
ADRALCEN

High speed ball bearings

Specific solutions for spindle applications and turbo-pumps in extreme environments



PROVEN HIGH-SPEED BEARING TECHNOLOGY

- High accuracy – ABEC 9 or ISO 2;
- Accurate roundness and waviness;
- High quality material rings and balls – low level of inclusion;
- Cleanness process (class 100/ISO 5);
- Long life and high reliability;
- Low noise and vibration levels;
- Repeatable quality.

SPECIFIC APPROACH TO HARSH ENVIRONMENT

- Knowledge of specific material;
- Dynamic vibration and thermal analyses;
- Adapted lubrication.

technology in **motion**

HIGH LEVEL OF QUALITY

With more than 90 years of experience in high precision ball bearings technologies, ADR developed high speed bearings suited to harsh environments.

ADR's expertise in the high speed sector is particularly appropriate for applications such as:

- High speed spindle;
- Turbo pump;
- Turbo molecular pump;
- X-ray tube.

Developed on specification, this range of bearings provides remarkable levels of technical performances (up to ABEC 9T – ISO 2) such as accurate roundness and waviness combined with an extremely low level of vibration and an increased service life.

MEANS OF PRODUCTION

Thanks to a sustained investment on its core business, ADR offers a unique technological know-how in the design, development and production of high speed ball bearings.

All our processes are adapted according to the performance level required by the field of application:

- High precision grinding;
- Super finishing to achieve excellent surface conditions (roughness);
- High precision means of geometric and dimensional control;
- Ultra clean washing and assembly;
- Lubrication process adapted to the application;
- Vibration control at end of line;
- Appropriate packaging.

RECOMMENDED MATERIALS

According to your needs, a wide variety of components materials will be proposed such as:

- Specific steels for rings with sizes of fine carbides and with low inclusion;
- High quality steel or ceramic balls (grad 5);
- Materials cage;
- Fluid lubrication.

Our Technical Department remains at your disposal to answer any questions you may have and/or to adapt this product to your specific needs.

