

ZOLLERN

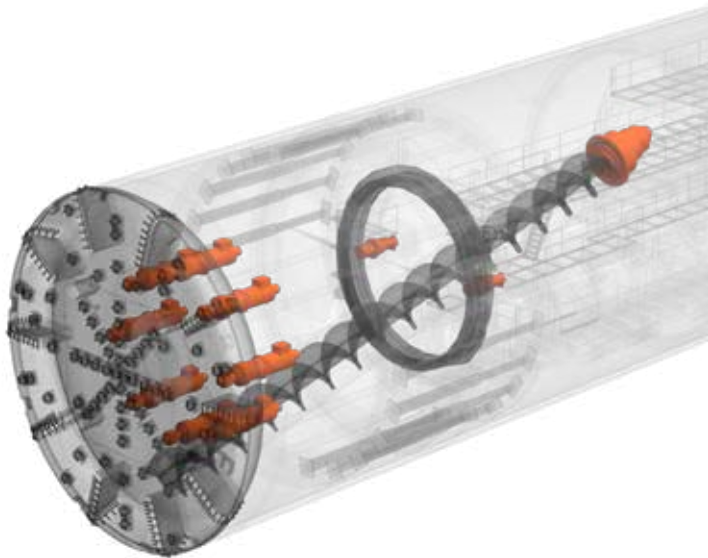
Solid metals. Fine solutions.

Drive Technology

Gearboxes for
tunnel boring
machines



ZOLLERN gearboxes for tunnel boring machines



Features and advantages

- 400 kW version; more power thanks to the additional cooling system
- 30% more compact design than conventional drive solutions
- Drive torques up to 3,000,000 Nm (as a standard)
- Hydraulic and electric drive variants
- Liquid cooled for continuous use
- Integrated brake
- Temperature monitoring
- Brake monitoring
- Safety coupling

ZOLLERN gearboxes for tunnel boring machines

ZOLLERN gearboxes drive tunnel boring machines around the world. They are core components for hard rock TBMs, earth pressure (EPB) and micro-tunnel boring machines as well as combinations thereof.



TBM gearbox

For hard rock TBM, earth pressure EPB TBM, as well as slurry TBM



TBM gearbox with synchronous motor

Compact overall system for tight tunnel radii



Manual gearbox

For different geological conditions (multi-mode use)



Micro tunnelling
Central hollow shaft
for suspension passage



Auger drive
For reliable
materials handling



Erector drive
For precise handling
of segments



Service concepts
Condition Monitoring
Downtimes can be reduced
with the predictive main-
tenance concepts for TBM
gearboxes.
The Condition Monitoring
System »ZMA« also makes
it possible to continuously
monitor the condition and
to calculate the gearbox's
remaining service life.

Installation sizes

Overview

Plug-on planetary gearboxes

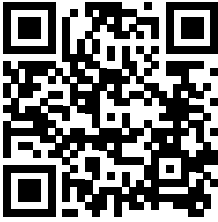
Type	kW power	Max. drive torque	Max. static drive torque
5.29	75 kW - 250 kW	125 kNm	185 kNm
5.31	200 kW - 300 kW	175 kNm	225 kNm
5.32	300 kW - 400 kW	280 kNm	345 kNm
5.33	350 kW	300 kNm	450 kNm
5.40	670 kW	2,200 kNm	3,000 kNm

Planetary gearboxes with integrated mounted output pinion

Type	kW power	Max. drive torque	Max. static drive torque
3.22	85 kW	16.8 kNm	25.2 kNm
3.27	60 kW - 100 kW	80 kNm	91.5 kNm
3.32	300 kW - 400 kW	280 kNm	345 kNm

Other sizes available from the product portfolio by request

Maintenance concept
for TBM gearbox



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tunnel boring machines



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