

**Techno Rings**  
*Quality, Quantity & On-time Delivery.*

ONE STOP SOLUTION FOR



CASTING



MACHINING



INDUCTION HARDENING



ADI TREATMENT

[www.technorings.in](http://www.technorings.in)

# ABOUT US

Techno Rings is your One Stop Solution for Casting, Machining, Heat Treatment ( Austempering ), & Induction hardening Services.



## | About us :

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- Bhoopalam group with an experience & expertise of almost 100 plus Years of business in shivamogga karnataka india, is always a progressive group and has diversified its wings in to the field of manufacturing by establishing Techno Rings & Shashi Bharath Industries.
- Techno Rings was born in the year 1992, Techno Rings is a forward looking company focused on building value added products & solutions that are needed for 21st century by adapting latest technology like High Pressure Moulding, ADI Treatment , Induction hardening, CNC, VMC, VTL, CMM, 3D Scanning etc.
- We have built our platform & success formula around some of the most demanding automotive business including TATA, Ashok Leyland , TAFE , Automotive Axle , AMREP & Trelleborg, Webtec for Railways.
- Techno Rings has always given importance for long term, Constant, Healthy relation with its customer for delivering the quality products in full quantity at competitive price.



## | Our Vision :

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- To be a dynamic world class organization providing value added product & services with innovation, quality & competitive products for a customer driven satisfaction with essence of responsibility towards environment community.



## | Our Core Values / Our Mission :

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### • WIN WIN WIN :-

Create Solution where the Customer Wins,  
Create Solution where the Community Wins,  
Create Solution where the Company Wins,

### • Innovation :-

We believe there is always a way to do it better and we find it.

### • Value Engineering :-

Provide Value Engineering support to our customers towards reducing cost & process & productivity improvement.

### • Excellence :-

We constantly strive to be excellent in all that we do in terms of quality, price, delivery & management.

### • Customers :-

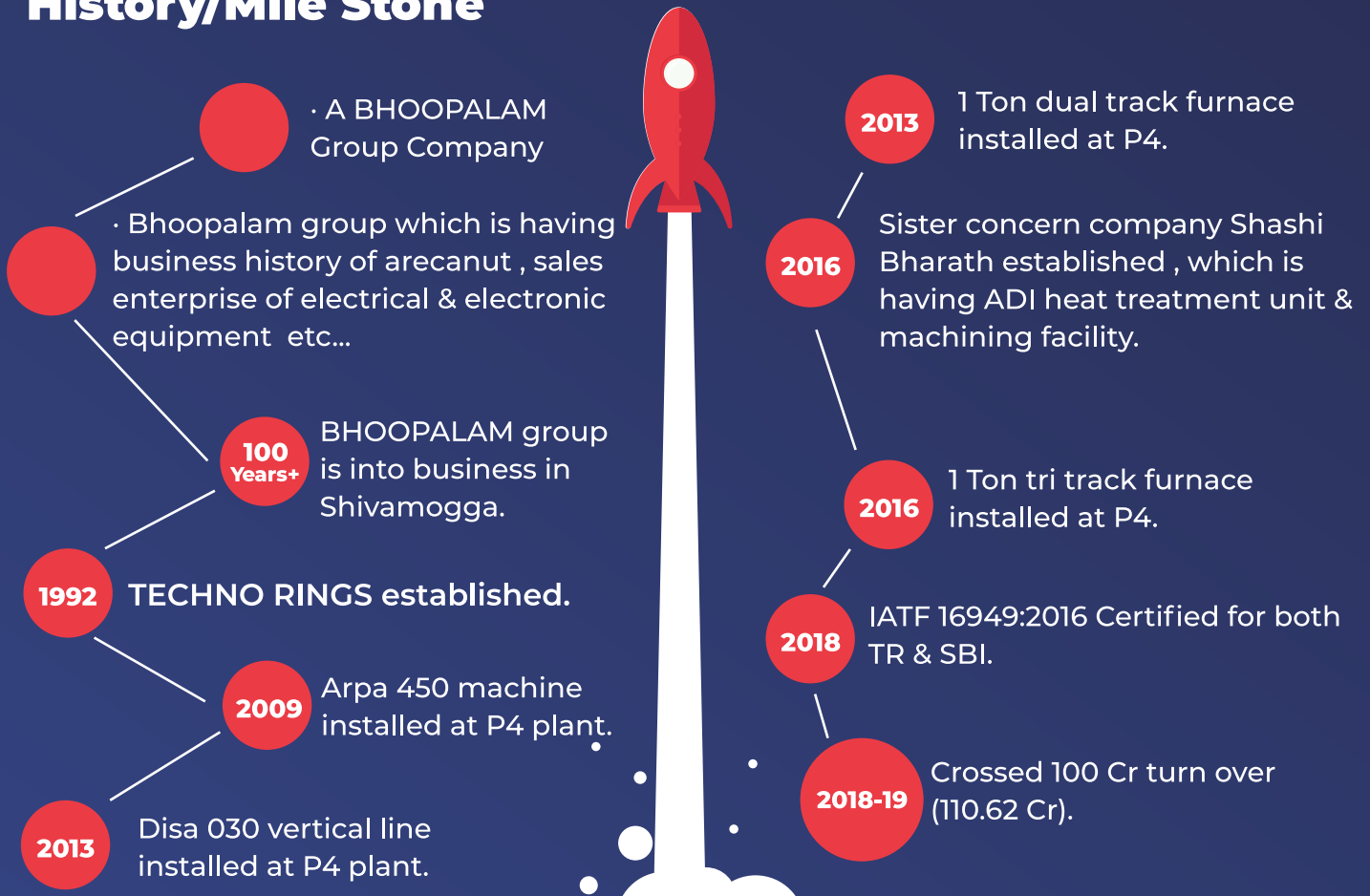
We place them at the heart of our business & relentlessly meet their expectations & requirements. ( Your Mission is our Vision ).

### • Team Work :-

We work together as we believe team work makes the dream work.



# History/Mile Stone



## Why Techno Rings ?

- In-house production processes - foundry, machining and Induction hardening
- Dedicated lines for each component family
- Quality & quantity at competitive prices
- Value engineering and R&D support
- Quick response by experienced staff



## Partners



**B. N. Satyanarayana**  
Managing Partner



**B. S. Shashidhara**  
Partner- New Projects



**B. S. Sharath**  
Partner Marketing & Operation



**B. N. Viswendra**  
Partner



**B. S. Bharath**  
Partner



# INFRASTRUCTURE

(detailed info of infrastructure, quality measures, testing facilities and machinery)

- Capacity: Installed capacity per annum 24000 MT
- Single piece casting weight:  
CI & SG/ADI in green sand – 3 kg to 50 kgs

## • Moulding process Green Sand

- Disa 030 = 1 Line. – Box Size 535 X 650 X 120 / 340
- Apra 450 = 1 Line. – Box Size 600 X 700 X 200/200



## • Melting process

- 1 Ton Induction Furnace (Tri Track). -- 2250 KW
- 500 Kg Induction Furnace (Dual Track 2 Nos). 450 KW & 350 KW
- 300 Kg Induction Furnace. (2 Nos). 250 KW & 175 KW



## • Heat treatment Process:

- Austempered Ductile Iron Heat Treatment.
- 650 kg/Batch - 2 Furnaces





## • Induction hardening. ( 4 Machines).

- Fully CNC Controlled
- Power: 100 Kw to 125 Kw ( 45 Kw)
- Frequency: 10000 to 30000 Hz ( 200 Khz)
- Cylindrical grinding Machine = 05 Nos.



## • Quality Process:

- Spectro Meter
- Microscope with Image Analyzer
- Computerized Universal Tensile Testing machine
- Carbon Silicon equivalent meter for each furnace
- Sand Lab
- Brinell & Rockwell Hardness Testing Machines
- Temperature Pyrometer
- Ultrasonic Testing



## • Other process/ Facility

- Sand Plant with Sand cooler – 30 Tons/hr
- In-house Shot Blasting and Fettling
- Heat Treatment Furnaces for Stress Relieving, Tempering, and Normalizing
- Patterns done by CAD CAM method
- In house facility of Cold Box shooter for Core Making
- Casting Simulation done for New Product Development



## • Machining Process

- VMC = 30
- CNC = 33
- VTL = 06
- Center Lathe = 30
- Milling = 08
- Drilling = 14
- Tapping Attach = 05
- Balancing machine = 01



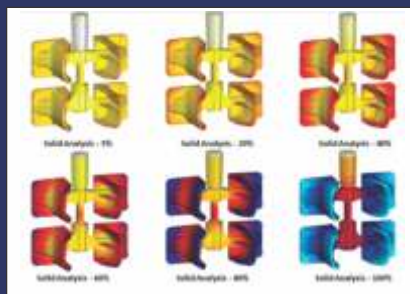
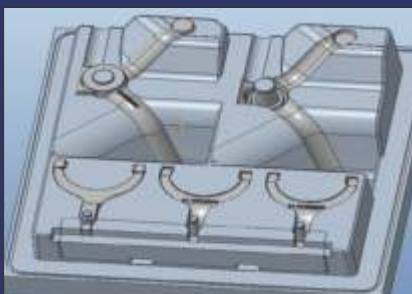
## • Metrology

- CO-ORDINATE MEASUREMENT MACHINE (CMM) for component Inspection.
- Measuring Range: X-700, Y-700, Z-600
- Programmable auto measurement
- +/- 180 degrees of bi-directional rotation of stylus allows for complex measurements.
- Surface Tester
- Digital Height Gauges
- Vernier Calipers, Bore Dial Gauges, Micro Meters etc
- Required Gauges and Fixtures



## • Methoding Design & Development

- 3 D Modeling
- Simulation
- 3 D Scanning



# PRODUCTS

## • AUXILIARY PRODUCTS



Bearing Housing



Cover Front Hub



Cover Timer



Ring For Oil Seal



Threaded Ring

## • CHASSIS PRODUCTS



Articulation Stopper



Bottom Wear Pad



Bump Stopper



Cable Select Operating Bracket



Cobra Bracket Assembly



Engine Mounting Bracket ADI



Engine Mounting Bracket



Engine Mounting Bracket



Engine Mounting bracket SGI



Front Shock absorbing Bracket



Front Spring Front Bracket



Front Spring Rear Bracket



Helper Spring Bracket



Helper Spring Bracket



Leaf Spring Bottom Plate



NRS Bracket



Relay drop Mounting



Shackle



Spring trunnion



Spring Seat Assembly



# PRODUCTS

## • CHASSIS PRODUCTS



Spring Seat  
HR Axle



Spring Seat



Top Clamp  
Assembly



Top Clamp



V-Rod Bracket

## • ENGINE PRODUCT



Back Plate



Bracket



Clutch Plate



Clutch Plate



Clutch Plate



COP Lever & CRF



Fuel Injection  
Pump



Fuel Injection  
Pump



Pressure Plate



Withdrawal plate

## • RAILWAY



Cone Flange

## • TRACTOR & FARM PRODUCTS



Arm Hydraulic  
Lift



Arm Spindle  
Lift





## VALUE ENGINEERING AND R&D PROJECTS



### Ring for Oil Seal

- Saving of Rs. 5 Crores through Value Engineering for Rear Axle Oil Seal Ring from forging to casting to AL.
- Conversion from forging ( EN8 )to casting (FG 260) with induction hardening



### Spring Seat

- Original material - SG 600/3 with induction hardening.
- Changed to ADI 1050/750/7 material, Since there was field failure in original material.
- After introduction of ADI material there is no field issues.



### Link Rod

- Conversion from Forging To ADI Casting for cost reduction.



### Bottom Wear Pad

- Original material - SG 500/7.
- Changed to ADI 750/500/5 material, Since there was Wear issues in the field in original material.
- After introduction of ADI material there is no field issues.

Hardness

Before for SG 500 / 7: 170-240 BHN  
After ADI grade : 241-302 BHN



### Arm Spindle

- Value Engineering in Arm Spindle from forging (EN41 B)to ADI casting to TAFE for cost reduction and Life increase



### V ROD BRACKETS

- Process changed from No bake process from Green sand Disa O30 Process.

# Awards & Certificate



Best in class performance in After Market Support for the year 2017-18



Casting Supplier Capability Improvement Initiative 2016-17 -Ashok Leyland



Best Supplier Performance Award 2014- JMI



Outstanding Performance in Delivery for the year 2013-14 from JMI



Best Kaizen Award 2012 from Ashok Leyland



Successfully completed cluster program on "World Class Parts for World Class Products"



Successful Industry of the State from KSFC



Outstanding QCLDM performance in casting, Forging & bar machining category for the year 2009-10.



We are certified for IATF16949:2016







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## CONTACT US

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