

1. Bearing materials

The internal design of NIKO track rollers is the same as in single row or Double-row Angular Contact Ball Bearings.

The units can carry axial loads in both directions and, due to the thickness of the outer ring, large radial loads.

The standard products are produced from high quality bearing steel, with a hardness of 58 to 62 HRC. Some types are also available in stainless steel (440C) with hardness >58 HRC.

The track rollers contained in this catalogue are produced with standard tolerances (ISO 492) and standard clearance (C1).

The track rollers are produced in two distinct families. Cylindrical or crowned outer ring and profiled outer ring.

These track rollers are available in single and double row design. They are available with straight cylindrical OD or crowned profile OD. The crowned OD is used to reduce the edge stresses caused by possible misalignment errors. The cylindrical OD can provide increased support due to the longer contact profile.

These products are used typically on flat surfaces. Some of the most common applications are:

- transfer rolls
- idler rollers
- Support rollers
- Straightening rolls

2. Shields and seals

2.1 Types

2.1.1 Track rollers LR 2..NFP, LR 2..RRU

These single row ball track rollers are available in two different versions.

- LR2..NFP: cylindrical OD, with contact seals protected by a metal shield.
- LR2..RRU: crowned OD with contact seals protected by a metal shield, inner ring with increased width to allow additional lubricant storage.

2.1.2 Track rollers LR 52-53..NFPU, LR 52-53..KDD

These are double rows angular contact ball track rollers. Due to their internal design, they can carry axial loads of large magnitude. They are available in two versions:

- LR52-53..NFPU: crowned OD, contact seals protected by a metal shield.
- LR52-53..KDD: cylindrical OD, with metal shields.

The track rollers with profiled outer ring are basically Double-rows Angular Contact Ball Bearings with a reinforced and profiled outer ring. The outer ring profile allows the units to operate on round shafts or other type of profiled raceways. The outer profile can have three different designs:

- Track rollers with gothic arch groove - type LFR
- Track rollers with "V" shaped groove - type RV
- Track rollers with "W" profile - type RM