

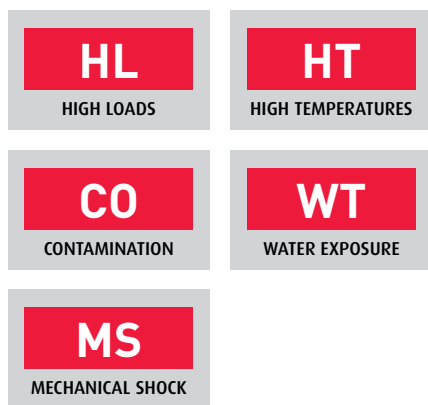
## EXTRA-CAPACITY SEALED-CLEAN FOUR-ROW TAPERED ROLLER BEARINGS

Bearings used in the steel-making process are exposed to operating conditions unique in their severity: metal dust, water, high and low speeds, high heat, heavy loads and mechanical shock. NSK Extra-Capacity Sealed-Clean Four-Row Tapered Roller Bearings for work roll applications are designed to perform in the perfect storm, utilizing NSK's Tough Steel material technology and featuring advanced seal technology to deliver reliability and productivity in the most aggressive environments.

### PROVEN BENEFITS

- › Higher load capacity derived from optimized internal design, as much as 35% greater than conventional sealed bearings
- › Super-TF and WTF™ steels provide significantly longer service life under heavily contaminated operating conditions
- › Improved sealing achieved with heat and water resistant sealing materials
- › Sealed-clean solution significantly reduces grease

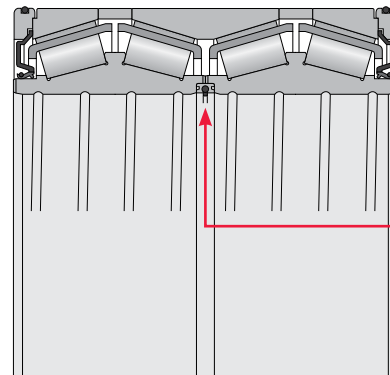
### CONDITIONS:



# EXTRA-CAPACITY SEALED-CLEAN FOUR-ROW TAPERED ROLLER BEARINGS

## DESIGN FEATURES

- › Newly designed bearing internal geometry - wider cage diameter, increased number and larger rollers
- › Higher load capacity due to newly designed bearing internal geometry and special seal
- › Main seal and seal holder are of a more compact design
- › New type of bore seal prevents the build-up of negative pressure that can cause the entry of water through the main seals
- › Special helical groove to prevent creeping on the roll neck shaft
- › Available with Super-TF or WTF steel material
- › Super-TF and WTF™ steels provide significantly longer service life under heavily contaminated operating conditions
- › Sealed-clean solution significantly reduces grease consumption



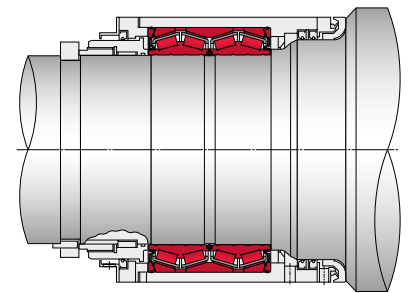
The new seal design facilitates easy handling and minimizes risk of seal damage

The new bore seal prevents negative pressure that causes water entry and allows for easier mounting and dismounting

## APPLICATIONS

- › Hot strip mills
- › Skin pass mills
- › Cold rolling mills
- › Temper rolling mills

Higher reliability, longer operating life, reduced grease consumption and reduced maintenance costs for work roll applications.



## DESIGN SPECIFICATIONS

STF	310	KV	S	4301	E	G
MATERIAL REFERENCE	BORE REFERENCE NO.	BEARING TYPE	SEAL	OUTER DIAMETER REFERENCE NO.	SPIRAL GROOVE	CARBURIZATION
MATERIAL REFERENCE	STF: Super-TF Steel    WTF: Water-TF Steel		SEAL	Blank: open bearing    S: sealed bearing		
BORE DIAMETER	Available in a wide range for metric and inch shaft dimensions		CARBURIZATION	G: complete bearing    GA: outer only GB: inner only		
BEARING TYPE	KV: Four-Row Tapered Roller Bearing					