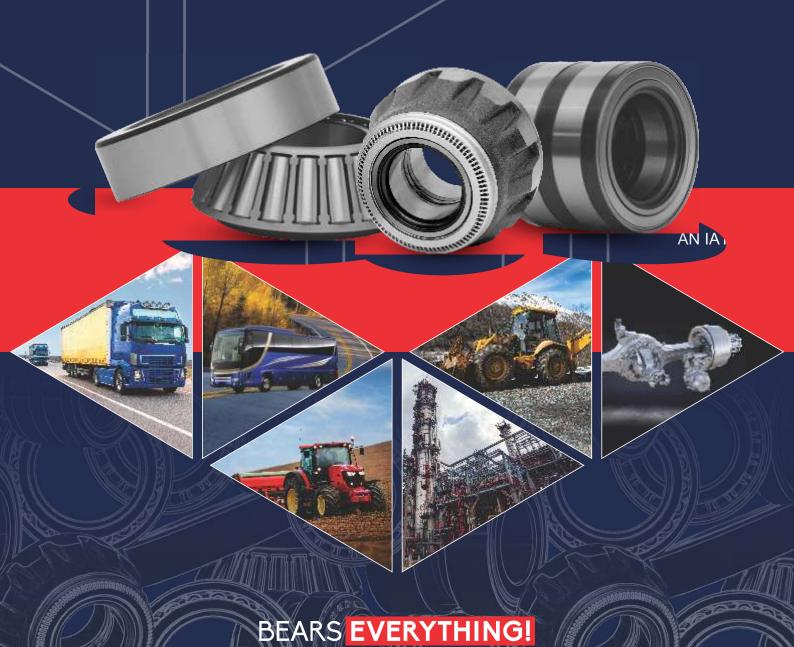
AN IATF 16949 CERTIFIED COMPANY

WEC. BEARINGS



GENERAL CATALOG





ABOUT US

VEC BEARING. is one of the leading bearing companies in India that manufactures and exports Automotive and Industrial bearings as per international standard specifications. VIMAL stands with courage, knowledge and an eye to innovation to produce technologically advanced bearings that reach perfection when it comes to seamless performance.

We offer a wide array of Bearings, namely Taper Roller Bearings, Wheel End Hub Units, Spherical Roller Bearings, Cylindrical Roller Bearings, Deep Groove Ball Bearings, King Pin Bearings & Thrust Bearings for reputed names such as Mercedes-Benz, Volvo, Scania, SAF, DAF, MAN, Renault, Iveco, Hino, Navistar, Kenworth, Freightliner, Fiat trucks, Bed Ford, Zetor, John Deere, Massey Ferguson for overseas markets.

The bearings are required in several industries, such as Automobiles, Agriculture Marine, Industrial Movers and Heavy Earthmoving Industry. Since its inception in 1993, it has been manufacturing, supplying and exporting a plethora of bearings. Meeting high level of excellence and international standard specifications, these bearings effectively used in manufacturing of automobiles, agricultural, Industrial, power motors, appliances and a host of other applications. Efficiency never takes a back seat whether radial or thrust loads and even with high speed rotation. This certainly becomes one of the core strengths of the VEC.

We had a very humble beginning, but today we have 2 cutting-edge manufacturing units consisting high-tech machinery at RAJKOT. This advanced infrastructure is spread across 5000 sq. mtr. with the construction in area of 50,000 sq.ft. We have a significant capacity to manufacture 1.5 million bearings per annum.

VEC Bearing is an IATF 16949 certified organization and we manufacture our products under the brand name of VEC Bearings.









WHY YOU SHOULD PREFER

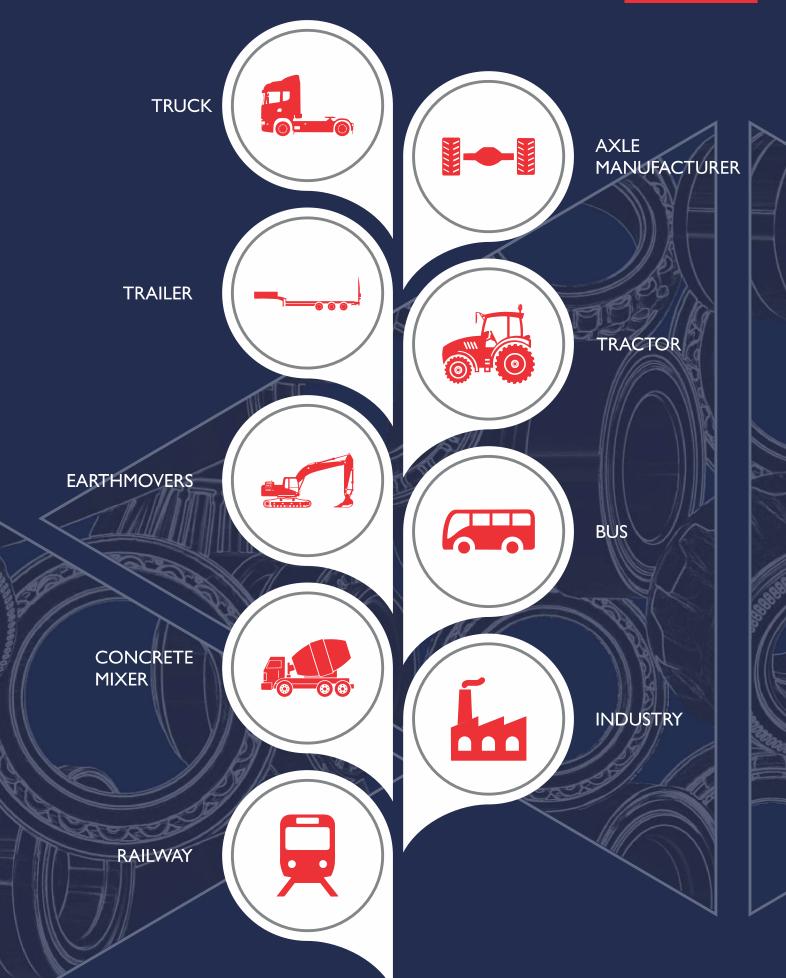
VEC

PRODUCTS?

- MATERIAL: IMPORTED SAE 52100 / 100 CR6.
- INDUCTION FORGING: TO MAINTAIN PERFECT CHEMICAL COMPOSTION.
- SPHERODIZIDE ANNEALING :TO MAINTAIN PERFECT MICROSTRUCTURE.
- CNC MACHINING: TO MAINTAIN PERFECT DIMENSIONS.
- HARDNESS : FOR BEARING RINGS 59 HRC TO 63 HRC FOR ROLLERS 62 HRC TO 64 HRC.
- GRINDING TOLERANCE:
 - 2 POINT Below 5 microns
 - 3 POINT Below 3 Microns
 - Ovality Below 2 Microns
 - Roundness Below 3 Microns
 - Roughness Below 0.16 Mircrons
 - Squareness Below 5 Microns
 - Face & Lip Parallelism Below 5 Microns
 - Eccentricity Below 5 Microns
 - Raceway Profile Positive Crowning +7 / +12
- ROLLERS: EVERY ROLLER IS BEING SORTED UNDER 2 MICRONS.
- VIBRATION & NOISE TESTING :WE ENSURE MINIMUM VIBRATION & LOW NOISE AT HIGH RPM.
- VISUAL TESTING: EACH RINGS & ROLLERS ARE VISUALLY CHECKED BEFORE ASSEMBLING TO ACHIEVE ZERO DEFECT PRODUCT.
- PACKAGING: WE SUPPLY PRODUCTS UNDER PRIVATELY REGISTERED BRANDS WITH BEST QUALITY PACKAGING.

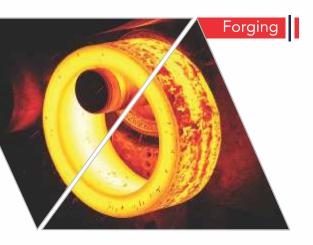
APPLICATION





Manufacturing Process





VEC Bearing use high quality Bearing Steel SAE 52100 / 100CR6 or Equivalent(Modified) Prime Steel of International Acceptability for manufacturing Bearing Rings.

Standard	GRADE	С	Mn	Р	S	Si	Ni	Cr	Cu	Мо
ASTM A295	52100	0.93- 1.05	0.25- 0.45	0.025	0.015	0.15- 0.35	0.25	1.35- 1.60	0.30	0.10
DIN 17230	100Cr6/1.3505	0.90- 1.05	0.25- 0.45	0.030	0.025	0.15- 0.35	0.30	1.35- 1.65	0.30	-
JIS G4805	SUJ2	0.95- 1.10	0.50	0.025	0.025	0.15- 0.35	-	1.30- 1.60	-	-
Bs970	535A99/EN31	0.95- 1.10	0. 4 0- 0.70	-	-	0.15- 0.35	-	1.20- 1.60	-	-

Chemical Composition as Per Standard

Forged Bearing Rings undergoes Spheroidize Annealing Process which improves Ductility and toughness with reduced Hardness and Strength to produce a definite Microstructure.



Cnc Machining

Cnc Machining

After Spheroidize Annealing the Bearing Rings are sent for CNC turning process.

Each Rings undergoes Dimensional & Visual Checking.

One of the Important Step for creating a highly durable & Long lasting Bearings is Heat Treatment Process. Our Heat treatment process consist of Hardening, Super Cooling and tempering which gives stabilized ring structure and increase the life span of bearings.



Manufacturing Process





Grinding is the most important process of bearings. To achieve Accurate Dimensions in grinding process, VEC's fully automatic machines are capable of manufacturing superior quality bearings under highly qualified engineer's team. VEC's manufacturing unit is equipped with world's best machinery to make world class quality products.

After Grinding Rings undergoes Super finish process on CNC Super Finish Machine which ensures best Roughness Values. We Control Roughness Values below 0.16 microns for Raceways& Rollers.





Before assembling bearings, Each and every rings are checked visually and Size of all rings are checked by our engineers in our Inspection room. Only after passing the quality test, components are taken for assembling.

Our Assembly &packing department is fully automatic with a capacity of packing 5000 pieces per day. We ensure Export Oriented Packaging that Do not Damage the Products.



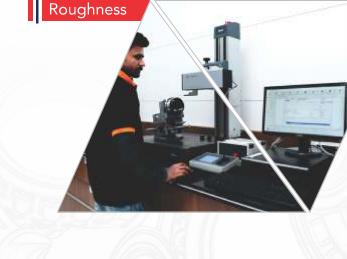
Quality Control Laboratory





Each & Every Bearing Ring Hardness are checked before Grinding Process. Hardness is Checked in Digital Hardness Testing Machine which Ensure Exact Hardness Values i.e 59 HRC to 64 HRC.

We have latest Version of MARSURF from MAHR GERMANY to Measure Surface Roughness. It Evaluates parameters like Form Geometry & Surface Finish of Components. This Control helps for Improving the Quality and Product performance in the Field.





MAHRFORM – MAHR GERMANY GMBH. This Equipment is Used for Checking the roundess, Squareness, Concentricity, Coaxiality& Parallelism of Bearing Components which ensures running accuracy for Long Life Bearings.

MAHR CONTOUR MEASURING MACHINE is Used to Measure Each and every Dimensions of Bearing Components. Dimensions like Grooves, Radius, Chamfers, Surface DegreeEtc.







CERTIFICATE

Certificate Registration No.: 12 111 60680 TMS / IATF Certificate No.: 0484792

IATF USI: 35MSF5

The Certification Body of TÜV SÜD Management Service GmbH

certifies that the organization

VIMAL AUTO INDUSTRIES

Survey No. 197, Plot No. 2, Plasma Road, NH 27, Veraval (Shapar), Dist. Rajkot - 360024, Gujarat INDIA

for the scope

Manufacture of Tapper Rollers Bearings, Cylindrical Roller Bearings & Wheel end Hub Units (without Product Design as per Chapter 8.3)

has established and applies a Quality Management System.

An audit was performed and has furnished proof that the requirements according to

IATF 16949 First Edition 2016-10-01

are fulfilled.

Issue date: **2023-10-09**Expiry date: **2026-10-08**

RAN Del

Fred Wenke Head of Certification Body Munich, 2023-10-09

Page 1 of 1



CERTIFICATE

The Certification Body of TÜV SÜD South Asia Private Limited

certifies that



VIMAL AUTO INDUSTRIES

Survey No. 197, Plot No. 2, Plasma Road, NH 27, Veraval (Shapar), Dist. Rajkot - 360024, Gujarat, India

has implemented Quality Management System in accordance with ISO 9001:2015 for the scope of

Manufacture, Supply and Export of Roller Bearings, Ball Bearings and Wheel end Hub Unit

The certificate is valid from 2023-10-09 until 2026-10-08

Subject to successful completion of annual periodic audits The present status of this certificate can be obtained through TUV SUD website by scanning below QR code and by entering the certificate number (without spaces) on web page. Further clarifications regarding the status & scope of this certificate may be obtained by consulting the certification body at info.in@tuvsud.com

> Certificate Registration No. 99 100 19969 Date of Initial certification: 2019-06-18 Issue Date: 2023-10-19 Rev. 00



Rahul Kale Head of Certification Body of TÜV SÜD South Asia Private Limited, Mumbai Member of TÜV SÜD Group









This is to Certify that the Management System of

VIMAL AUTO INDUSTRIES

SURVEY NO.: 197, PLOT NO. 2, PLASMA ROAD, NH 27, VERAVAL (SHAPAR) DIST. RAJKOT 360 024 GUJARAT, INDIA

has been found to conform to the Occupational Health & Safety Management System standard:

ISO 45001:2018

This certificate is valid for the following scope of operations:

MANUFACTURE OF TAPER ROLLER BEARINGS, WHEEL END HUB UNITS, WHEEL END MODULES & CYLINDRICAL ROLLER BEARINGS.

IAF Code: 18 NACE Code: 28.15

:: Certificate No :: IN121163C-1

Date of initial registration

Date of this Certificate

Recertification Due

11 October 2022

11 October 2022

10 October 2025

This Certificate remains valid subject to satisfactory surveillance audits.



Scoure

Director

For verification and updated information concerning the present certificate visit to www.lmsassessments.com.

This Certificate is the property of LMS Certifications Private Limited and shall be returned immediately when demanded.









LMS Certifications Private Limited 1, Ananddham, Opp. Kukrail Picnic Spot Gate, Faridi Nagar, Lucknow - 226015, U.P. (INDIA).

Phone: +91-9554645464

Valt:- www.imsassessments.com
6-mail:- infp@imsassessments.com

LMS/FM/001/OH/REV06



CERTIFICATE

This is to Certify that the Management System of

VIMAL AUTO INDUSTRIES

SURVEY NO.: 197, PLOT NO. 2, PLASMA ROAD, NH 27, VERAVAL (SHAPAR) DIST. RAJKOT 360 024 GUJARAT, INDIA

has been found to conform to the Environmental Management System standard:

ISO 14001:2015

This certificate is valid for the following scope of operations:

MANUFACTURE OF TAPER ROLLER BEARINGS, WHEEL END HUB UNITS, WHEEL END MODULES & CYLINDRICAL ROLLER BEARINGS.

IAF Code: 18 NACE Code: 28.15

:: Certificate No :: IN121163B

Date of initial registration

Date of this Certificate

Recertification Due

11 October 2022

11 October 2022

10 October 2025

This Certificate remains valid subject to satisfactory surveillance audits.



Scor

Director

For verification and updated information concerning the present certificate visit to www.lmsassessments.com

This Certificate is the property of LMS Certifications Private Limited and shall be returned immediately when demanded









LMS Certifications Private Limited 1, Ananddham, Opp. Kukrail Picnic Spot Gate, Faridi Nagar, Lucknow - 226015, U.P. (INDIA), Phone: +91-9554645464

Visit :- www.imsassessments.com

E-mail - info@lmsassessments.com LMS/FM/001/E/REV06





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 Unit-2: Survey No 30, Plot No 4, Near Kalariya Forge, Ganga Gate, Veraval-Shapar 360027.

