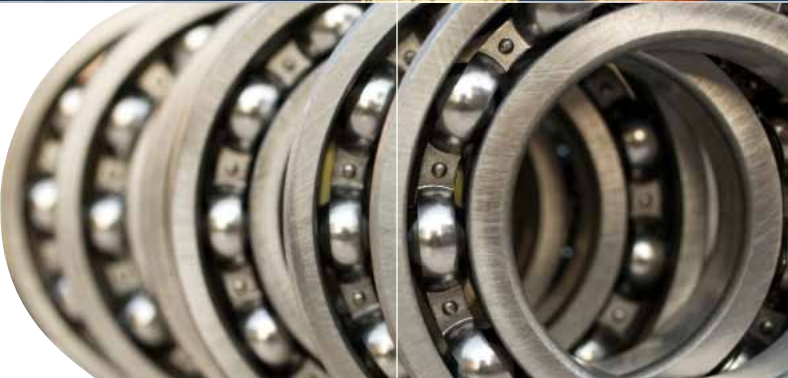




TSS Rotterdam BV

Technical products for Marine, Offshore and Industry





INTRO

TSS Rotterdam supplies equipment to Marine, Offshore and Industry

Ships and industry need to be kept operational for 24 hours a day. That's why a reliable supplier of technical products is of the utmost importance. Pumps, e-motors, compressors have to be replaced as quickly as possible when they break down. TSS Rotterdam BV supplies the required equipment and spare parts to Marine, Offshore and Industry. We have stocking points available for pumps, e-motors, compressors, bearings, shaft seals and valves and we take great care to maintain a high quality in the products we supply.

As a brand independent trading company we are dealing in both European and Asian equipment and related spare parts. Besides the replacement of equipment and spare parts, TSS Rotterdam also takes on 'special projects', which can be viewed on our website www.tssr.nl/special-projects

Strategic location and brand independent

TSS Rotterdam is strategically located in the ARA-region (Amsterdam, Rotterdam and Antwerp). Our warehouse and head office is located in

Schiedam at industrial estate "Vijfsluizen". Part of the famous Wilton Fijenoord Shipyard from 1929 until 1999, "Vijfsluizen" is centrally located between Vlaardingen and Schiedam, fifteen minutes from all major ports in Rotterdam. The ports of Amsterdam and Antwerp (Belgium) are both one hour away.

TSS Rotterdam operates brand independent and is known for its innovative and resourceful ways of dealing with the delivering of equipment and spare parts. We understand that time and money are limiting factors. TSS Rotterdam is not committed to one manufacturer, which means we can anticipate quickly and are flexible in our operations. We supply the requested equipment and spare parts from our stocking points, but are also able to find those hard-to-locate and critical parts you are looking for.

International network and a unique computer system

When it comes to logistics, TSS Rotterdam doesn't see any barriers, only challenges. Our products can be shipped worldwide by road, sea or air. Our international network extends through forwarders and shipping agents around the globe. We can ship the desired

products to your warehouse or deliver directly on board of your vessel, if necessary.

TSS Rotterdam uses a unique registration system. With this computer system, we create a client related database and/or vessel related database by registering each item we deliver. Our computer system creates a unique article number for each item shipped, which relates to the client and/or vessel. Our database enables us to provide better, faster and more reliable service to our clients.

Specialized knowledge and reliable service

With our years of experience in the replacement market and our in-house product specialists we are actively involved during the process of replacing equipment. TSS Rotterdam specialists with an extended knowledge of pumps, e-motors, bearings and power transmission are at your disposal. We know what you are talking about. We are able to offer reliable and high quality service due to our specialized knowledge and our familiarity with all the facets of the Maritime industry. TSS Rotterdam is your source for technical products from the ARA-region.



BEARINGS

What is a bearing?

A bearing is a device to allow constrained relative motion between two or more parts, typically rotation or linear movement. Bearings may be classified broadly according to the motions they allow and according to their principle of operation as well as by the directions of applied loads they can handle.



Ball Bearings



Taper Roller Bearings



What type of manufacturers and type of bearings can TSS Rotterdam supply?

TSS Rotterdam stocks all commonly used bearings and related bearing products for both marine and industrial applications.

Besides the standard bearings we offer a full range of special and hard to locate bearings. We keep bearings in stock from leading manufacturers such as:

- ✓ INA
- ✓ FAG
- ✓ MTK
- ✓ NTN
- ✓ NSK
- ✓ SKF
- ✓ Timken

Other brands can also be supplied upon request.



Bearing Housings



EXPLANATION OF BEARING CODES

| SEALING: | |
|----------------|--|
| Z | Z, V, LB Shield of pressed sheet steel on one side of the bearing |
| ZZ | ZZ, ZZ, WV, LLB Z-shield on both sides of the bearing |
| RS1 | RS, RS1, DU, LU Sheet steel reinforced contact seal of acrylonitrile-butadiene rubber (NBR) on one side of the bearing |
| 2RS1 | 2RS, 2RS1, DDU, LLU contact seal on both sides of the bearing |
| CLEARANCE: | |
| C1 | Bearing internal clearance smaller than C2 |
| C2 | Bearing internal clearance smaller than Normal |
| C3 | Bearing internal clearance greater than Normal |
| C4 | Bearing internal clearance greater than C3 |
| C5 | Bearing internal clearance greater than C4 |
| GREASE: | |
| GJN | Grease with a polyurea thickener of consistency 2 to the NLGI Scale for a temperature range -30 to +150 °C (normal fill grade) |
| HT | Grease fill for high temperatures (e.g. -20 to +130 °C). HT or a two figure number following HT identifies the actual grease. Filling degrees other than standard are identified by a letter or letter/figure combination following HTxx: A Filling degree less than standard B Filling degree greater than standard C Filling degree greater than 70% F1 Filling degree less than standard F7 Filling degree greater than standard F9 Filling degree greater than 70% Examples: HTB, HT22 or HT24B |
| LHT | Grease fill for low and high temperatures (e.g. -40 to +140 °C). A two-figure number following LHT identifies the actual grease. An additional letter or letter/figure combination as mentioned under www.skf.com/skf/productcatalogue |
| LT | LT Grease fill for low temperatures (e.g. -50 to +80 °C). identifies the actual grease. HT identifies filling degrees other than standard. Examples: LT, LT10 or LTF1 |
| CAGE MATERIALS | |
| M | Machined brass cage, rolling element centred; different designs or material grades are identified by a figure or a letter, e.g. M2, MC |
| MA | Machined brass cage, outer ring centred |
| MB | Machined brass cage, inner ring centred |
| ML | Machined one-piece window-type brass cage, inner or outer ring centred |
| P | Injection moulded cage of glass fibre reinforced polyamide 66, rolling element centred |
| J | Pressed steel cage, rolling element centred, unhardened; different designs are identified by a figure, e.g. J1 |

TSS Rotterdam BV

Product overview



Pumps (Centrifugal)



Drive Belts



Pumps (Positive Displacement)



Compressors (Air)



Pumps (Spare Parts)



Compressors (Refrigeration)



E-Motors



Cargo Hoses



Couplings & Inserts



Hydraulics



Bearings



Diesel Engines (Spare Parts)



Valves



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