



IDC® - Bearings  
by INTERPRECISE Germany

Es ist nicht genug zu wissen, man muss auch anwenden. Es ist nicht genug zu wollen, man muss auch tun. Knowing is not enough, we must apply. Willing is not enough, we must do.



# About us

1980 founded by Mr. Walter Donath

## Headquarter

Interprecise Donath GmbH  
Obermichelbach

## Production Plants

Obermichelbach (DE)  
Changzhou (CN)

## Sales Offices

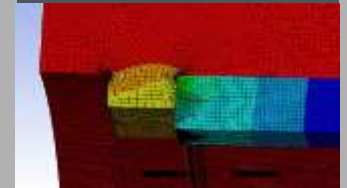
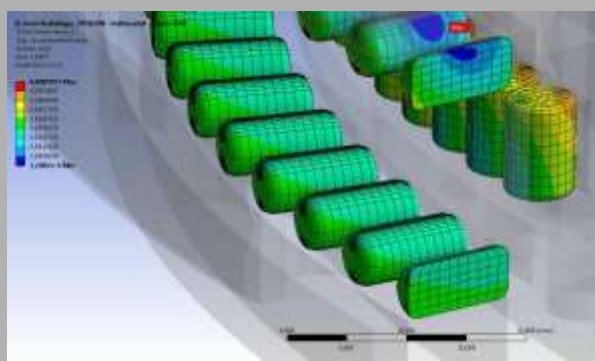
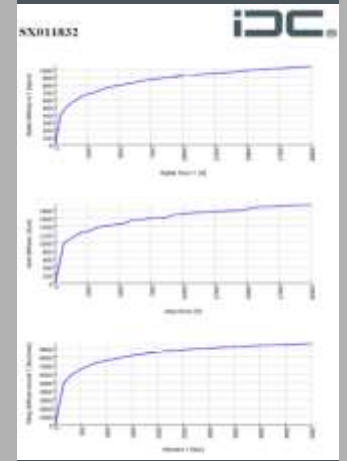
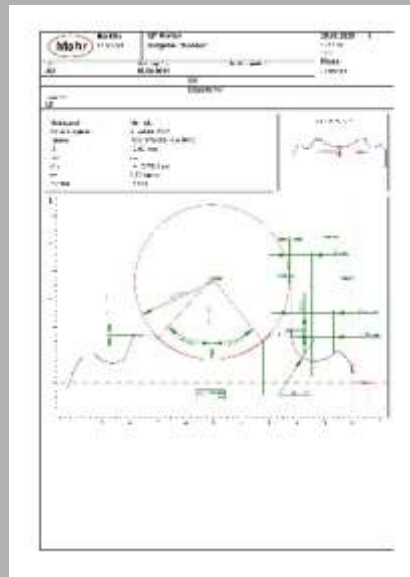
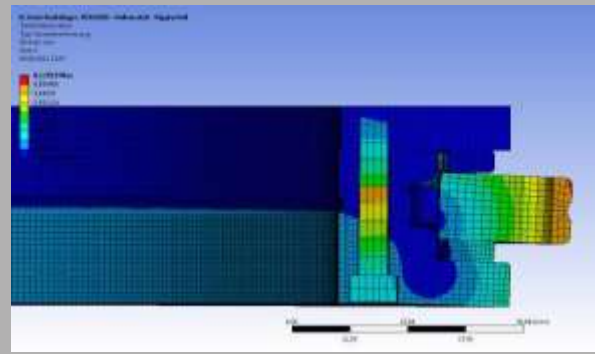
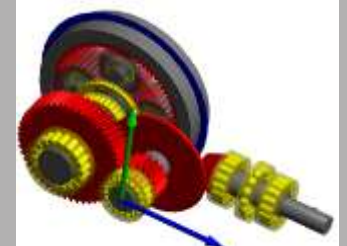
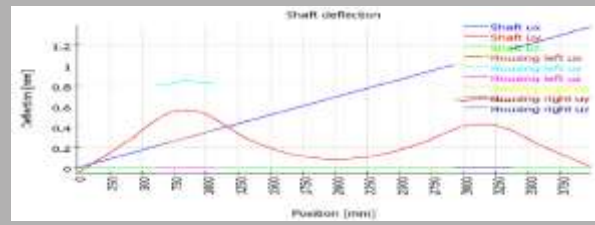
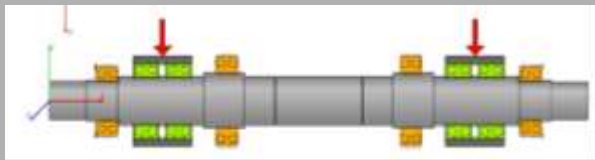
IDC Germany  
IDC USA



# Production in Germany



# Development and Quality



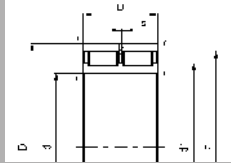
# Product Range / Standard

## Full complement cylindrical roller bearings



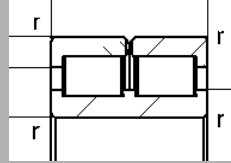
Series  
NNCL48...V  
NNCL49...V

Cylindrical roller bearing, full complement roller set, two-row, non-locating bearing



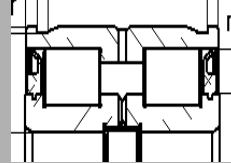
Series  
NNC48...V  
NNC49...V

Cylindrical roller bearing, locating bearing, double row, full complement cylindrical roller set



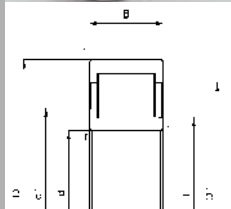
Series  
NNF50...V

Cylindrical roller bearing, full complement roller set, two-row, locating bearing



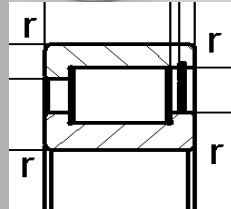
Series  
NJG 23...VH

Cylindrical roller bearing, full compl, roller set self-retaining, single row, semi-locating bearing



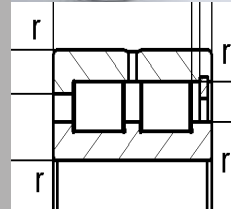
Series  
NCF18,22..V  
NCF29,30..V

Cylindrical roller bearing, full complement roller set, single row, semi-locating bearing



Series  
NNCF49..V  
NNCF50..V

Cylindrical roller bearing, full complement roller set, two-row, semi-locating bearing



# Application Full Complement Roller Bearings



- Lifting and transportation



- Gearboxes



- Mining Equipment



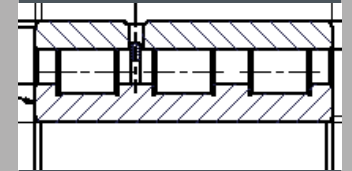
# Non Standard Full complement cylindrical roller bearings



- Bearing for military application
- Oscillating movements with very high accelerations
- Mainly static loaded / extremely high contact pressure
- Corrosion protection layer (Fe/ZN 3-5 T4)
- Seal ring system / slip ring seal/ shaft seal



- Bearings for tube bending machines
- Multi row full complement cylindrical roller bearings
- 3 row or 4 row



- Tandem Bearings for Extruder Gearboxes
- 4row / 6row / 8row
- To bear extreme thrust loads in a narrow envelope



# Non Standard Full complement cylindrical roller bearings



- Bearings for universal joint bushings
- For shaft diameter up to 1000mm
- Small oscillating movements
- Transmit extreme loads and torques
- With rollers in radial and axial direction



- High Precision Cylindrical Roller Bearings with cage
- Series N10.., N19.., NN30..und NNU49....
- Accuracy class SP, high stiffness, smooth running
- suitable for high speed



- Self adjusting cylindrical roller bearing for calender application





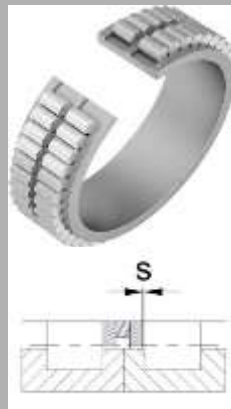
# Product range / Standard

## Full complement cylindrical roller bearings for planetary wheels



Series RNCF

Cylindrical roller bearing without outer ring, full complement roller set, single row, semi-locating bearing



Series RNNCF

Cylindrical roller bearing without outer ring, full complement roller set, two-row, semi-locating bearing



# Non Standard Full complement cylindrical roller bearings for planetary wheels



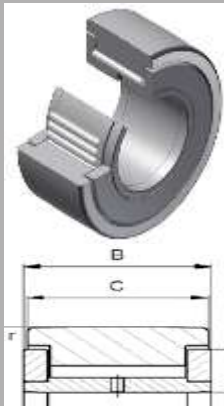
Planetary gears in industrial gearboxes have to ensure extreme levels of performance and reliability with a minimum installation space.

It is not unusual that planetary wheels are pushed to the edge of their physical limitations. The accommodation of the largest possible number of cylindrical rollers and a compact design at the same time provide high rigidity and the highest possible radial load carrying capacity. That is why full complement cylindrical roller bearings for planetary wheels are most suitable to meet these requirements.



# Product range / Standard

## Track Rollers Yoke Type



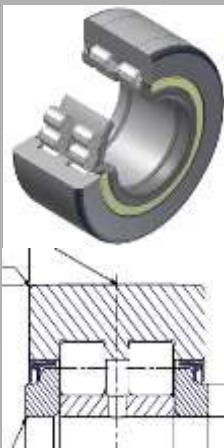
### Series NATV

Yoke type track rollers, full complement needle roller set, with axial guidance, seals on both sides optional.



### Series NATR

Yoke type track rollers, with axial guidance, seals on both sides optional.



### Series PWTR

Yoke type track rollers, full complement cylindrical roller set, with axial guidance, lip seals on both sides optional.



### Series NUTR

Yoke type track rollers, full complement cylindrical roller set, with axial guidance, labyrinth seals on both sides optional.



### Series NNTR

Yoke type track roller, full complement roller set, two-row, with inner ring, 3 ribs on outer ring, sealed.



# Product range / Standard

## Track Rollers Stud Type



Series KRV

Stud type track rollers, with axial guidance, full complement needle roller set



Series KR

Stud type track rollers, with axial guidance, gap seals on both sides



Series PWKR

Stud type track rollers, with axial guidance, full complement cylindrical roller set, lip seals on both sides



Series NUKR

Stud type track rollers, with axial guidance, full complement cylindrical roller set, labyrinth seals on both side



Eccentric-ring



# Application Track Rollers



- Food processing Industry



- Warehouse and Logistics



- Cam Gears



# Non Standard Track Rollers



## Special Coatings / Special Dimensions

- Reduction of wear (abrasiv)
- high wear-protection under mixed friction, high hardness
- anti-adhesive properties, reduced friction coefficient



- Corrosionprotection
- Reduction of friction and wear
- Special Dimensions
- Special Grease
- Special seals for vacuum application



- Track rollers for Multiclustermills (Senzimir)- Series WGTR
- Sorted in 5 $\mu$ m-heights
- Precision class better P4



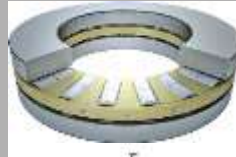
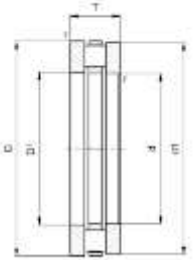
# Product range / Standard

## Cylindrical Roller Thrust Bearings



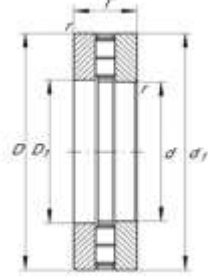
Series  
811/812

Axial cylindrical roller bearings 811xx & 812xx series, single direction, comprising K811/K812, GS, WS



Series  
894/894

Axial cylindrical roller bearings 893xx and 894xx, single direction, comprising K893/K894, GS, WS

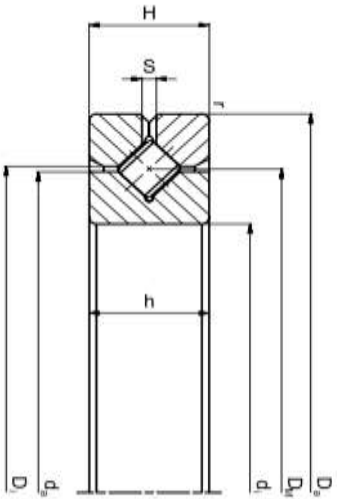


# Product range

## Cross Roller Bearings

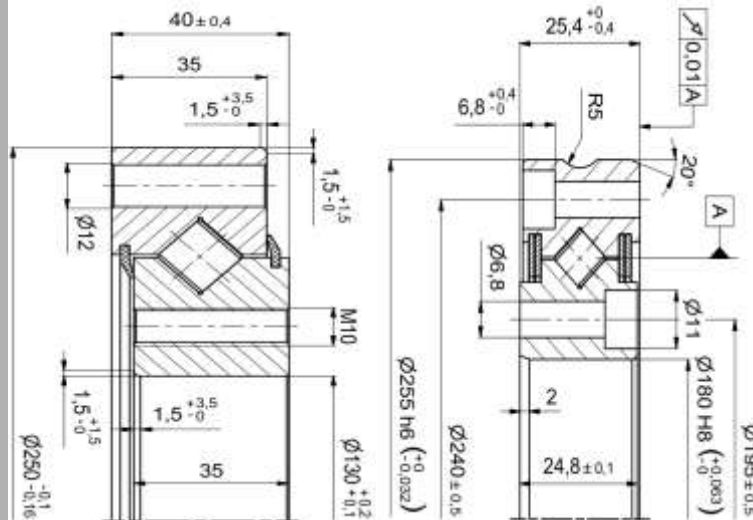
### Series SX

Bearings of the SX-series are composed of an inner ring, cylindrical rollers, polymer separators and a split outer ring that is retained by assembly rings.



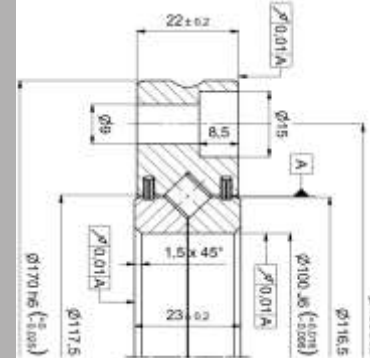
### Series XU / XSU

Bearings of this range have a massive outer and inner ring, cylindrical rollers, separators and a plug with securing splint for the mounting slot. For high stiffness these bearings are usually manufactured to preload or zero clearance. They can be supplied with nitrile contact seal or labyrinth seal. Outer and inner ring are directly bolted to the surrounding machine parts, both can be executed with centering diameters. The screw holes can be through bored, with recess or threaded.



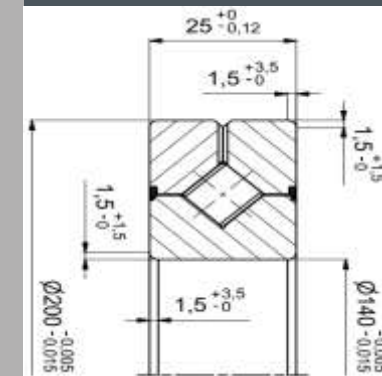
### Series XV

Bearings of XV design have a massive outer ring, a split inner ring, cylindrical rollers, separators and labyrinth seals. The inner ring is centered on the shaft and axially positioned and secured against a shoulder with a precision locknut. Thus the bearing clearance can be adjusted between play and preload. The outer ring is centered in, and bolted to the housing.



### Series XB

These bearings are composed of a massive inner ring, split outer ring, cylindrical rollers and separators. The bearing clearance or preload is preset according to customer's request. If needed, the bearings can be equipped with nitrile contact seals. Similar to the SX-series, mounting for these bearings is made by clamping rings.

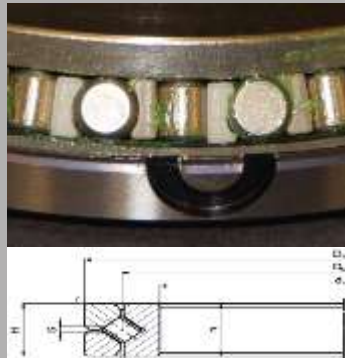




# Applications Cross Roller Bearings



- Rotary indexing table



- Health Care



- Turntables
- e.g. Tablet Press



# Product Range / Standard

## Needle Roller Bearings



Series NA48



Series NA49



Series NA69



Series NKIS

### Needle Roller Bearings with ribs Series NA48., NA49., NA69.. and NKIS..

Needle roller bearings with ribs of dimension series NA48., NA49., NA69., and NKIS.. are single rowed. Only NA69 series.. are double rowed up from the bore diameter  $d \geq 32\text{mm}$ .

The bearing unit is made of one outer ring with two respectively three ribs, one needle cage assembly, and one removable inner ring without ribs. The outer ring and the needle cage assembly form a self-retaining unit. Needle roller bearings with an inner ring are used in cases where the shaft is not designed as a rolling bearing raceway.



# Product Range / Standard

## Needle Roller Bearings



RNA series correspond to the above listed series, but they have no inner ring. Therefore these bearings are in particular radially space-saving with otherwise identical parameters. The use of RNA series requires a bearing raceway on the shaft which is hardened and ground according to the respective specification. The RNA series are single rowed, with the exception of series RNA69., which is double rowed up from an enveloping circle diameter  $FW \geq 40\text{mm}$ .



# Applications Needle Roller Bearings



- Compressor



- Textile Industry

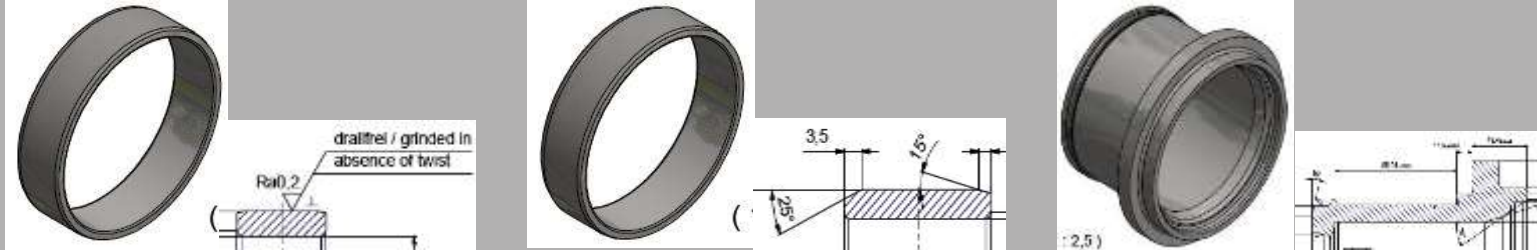


- Printing Machines



# Product Range

## Inner Rings



### Available designs

The design and the size of IDC inner rings are basically derived from the corresponding needle roller bearing series. Special designs and other dimensions are available upon request.

### Twist free ground raceways

IDC inner rings with a twist free ground raceway (Suffix EGS) are designed for the use with radial shaft seals corresponding to DIN 3760 and DIN 3761.

### Lubrication hole

IDC inner rings are available with a lubrication hole on the circumference area upon request (Suffix IS1).

### Pre-ground raceways

IDC inner rings with only a pre-ground raceway (Suffix VGS) are offered with a grinding allowance for cases where the finish grinding has to be performed when mounted on the shaft. The diametrical oversize ranges from 0.1 to 0.4 mm depending on the diameter.



# Other IDC Products

Self-aligning  
needle roller  
bearing



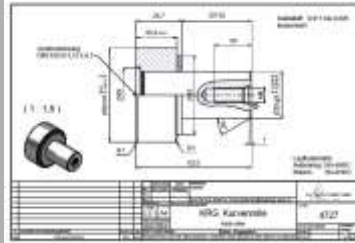
Needle roller  
bearing for  
printing machines  
which allows  
bending of shaft

Cylindrical Roller  
Bearings with  
brass cage



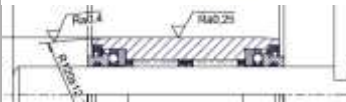
Bearing with  
special coating to  
avoid/reduce  
sliding damages.

Special Track  
Rollers



Track roller without  
rolling elements  
made as sliding  
bearing.

Support Rollers



Multiclustermills  
for thin foil and  
sheetmetal



# IDC Products - Textile Industry

Ball Bearing



Wire Production

Seperator Rolls



Synthetic Fibers

Guide Rollers



For guiding of threads and tapes

Top Rollers



Top roller for spinning quality yarn

Tension Rollers



Lead and tension

Backup Rolls



Supporting rollers for deflecting and guiding



# IDC Products – Rolling Mills

4row Cylindrical  
Roller Bearings



Backup Rolls

2row Tapered  
Roller Bearings



Workrolls

4row Tapered  
Roller Bearings



Workrolls

WGTR Bearings



Cold Rolling

