





#### **Looking For The Perfect Solution For Bearing Housing?**

For any motion and drive arrangement Bearing has crucial role, that is, to carry load with minimum friction. And hence, for safety and life of the bearing, a Bearing Housing plays equally important role in the drive arrangement. You need a competent Bearing Housing for supporting your bearing accurately and for carrying the load efficiently. You need a brand, that can offer high quality Bearing Housing solution.

Masta - a world wide leading brand offers the answer.







#### INTRODUCTION

A company with experience of more than seventy years, Masta has their own foundry and state of art manufacturing facility spread over 20000 sq. yards in Ahmedabad, India.

Adequate manufacturing facilities to:

- Develope 3D Models for patterns.
- · Make Patterns and Tooling.
- Make Castings with Induction Furnace. Green sand and Resin sand reclamation plants.
- Semi Automatic Heat Treatment Furnace.
- · Shot Blasting and Fettling Facilities.
- Accurately Machine on CNC Turning Center, Vertical Machining Center.
- Horizontal Machining Center.
- · Conveyor Operated Paint Shop.



**MASTA MACHINERY STORES PVT. LTD.** 



#### **FOUNDRY**

CNC

HMC Automatic

**VMC** 

PAINT SHOP

#### MANUFACTURING CAPABILITY

- Foundry capacity 2000 kg. Single Piece.
- 600 Metric Tonne per month.
- Graded Cast Iron
- Ductile Iron (S. G. Iron)
- Cast Steel
- Manganese Steel and Alloy Steel Castings
- 30000 Nos. of Bearing Housings (Plummer Block)per month
- Further infrastructure is available to enhance above capacity.
- Masta can produce customised bearing housings as per specific application and customer drawing.















#### **QUALITY CONTROL & QUALITY ASSURANCE**

Quality gets prime importance in Masta. We are an ISO 9001 certified organization by TUV, Germany. MASTA is a system driven company and relies on its matured level of implementation. We have a dedicated team of Quality Control Engineers who look after various aspects of the quality of our products. They strive to achieve our ambitious goal of a "Zero Defect Product."

#### SAND TESTING LAB

Our sand testing laboratory controls the quality of sand and mould, which ultimately results in excellent aesthetic and quality of casting. The laboratory is equipped with **compressive strength tester**, **permeability tester**, **rapid moisture testing**, **mould hardness tester**, **compactness tester**, **and sand sieves**.

#### MATERIAL TESTING LAB

Our Quality Laboratory is equipped with in-house Material property testing and non-destructive testing facility to ensure soundness and correct quality parameters of material.

- Spectrometer- Chemical Analyzer
- Tensile Testing Machine
- Impact Testing Machine
- Metal Hardness Testing Equipment
- Ultrasonic Testing Equipment
- Magnetic Particle testing Equipment
- Die Penetration test Equipment
- · Microscope Microstructure Analyzer
- Radiographic examination

We produce Radiographic quality castings.





#### Product Range

#### **SN SERIES**

#### **Bearing Housings**





Base Construction with one Rib

- Dimensions as per International standard ISO 113
- · Simple construction, Hollow base with one Rib
- Only Felt seal can be used
- Suitable for -Light load and moderate speed; Grease lubrication, like in Conveyors
- Suitable for shaft Sizes: 20 mm to 140 mm



**SNA SERIES** 

- Enhanced version of SN series makes it better design. Provision for drain plug.
- Base with one thick rib and round corners for dowelling
- Four types of seal can be used: Felt seal(TC), Double Lip seal(TG), V Seal (TA) & Labyrinth seal(TS).
- Suitable for comparative heavier load and speed, Grease lubrication, like in conveyor and light fan application
- Suitable for shaft Sizes: 20 mm to 140 mm



Improved Base construction with one thick Rib

#### **SNH SERIES**

• Versatile design with flat base, and sides, provision for oil inlet, drain plug, connection for vibration and temperature probe.

 More sturdy base with crossed rib at centre & two ribs at sides, give more load carrying capacity.

All four types of seal can be used, TC, TG, TA, TS.

• Taconite seal can also be used.

 Suitable for –Higher load and speed; Grease &Oil lubrication, heavier application having vibrations.

Suitable for shaft Sizes: 20 mm to 140 mm







**SNL SERIES** 

- Latest and universal design having all features of previous series; added with flat base, and sides, provision for oil inlet, drain plug, connection for vibration and temperature probe.
- More sturdy base with crossed rib at centre & side ribs, increased load carrying capacity.
- All five types of seal can be used, TC, TG, TA, TS, Taconite seal can also be used.
- Suitable for Heavier load and speed; Grease and Oil lubrication, best choice for application with temperature, vibrations, like in industrial fan.
- Suitable for shaft Sizes: 20 mm to 140 mm



Sturdy base with Crossed Rib

#### SN 30 SERIES



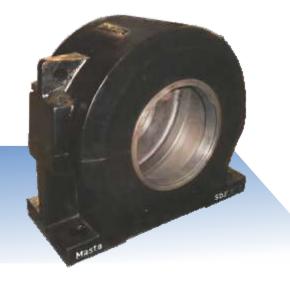
- SN 30 is stronger version in the SN series.
- Increased load carrying capacity to suit bearing of 230 series
- Normally felt seal is used and additional V seal can be mounted.
   Labyrinth seal can be fitted as per application
- Suitable for –Heavy load, designed for Grease lubrication with provision for grease inlet and drain
- Suitable for shaft Sizes: 110 mm to 260 mm

#### SD SERIES

- SD series is a heavy duty bearing housing
- It has very strong base, some design are provided with Rib un till at sides base for added strength.
- Range of Bearing series 231, 230,222, 223 can be fitted in SD series
- Labyrinth seal with O cord is used
- Suitable for –Heavy load and severe application like Cement, Mining, Steel, Material Handling etc., Grease lubrication with provision for grease inlet and drain.
- Suitable for shaft Sizes: 150 mm to 400 mm



#### **SDJ SERIES**



- SDJ series is extension to SD designed to carry very heavier loads.
- It has very strong base and external thick rib to connect base adds to its capacity to carry axial loads also.
- · With standard Labyrinth seal with O cord is used
- Suitable for -Very Heavy load and severe application like
- Cement, Mining, Steel, Normally Grease lubrication
- Suitable for shaft Sizes: 320 mm to 450 mm

#### SAF SERIES



- SAF series is suitable for heavier radial load and shock load.
- It has extra heavy base
- Normally Triple Seal (LER) is used. For dusty environment Taconite seal (TER) is used.
- Suitable for –Very Heavy load and severe application like Cement and steel, used with Grease lubrication
- Suitable for shaft Sizes: 20 mm to 200 mm Note: SAF series is an inch series design and shaft sizes in inch Is normally available.

#### SDAF SERIES

- SDAF series is extension of SAF series and have robust construction suitable for heavy impact and thrust loads.
- It has extra heavy base
- Normally Triple Seal ( LER) is supplied. Also Taconite (TER) seal is available.
- Suitable for Very Heavy load and severe application like Cement and steel, used with Grease or Oil lubrication
- Suitable for shaft Sizes: 68.26 mm to 222.25 mm

**Note:** SDAF series is an inch series design and shaft sizes in inch Is normally available.



#### LARGE SNL SERIES



- SNL LARGE series is designed for heavy duty.
- · It has very strong base,
- Bearing of series 231, 230, 222, 223, 232, c30, c31, c22 can be fitted.
- Labyrinth seal with O cord is used Taconite seal is also used.
- Suitable for Heavy load and severe application like Cement, Mining, Steel, material handling etc.,
- · Grease and Oil lubrication.
- Suitable for shaft Sizes: 150 mm to 530 mm.



- SOFN series is design for heavy load and continuous application. It is principally Oil Lubricated type.
- It is horizontally split type with two end covers on two sides. It has very strong base to carry load in radial, axial and inclined direction.
- Oil Splash lubrication is provided in housing. For high speed and high temperature service external oil lubrication is possible.
- Grooved Sealing Collar is used to prevent any oil leakage
- Suitable for –Industrial Fan application and popular in Cement, Mining, Steel, Power etc industries.
- Suitable for shaft Sizes: 50 mm to 240 mm

#### LOE SERIES

- LOE series has similar construction as that of SOFN series. Dimension and design have minor changes. It is also used for heavy load and continuous application and Oil Lubricated type.
- It is horizontally split type with two end covers on two sides. It has very strong base to carry load in radial, axial and inclined direction.
- Oil Splash lubrication is provided in housing. For high speed and high temperature service external oil lubrication is possible.
- Grooved Sealing Collar is used to prevent any oil leakage
- Suitable for –Industrial Fan application and popular in Cement, Mining, Steel, Power etc industries.
- Suitable for shaft Sizes: 50 mm to 240 mm

# LOE 218

#### SBD / BND SERIES



- SBD / BND series is a one-piece housing without any split in between. On two sides there are two covers.
- It has very stronger base and external thick rib to connect base.
   SBD / BND series is designed to take load acting in right angle to foundation support.
- Axial Labyrinth seal is used in this type.
- Suitable for –Heavy load in multiple directions, and Grease lubrication. It is preferred in mining industry, heavy duty conveyor belt pulleys, wagon tippler and steel industry.
- Suitable for shaft Sizes: 90 mm to 400 mm

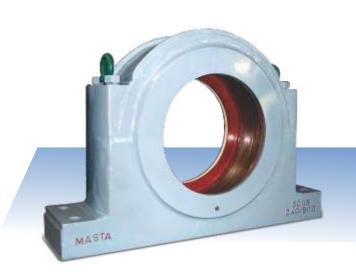
#### THD / SPA SERIES



- THD series is a one-piece housing without any split in between. On two sides there are two covers.
- SPA series is similar design to that of THD series, and they are interchangeable.
- At one end fork arms are provided to facilitate fitment of anchor pin of take up application.
- Axial Labyrinth seal is used in this type.
- Suitable for –Heavy pulling load in multiple directions. It is used in take up pulley for conveyor belt tensioning application. It has grease lubrication.
- Suitable for shaft Sizes: 50 mm to 530 mm

#### **SDG SERIES**

- SDG series is large heavy duty housing. It is extremely reliable design for heavy load application and hence widely used.
- It is split type with a cover on one side. Its base construction is very strong with crossed ribs.
- Housing feet has machined pads on two sides for proper alignment while mounting.
- Labyrinth seal is used. Supplementary felt seal is provided.
   Additional V seal can be used.
- Suitable for Heavy duty with continuous application and Grease lubrication. It is preferred in mining industry, Cement, and steel industry.
- Suitable for shaft Sizes: 125 mm to 710 mm



#### **PDN SERIES**



- PDN series is one-piece cylindrical housing designed to support two bearing at it two ends. It is designed to support over hanging shaft with perfect alignment.
- At two ends there are cover to hold bearing in position.
- Sealing arrangement consist of felt seal and V seal at each end.
- Suitable for Moderate load at higher speed like Impeller of fans, centrifugal pump shaft and transmission application.
- Suitable for shaft Sizes: 25 mm to 120 mm

#### **CUSTOMISED PRODUCTS**



- Masta provides Bearing Housing Solution based on customer's specific requirement. Masta has experienced design engineers team who develops 3D model to develop the solution.
- Based on customer's sample or drawings Masta develops the bearing housing. That includes Imports substitution also.
- Any size, any design or any material requirement can be supplied. Customised seal and end covers are also supplied, suitable for grease lubrication, oil lubrication / force feed lubrication.
- · Some variety includes:
- Water jacketed Housing, Water cooled housing, Twin bearing housing, Cartridge type housing, Housing with Split taconite seal, Housing with Screwed end cover.
- · Capacity: Bearing Housing of weight 80 kg to 2000 kg.

### Masta Products includes **Rotor Blade for Induced Draft Fan** which is used in Power Plant. This is an indigenous development of a precision product where blade contour, axis, height, and orientation with mounting etc are very critical.

- Various sizes and design of Rotor Blades are developed.
   Requisite tooling, fixture and inspection gauges are developed in-house.
- To maintain strict quality norms each blade passes thru
  various tests, like: chemical and physical property,
  microstructure, Radiography, Ultrasonic, Magnetic Particle
  and Die Penetration tests.Blade profile and dimensions are
  verified by CMM scanner.
- 450 nos of Blades are supplied to Bharat Heavy Electrical Ltd, India during 2015 & 2016 year.
- Production Capacity: 100 nos per month with blade weight ranging from 10 kg to 150 kg.

## ROTOR BLADE

#### CASTING COMPONENTS



- Masta supplies Casting Components as per customer's drawings or sample products available.
- Castings can be supplied in graded Cast Iron, Cast Steel, Ductile Iron, Manganese Steel, Alloy Steel, and Stainless Steel as per customer's specs.
- Masta specializes in castings of engineering components like Pump, Impeller, Valves, and large Pulley blanks, Gear blanks, Textile and General Engineering purpose use.
- The castings are supplied in Pre-machined or Proof Machined condition for ease of customer.
- Any size, any design or any material requirement can be supplied.
- Capacity: Castings weight from 25 kg to 2000 kg.

#### **VARIETY OF BEARING HOUSINGS**

Masta supplies following series of bearing housing also.

- · SNV SERIES.
- TVN SERIES.
- SNT SERIES.
- 4440 & 4430 SERIES.
- TN SERIES.
- SQUARE FLANGE SERIES.
- TRIANGULAR FLANGE SERIES.
- EVERY TYPE OF SEAL.



#### ADAPTER SLEEVE & WITHDRAWAL SLEEVE

- Sleeves are manufactured on CNC machine to require accuracy and concentricity.
- Dimension of Sleeves, lock nut and lock washers are in accordance with international standard ISO 113.
- Tolerance grades are strictly maintained to ensure correct fitment of sleeves with bearing.
- Series available are: H, HE,HA, OH, AH, AOH, KM, HM, MB. MB, MS.
- Hydraulic Adapter Sleeves OH and Withdrawal Sleeves AOH are manufactured with precision for allowing use of hydraulic system.













#### **Environment, Health and Safety:**

- In Masta every process and activity is formed with specific attention to conserve Environment, which is prime duty of every employee in Masta.
- Our Human Resource Department is active to continuously maintain safety and health norms in the company.
- Whole Masta team work as a MASTA Family in a cordial atmosphere in the workplace.

#### CONTINUED GROWTH AND FOCUS IN ORGANISATION

Over THREE GENERATIONS during last 70 years, Masta is owned by lineage of an Industrial family which resulted into constructive growth year after year. Continuous focus on improvement, working with clear mandate and streamlined approach instilled in the company by its visionary leadership. That has helped **Masta** adopt a modern avatar in the recent times. A case in point is the whopping 450% growth demonstrated in Infrastructure thru automation as well as increase in Sales that have been achieved during the last 6 years.



1946
Established with
2 Drill Machines & 1 Lathe



19614 Pit Furnaces for meltingCI casting and 6 Lathe



1966-67
Oil Fired Rotary Furnace of 250kgs capacity



1970Enhanced furnace to 500kgs2 Hand moulding machines with match plate, Milling machines



Boreing Machine, Lathes equipped with Turret head; Vertical Milling m/c with Rotary Table



1980-2004
Gradual upgradation of foundry & machining capacity



2005
Shifted in land of 20000 Sq Yard
Retro Fitting of Horizontal Boring m/c; CNC turning Centers, VMC m/c;



#### 2006-2016

Automatic Sand Plants, High Pressure Moulding Lines, Installed 2 MT capacity Induction furnace for heavy casting. Automatic Paint Conveyor Booth.

#### Valued customers in different industries

#### **Steel Industry**

















#### **Cement Industry**





















#### **Power Industry**















#### **Fan Industry**



















#### **EPC & Projects**

























#### **Export customers**























#### **Our Export Spread Over Countries:**

Australia Philippines Uganda Iran Canada Vietnam Jordan UK Denmark Kenya South Africa UAE Greece Malaysia Turkey Germany Indonesia USA Zambia Oman

Masta Machinery Stores Pvt. Ltd.

553, G.I.D.C. Kathwada, Odhav Road,

Ahmedabad - 382430, INDIA.

Phone: + 91 79 22901220

+ 91 79 22901222

Fax: + 91 79 22900497

E-mail: info@mastagroup.com, mastagroup@gmail.com | www.mastagroup.com

