



## HERRENKNECHT.CON NECTED

Performance-relevant reports, data analysis and visualizations at any time.

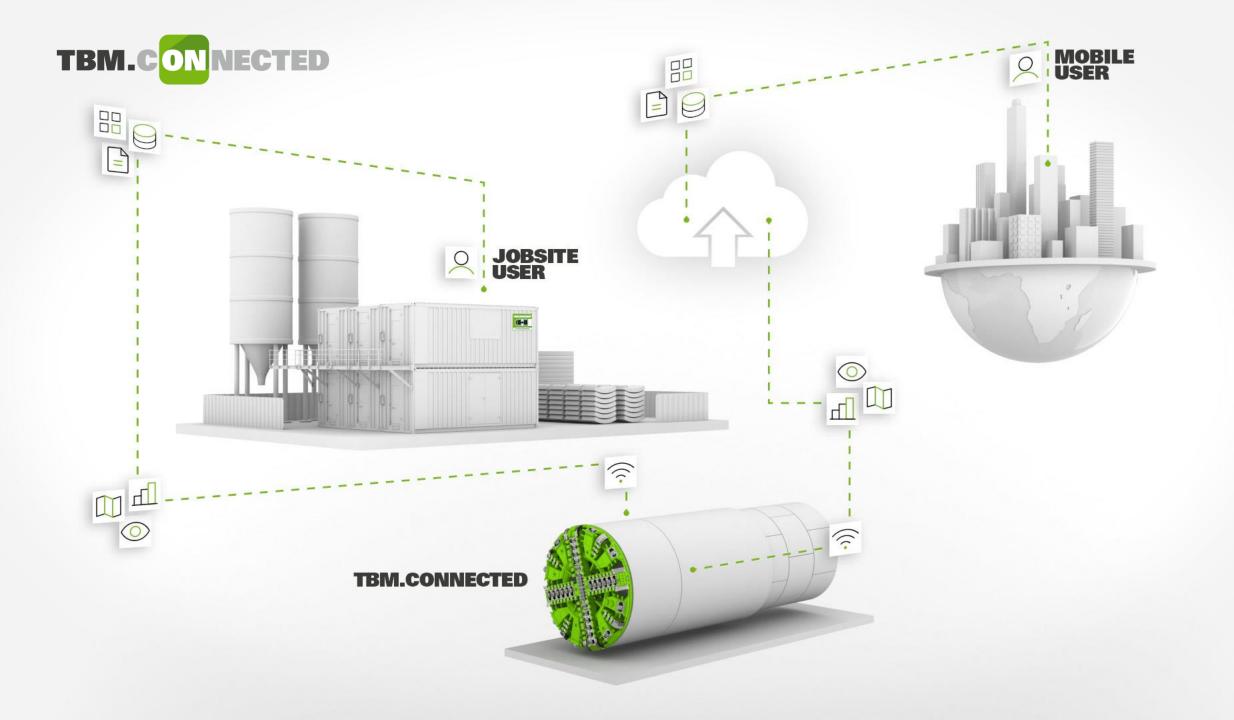
The new **Herrenknecht.Connected** customer portal provides jobsite and project management with location-independent, webbased digital analysis tools and worldwide insight into the cockpit monitors of the machine operators. This includes a wide range of automated analysis functions as well as clear visualizations and reporting of data relevant to tunnelling operations.

The following digital products are already available:

- TBM.Connected
- > SBR.Connected
- Conveyor.Connected
- Separation.Connected

Individual customer solutions can also be implemented via the new **Herrenknecht.Connected** platform.









#### **Visualization**

Worldwide insight into the machine operator's cockpit monitors



#### **Dashboards**

The most important key metrics summarized on one screen.

(History & status quo)



#### Reports

Central access to numerous preconfigured reports



#### Charts

Comprehensive creation of sensor data charts



#### Navigation\*

Display of the TBM alignment and its possible deviation from the tunnel route.



#### Maps\*

Map visualization of the current TBM position on the projected tunnel alignment.



#### Data

Management of sensor information and data exports





#### **Visualization**

See what the monitors in the control cabin are showing in near real time from the jobsite office, global headquarters or anywhere else in the world. Depending on the systems installed on the machine, see the data for:

- **TBM**
- DCLM
- Navigation
- > SSP-E

The visualizations can be changed without affecting the machine operator's current view.







#### **Dashboards**

Fast analyses with our pre-installed dashboard functions, such as

- Advance rates: daily, weekly and monthly performance
- Drive power
- Ring cycle: advance, ring building times

We are also happy to create personalized dashboards at the customer's request.





### Reports

Easily generate and download PDF reports on advance rates and navigation metrics as well as data from additional equipment purchased such as separation and belt conveyor systems, navigation, SSP-E, DCRM and more. Automatically generated by the Herrenknecht systems, here the constantly updated reports are centrally available to users.





#### Charts

Charts of sensor data relevant to the drive:

- Daily overview
- Grouting
- Main drive
- Navigation system
- Preliminary exploration (probe drilling)
- > Slurry circuit
- > Torque FC

Preset evaluations of the most important and most common data analyses and option to manually create additional, user-specific charts.





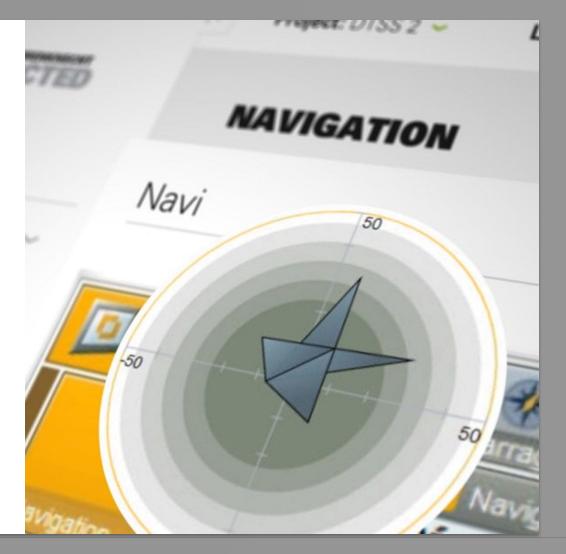


## **Navigation**

Display of the current TBM alignment and its possible deviation from the tunnel route.

## **Navigation history**

Historical display of the navigation arrow, freely selectable by kilometer or ring number.

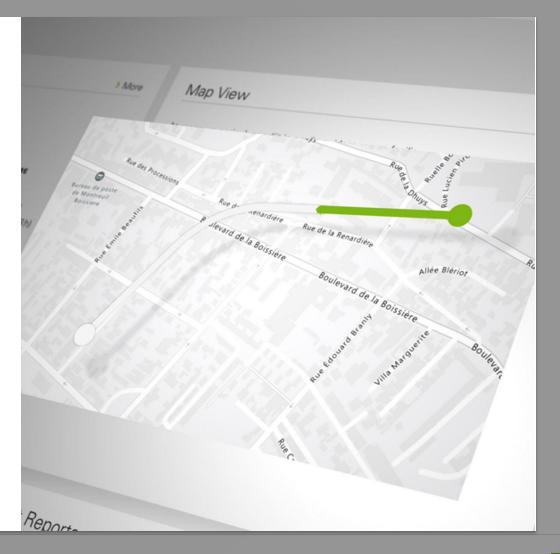






## Maps

Display of the current TBM position on the projected tunnel alignment including geographic coordinates, determined using online map services.







## Data information and export

Exports of sensor data, instantaneous values or average values per ring (as min/ max/ start/ end) available at any time for further use in all common file formats (e.g. PDF files and Excel worksheets).

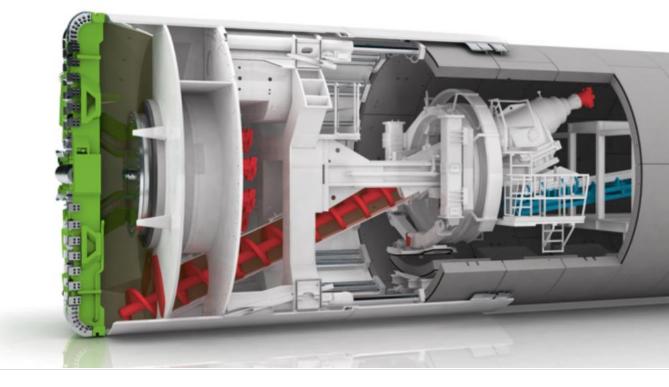




# CHOOSE YOUR PERSONAL BUNDLE

#### **TBM.Connected**

Whether it's an EPB shield, Mixshield or any other type of machine, TBM.Connected is your tool for optimal monitoring and analysis of the advance of one or more machines in a construction project.





# CHOOSE YOUR PERSONAL BUNDLE

#### SBR.Connected

SBR.Connected is the ideal data tool to take innovative shaft drilling technology for modern mining to the next level. Entering material extraction and shaft lining areas can thus be minimized even further.



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# CHOOSE YOUR PERSONAL BUNDLE

## **Conveyor.Connected**

You can purchase our belt conveyors for your TBM drive or completely independently as a stand-alone tool. Conveyor.Connected gives you access to conveyor volumes, belt system overviews and all visualizations of the control cabin.





February 15, 2021



