainless Steel Casted
- Spring Steel Roller holders with high elasticity
- Simple design
- Low cost and easy maintenance

Technical Specifications :

- Cast Iron / Mild Steel / Stainless Steel Casted.
- Spring Steel Roller holders with high elasticity.
- Simple design.
- Low cost, easy maintenance and low inventory.



PINCHROLL

Salient Features :

Pinch rolls are used between roughing mill and intermediate finishing mill to carry the hot rolled material, to rotary shear & conveyors. The pinch roll comprises stationary frame provided with a rotatably mounted lower roll and stationary lower blade adjacent the lower roll. This arrangement provides an advantage of minimized space with compact structure

Technical Specifications :

- Base frame - 5" Channel
- Stand - 100mm slap fabricated
- Gear box material steel fabricated
- Gear material - E.N-9 forging
- Roll material - E.N-9 forging
- Motor capacity - 25 H.P.

TWISTER PIPES

Salient Features :

We offer high quality twister pipes widely used for twisting and bending the pipes. Made from high quality raw material, these pipes feature high metallurgical strength that guarantees ultimate durability. Innovative of the mouthpiece provides perfect grip on pipes and tubes of different diameters. Available in different specifications based on the requirement of the clients.

- Compact and sturdy design.
- Can be easily stored.
- High strength and rigidity.
- Can easily be used for pipes and tubes of different dimensions.

Technical Specifications :

- Sizes Available 150 mm to 3500 mm Dia.
- CI Casted Shaft, Best Quality Bearings & Plummer Blocks





HEAVY FLYWHEEL

Salient Features

- Material : Cast Steel and Graded Cast Iron
- Weight : Maximum upto 30 M.T.
- Revolution Range : 50RPM to 1500RPM
- Shaft : Forged EN-9 or Class IV Steel
- Base Plate / Pedestal : Fabricated from Mild Steel Prime Plate
- Bearing : Single and Multi-row. depending on - Load analysis and speed analysis
- Bearing Block : Heavy Duty Cast Steel / Cast Iron
- Anchor / foundation bolts : Carbon Steel

Technical Specifications

- Turned to zero eccentricity.
- Dynamically balanced.
- Ultra Sound tested.
- Revolution range 50 FtPM to 750 RPM.

COOLING BED

Salient Features

The cooling beds are used to uniformly air - cool the bars & profiles and transporting the same in a phased manner from the entry to discharge side. These cooling systems provide adjustability to the size, shape, and alloy of the profiles with appropriate cooling rate and minimized distortion.

Some of the cooling bed types are:

- Simple manual handled cooling bed with W Channel, Stationary Platform and run out table.
- Automatic rake type cooling bed or automatic cooling bed which transfer the material by one pitch for every rake movement. These systems are provided with twin channel bar delivery system or run in table with apron type diverters. The bed is provided with bar aligning arrangement.
- Simple rope skid / chain skid type cooling beds for sections
- Turn-over cooling bed for alloy steel which rotates the bars by one revolutions every time the rake moves by a pitch. These cooling beds impart better straightness in material with improvised metallurgical properties, as the bars are uniformly cooled.



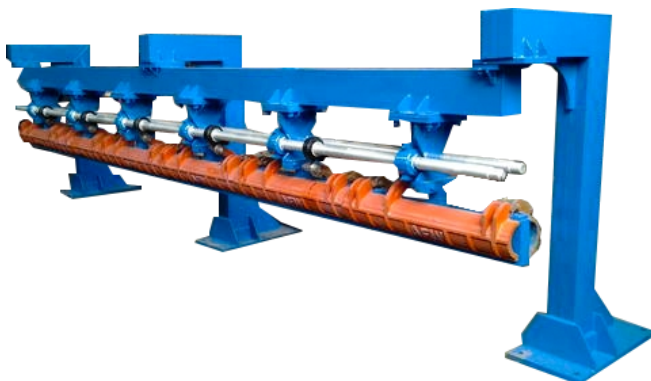
TWIN CHANNEL

Salient Features

- Twin water-cool C-sort channels with water chilling course of action
- Supporting course of action for the twin-channel and drive framework
- Cam gadget for opening shutting of the channels
- Water driven Drive for activity of the cams

Technical Specifications

- Type : Twin Channel
- Material : Cast Iron
- Computerized : Yes
- Automatic Grade : Semi-Automatic
- Control System : Frequency Speed Control
- Voltage : 380-420 Volt (V)





MATERIAL TRANSFER TROLLEY

Salient Features :

BSMW has a wide range of Material Transfer Trolley to suit all kind of application. This Motorized Transfer Trolley is used on Rail / Square bar for definite travel in Painting shops, Warehouses and multi-bay workshops for transferring loads. The Trolleys are non-standard and designed considering pay load. Various parameters for considering the pay load include the Dimension of the load, Point Loading / U.D. Load, Speed, Length, Width & Height. The Structure is made out of IS-2062 M.S. Structural Steel and wheels are made from Alloy steel to suit the load and profile of Rail /Square Bar. The top platform can be a checkered plate - Plain or with a turning table in paint shop or with perforated sheets, depending upon the application.

Technical Specifications:

- Customized capacity from 1 to 1,000 tons.
- Customized power supply.
- Low cost & low maintenance requirement.
- High using frequency.
- Good choice if short distance (20 meter)
- Anti-explosion, Anti High Temp., Anti Water, Anti Dust etc.



CONVEYOR

Salient Features :

Roller Conveyor is among the most common pieces of equipment found in many warehouses. This conveyor is mostly used as transportation for cartons, packages or pallets over shorter distances.

Technical Specifications:

- 2400' Available - 9" Wide, 1.9" rollers on 3" centers
- 1400' Available - 18" Wide, 1.9" rollers on 3" centers
- 1400' Available - 24" Wide, 1.9" rollers on 3" centers



E.O.T. CRANE

Salient Features :

Compared with top running single girder EOT cranes, double girder EOT cranes have much higher load capacity and longer span, higher Duty Group, and more flexible configuration for different working conditions, such as steel industry, explosion-proof place, isolated place, etc. We are always keen help our customer to choose the most suitable cranes for the special conditions.

Technical Specifications:

Design, fabrication, supply, installation, testing, commissioning and handover of 10 ton capacity EOT crane: main hoist – 10 tons span - 15.6 meters lift height - 6 meters Long travel 36 meters and other details as per enclosed specifications. Rails for long travel. Length of travel 36 meters.

BALL VALVE WITH ROTARY ACTUATOR

Ball Valve with pneumatic Piston actuator rack and pinion type are specially designed for on-off application. It is widely used in control of air, water, oil, gas and steam in Pharma, Textile, Chemical, power generation, paper pulp, petrochemical industries etc.

DESIGN FEATURES

Designed and Manufactured as per
ANSI B16.34, BS 5351

Pressure Testing: API 598, API 6D

End Connection: ASME B 16.1

FEATURES

- Compact and simple construction provides ease in maintenance without disturbing insulations and piping connections
- Easy Operation even under high pressures
- Full circular passages
- Easily replaceable PTFE seats & Packing
- Prolonged successful operation even under High Pressures

TYPES OF END CONNECTION MOUNTING

Interface : ISO 5211

Body MOC : WCB, CF8, CF8M, CE3, CE3M
(Special on Request)

Trim MOC : CF8, CF8M, CF3, CF3M
(Special on Request)

Seat MOC : PTFE, GFT, PEK
(Special on Request)

Sizes : 1/2" (15mm) to 8" (200mm)



INFRASTRUCTURE





B.S. PRECISION MACHINES PVT. LTD.

Behind Punjab Forging Mills Khanna Side Mandi, Mandi Gobindgarh - 147301, Punjab, India

For Enquires, Call: +91 98151 51290, 98159 51290, 98150 93290, 82644 41290

✉ info@bsmechanical.com 🌐 www.bsprecisionmachines.com