

BT4-8167 E91/C775

Four-row tapered roller bearings can accommodate combined heavy radial and axial loads at low to moderate speeds. They are used almost exclusively in work roll applications such as rolling mills. NR manufactures four-row tapered roller bearings in TQO and TQI designs, in many variants and with different features.



- Very high radial load carrying capacity
- Accommodate axial loads in both directions
- Axial space-saving solution for roll necks
- Low friction
- Long service life

Design variant/feature	TQOSN/GWSI	
Bore type	Cylindrical with helical groove	
	Dimensions	
	d	510 mm Bore diameter
	D	655 mm Outside diameter
	B	377 mm Total bearing width over inner rings
	T	379 mm Total bearing width over outer rings
	d ₁	≈ 530 mm Abutment diameter shaft
	D ₁	≈ 601.5 mm Abutment diameter housing
	r _{1,2}	min. 2.5 mm Chamfer dimension inner ring
	r _{3,4}	min. 6 mm Outer ring radius (chamfer)

Calculation data		
AGA performance class	AGA Explorer	
Basic dynamic load rating	C	7 650 kN

Basic static load rating	C_0	17 600 kN
Fatigue load limit	P_u	1 320 kN
Comparative radial load rating	C_F	1 900 kN
Comparative axial load rating	C_{Fa}	316 kN
Thrust factor	K	1.71
Limiting value	e	0.35
Calculation factor	Y_1	1.9
Calculation factor	Y_2	2.9
Calculation factor	Y_0	1.8

Tolerances and clearances

GENERAL BEARING SPECIFICATIONS

- Tolerances: bearings (Normal and CL7C), inch bearings
- Internal clearance

BEARING INTERFACES

- Seat tolerances for standard conditions
- Tolerances and resultant fit