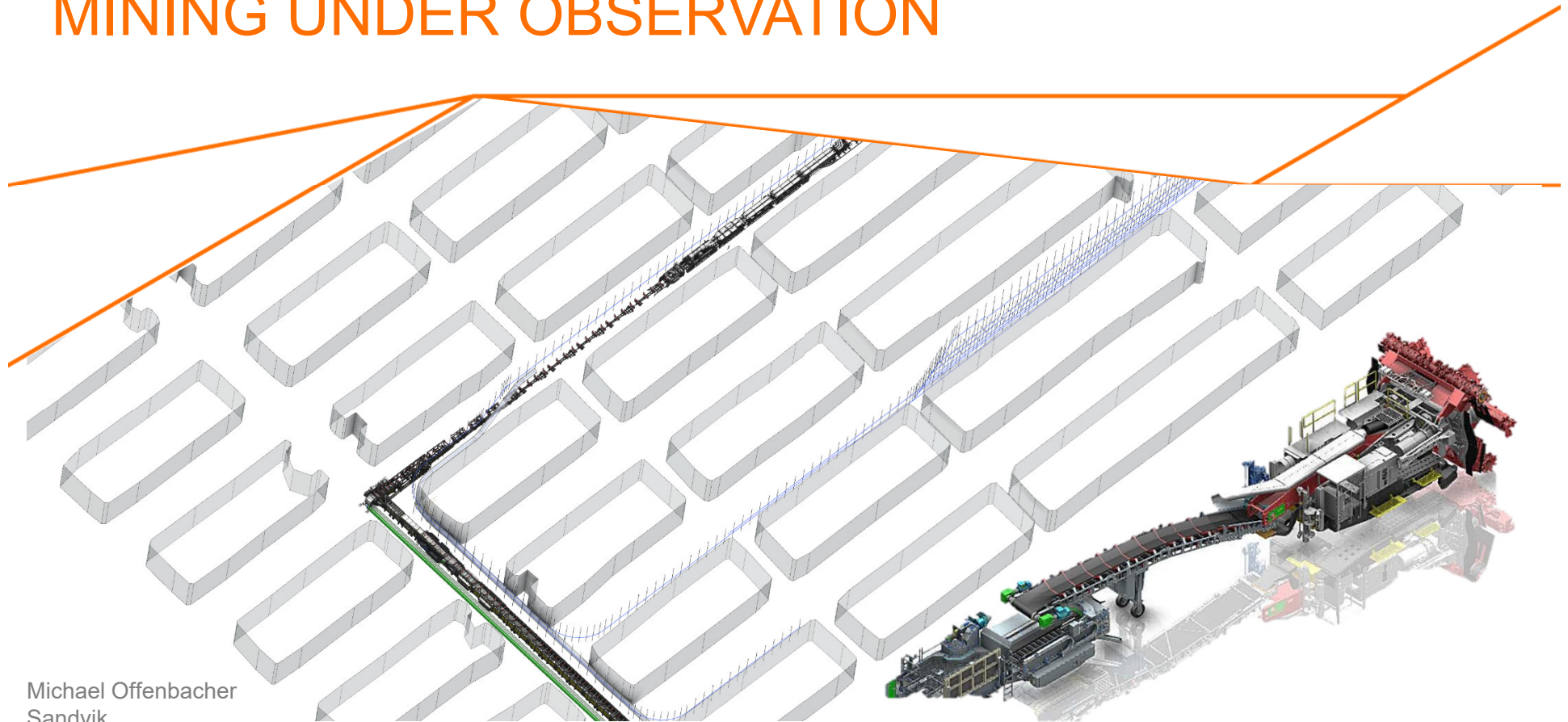


SANDVIK



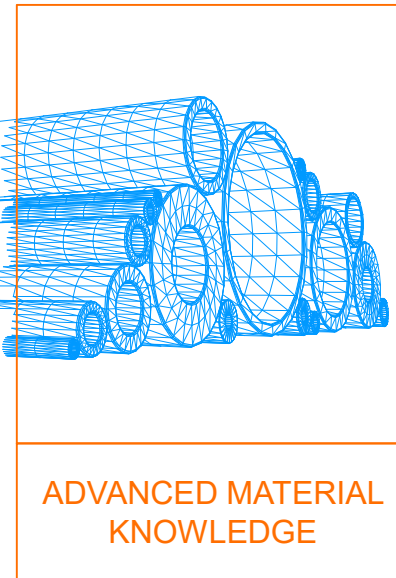
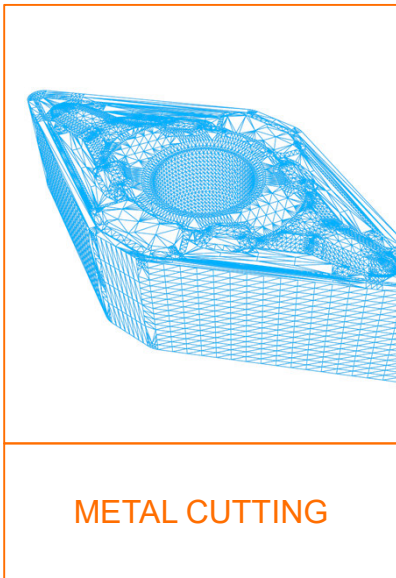
# MINING UNDER OBSERVATION



Michael Offenbacher  
Sandvik

# SANDVIK WORLD-LEADING POSITIONS

## PRODUCT AREAS



# SANDVIK – COMPANY KEY FIGURES

**42,000**  
EMPLOYEES

**100**

BILLION SEK IN REVENUES

**50**

R&D CENTERS  
GLOBALLY

SALES IN OVER

**160**

COUNTRIES  
AROUND THE GLOBE

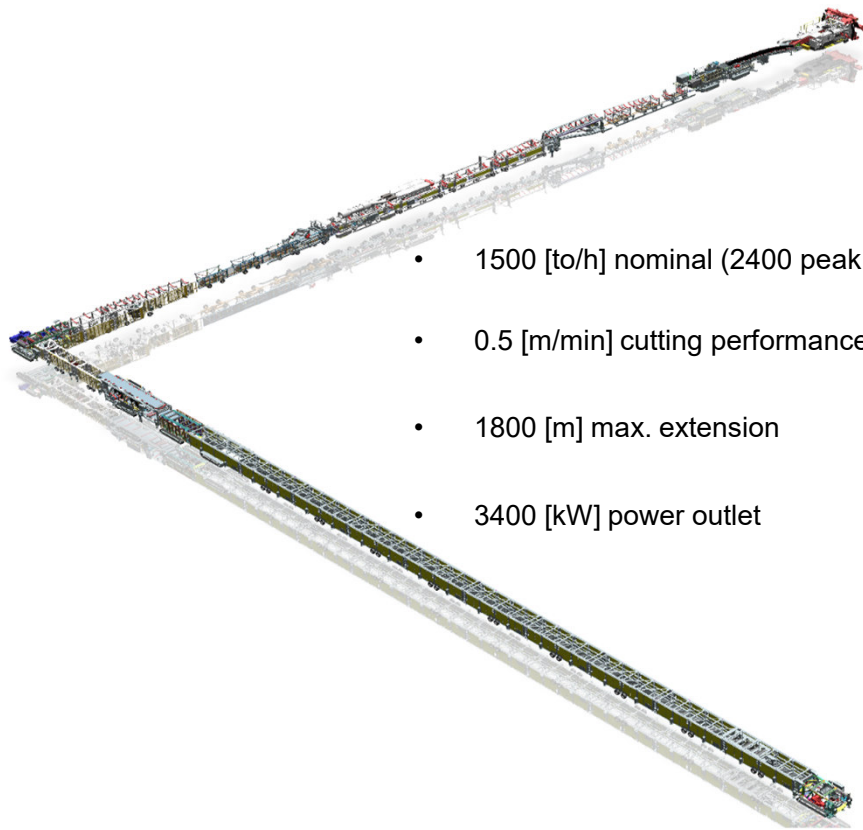
**3.7** BILLION SEK  
ANNUAL R&D  
INVESTMENT

**5,900**  
ACTIVE PATENTS

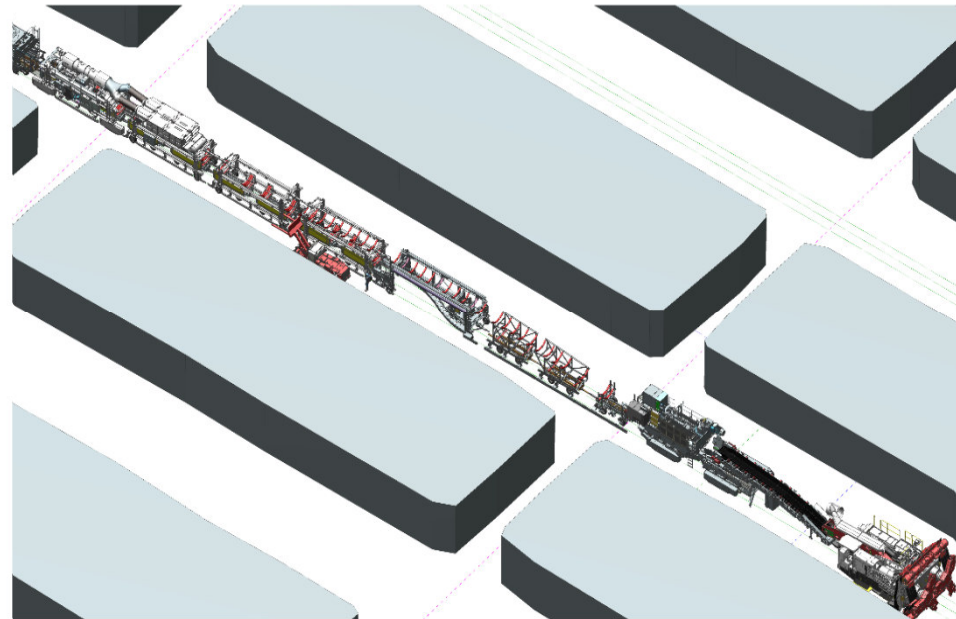


Figures refer to Group total 2018

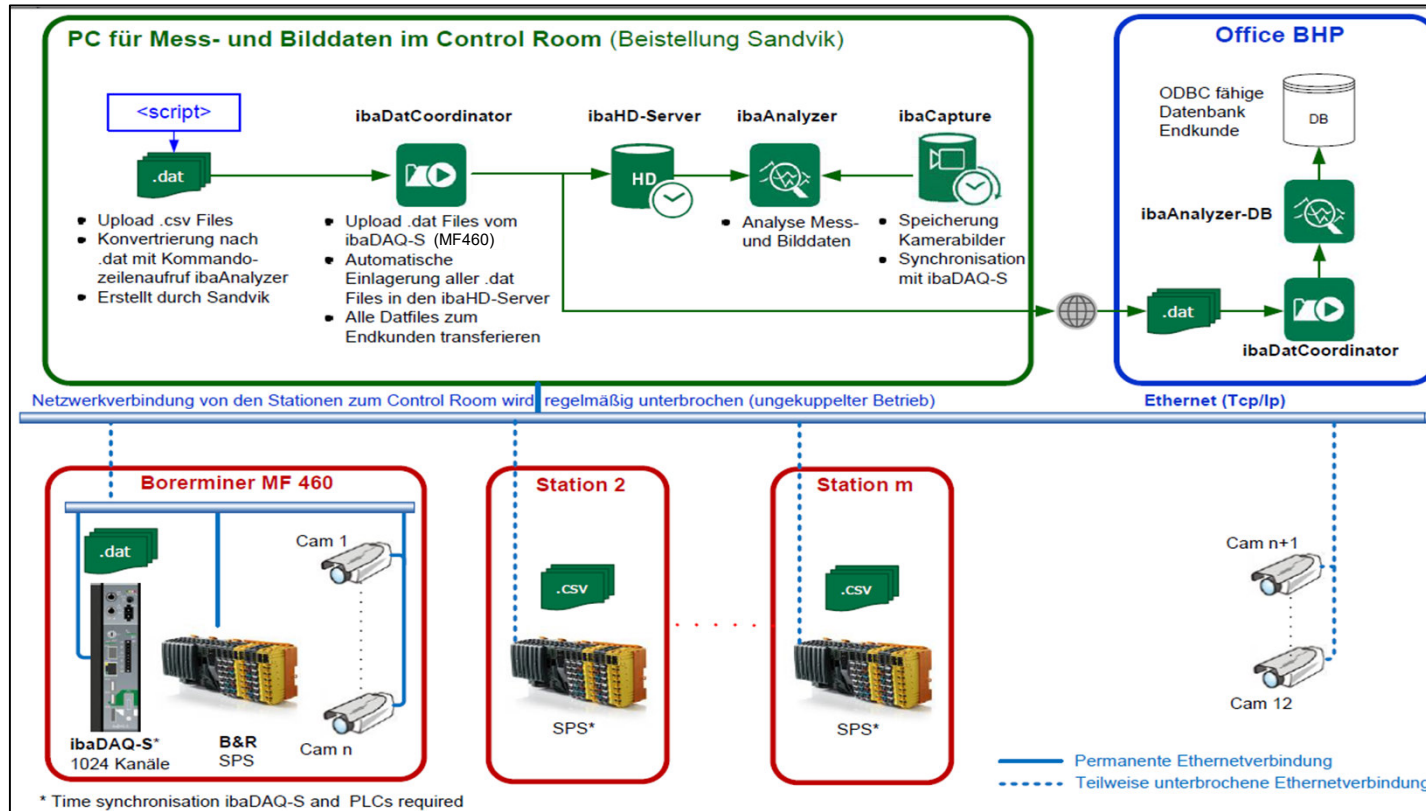
# MINING SYSTEM MF460 & PO140



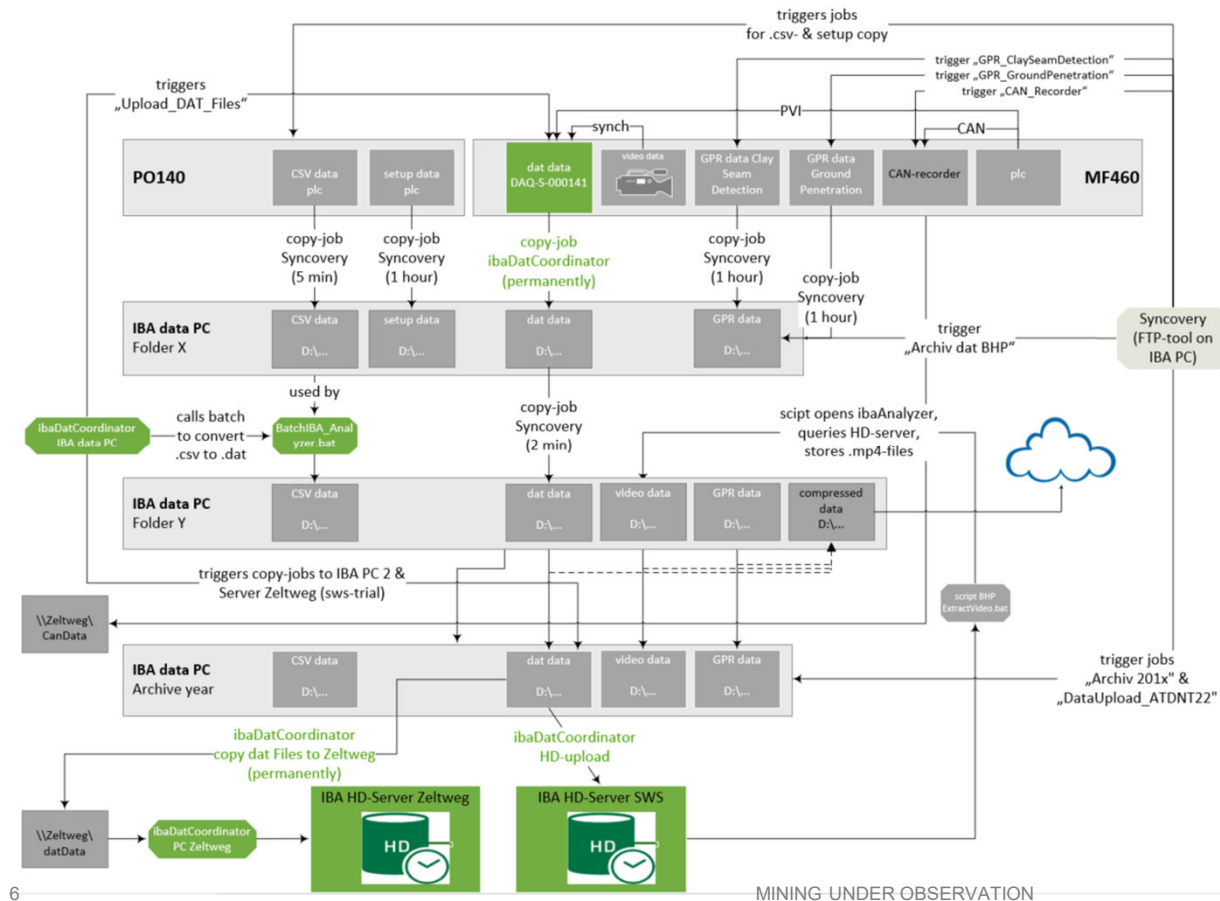
- 1500 [to/h] nominal (2400 peak)
- 0.5 [m/min] cutting performance
- 1800 [m] max. extension
- 3400 [kW] power outlet



# IBA SYSTEM - CONCEPT



# IBA SYSTEM – SYSTEM OVERVIEW



iba daq-s

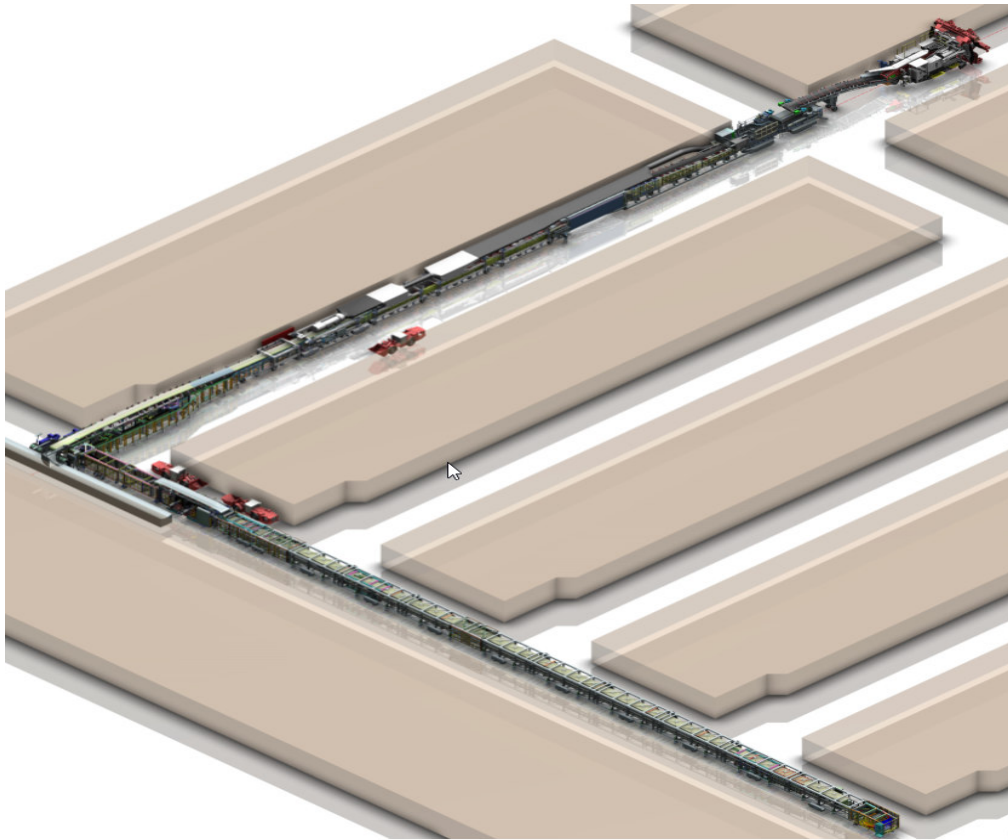


iba rackline





# EXAMPLES: STARTUP OF MINING SYSTEM

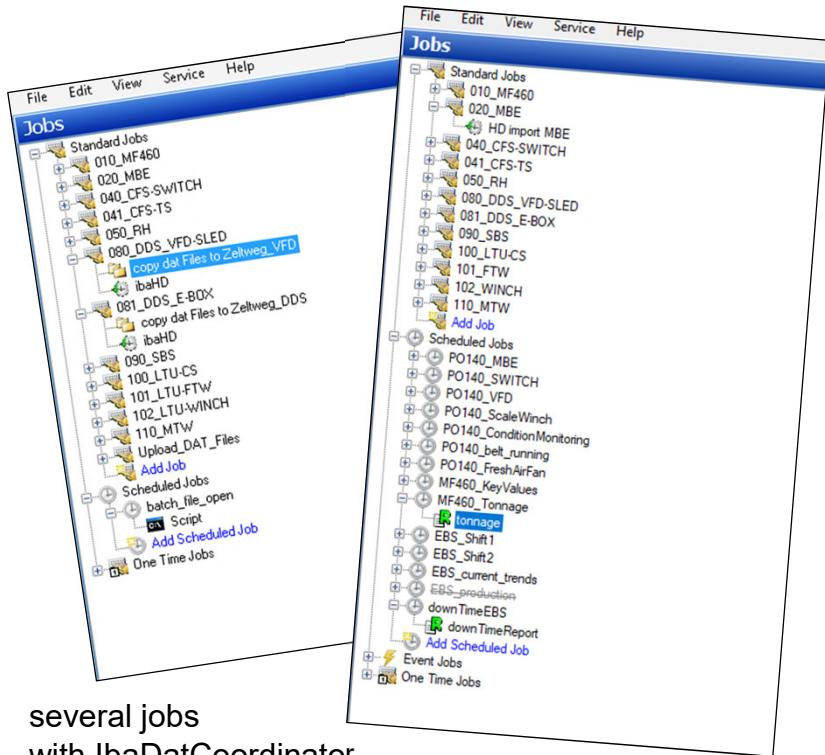


SystemStart.dat



SystemStart\_Video.dat

# DATA STORAGE



several jobs with IbaDatCoordinator

many different HD stores

Name	Storage path	Signals	Size limit	Time limit	Active
HD store 010_MF460	D:\04_IBA_HD_stores\HD-DATA-010_MF460	599	31,4 / 500 GB	200,5 / 200 days	✗ ⓘ
HD store 020_MBE	D:\04_IBA_HD_stores\HD-DATA-020_MBE	149	2,1 / 100 GB	200,2 / 200 days	✗ ⓘ
HD store 040_CFS-SWITCH	D:\04_IBA_HD_stores\HD-DATA-040_CFS-SWITCH	55	0,6 / 100 GB	199,4 / 200 days	✗ ⓘ
HD store 041_CFS-TS	D:\04_IBA_HD_stores\HD-DATA-041_CFS-TS	60	1,1 / 100 GB	199,4 / 200 days	✗ ⓘ
HD store 050_RH	D:\04_IBA_HD_stores\HD-DATA-050_RH	457	0,8 / 100 GB	200,5 / 200 days	✗ ⓘ
HD store 080_DDS_VFD_SLED	D:\04_IBA_HD_stores\HD-DATA-080_DDS_VFD_SLED	83	1,1 / 100 GB	199,4 / 200 days	✗ ⓘ
HD store 081_DDS_E-BOX	D:\04_IBA_HD_stores\HD-DATA-081_DDS_E-BOX	226	3,5 / 100 GB	199,4 / 200 days	✗ ⓘ
HD store 090_SBS	D:\04_IBA_HD_stores\HD-DATA-090_SBS	91	1,5 / 100 GB	200,4 / 200 days	✗ ⓘ
HD store 100_LTU-CS	D:\04_IBA_HD_stores\HD-DATA-100_LTU-CS	27	1,1 / 100 GB	200,4 / 200 days	✗ ⓘ
HD store 101_LTU-FTW	D:\04_IBA_HD_stores\HD-DATA-101_LTU-FTW	125	2 / 100 GB	200,2 / 200 days	✗ ⓘ
HD store 102_LTW-WINCH	D:\04_IBA_HD_stores\HD-DATA-102_LTU-WINCH	75	0,7 / 100 GB	199,4 / 200 days	✗ ⓘ
HD store 110_MTW	D:\04_IBA_HD_stores\HD-DATA-110_MTW	29	0,2 / 100 GB	187,3 / 200 days	✗ ⓘ

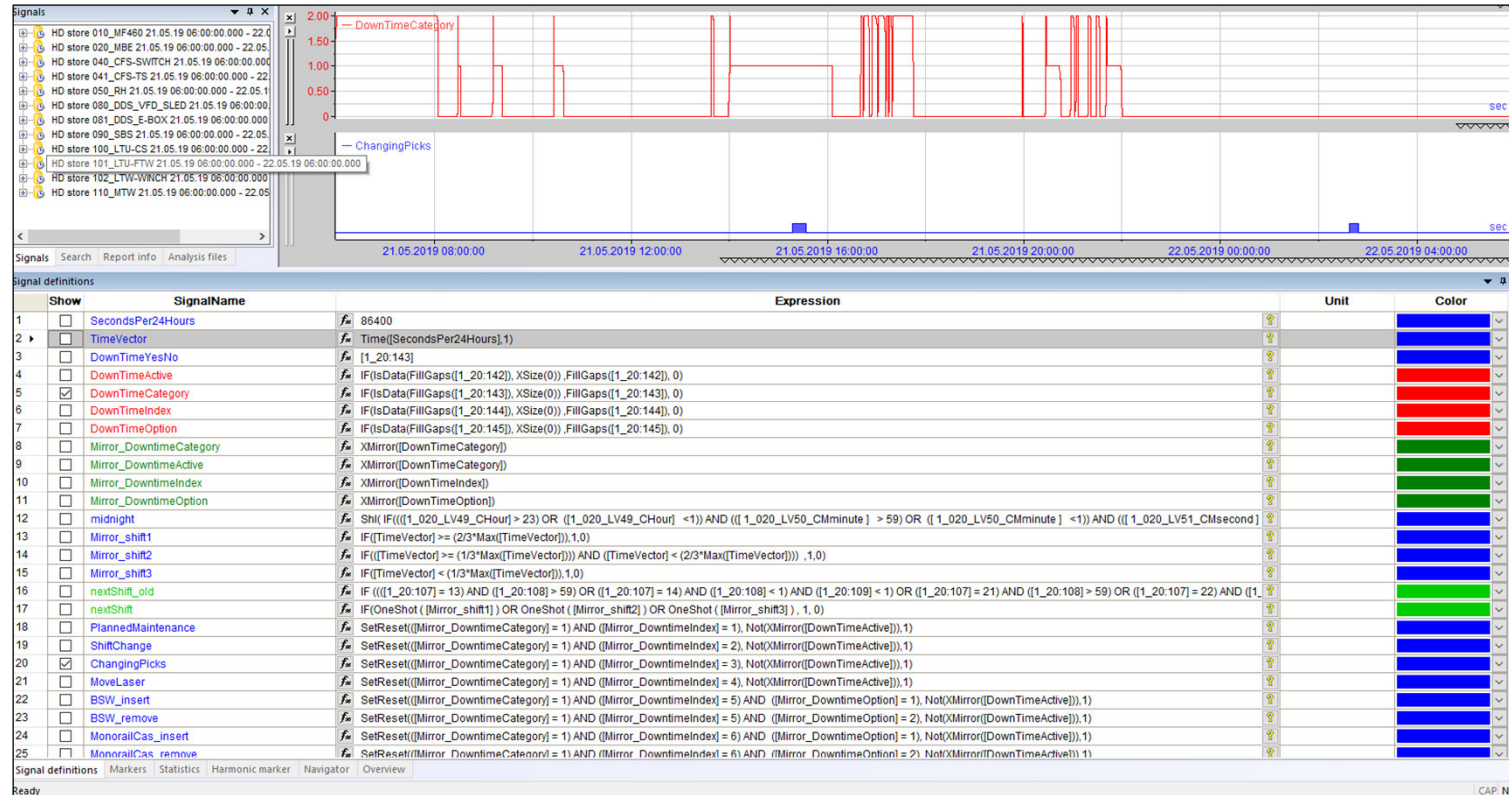




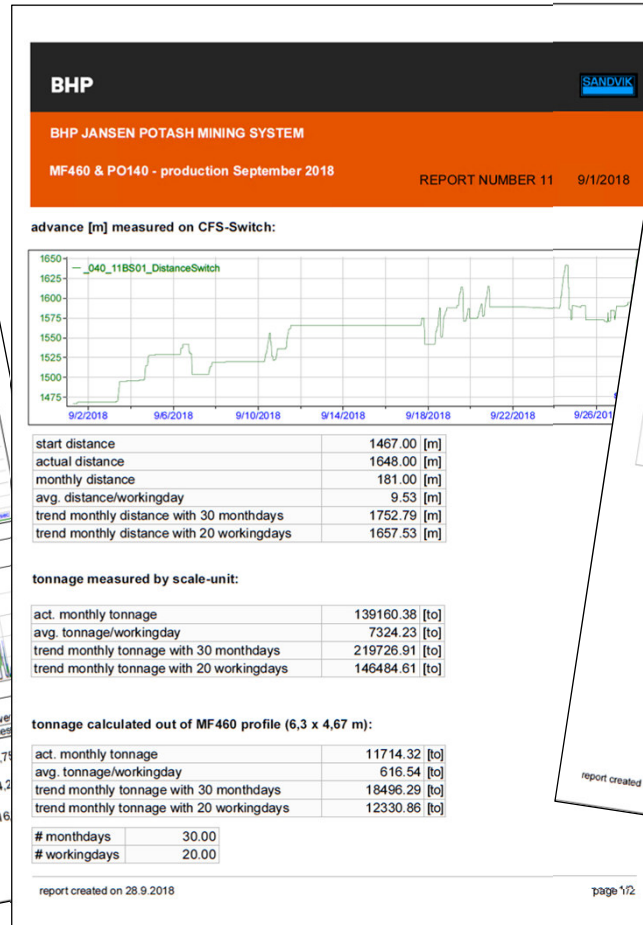
# DATA ANALYSIS – CUTTING PARAMETERS



# DATA ANALYSIS – UTILIZATION/DOWNTIME



# REPORTING



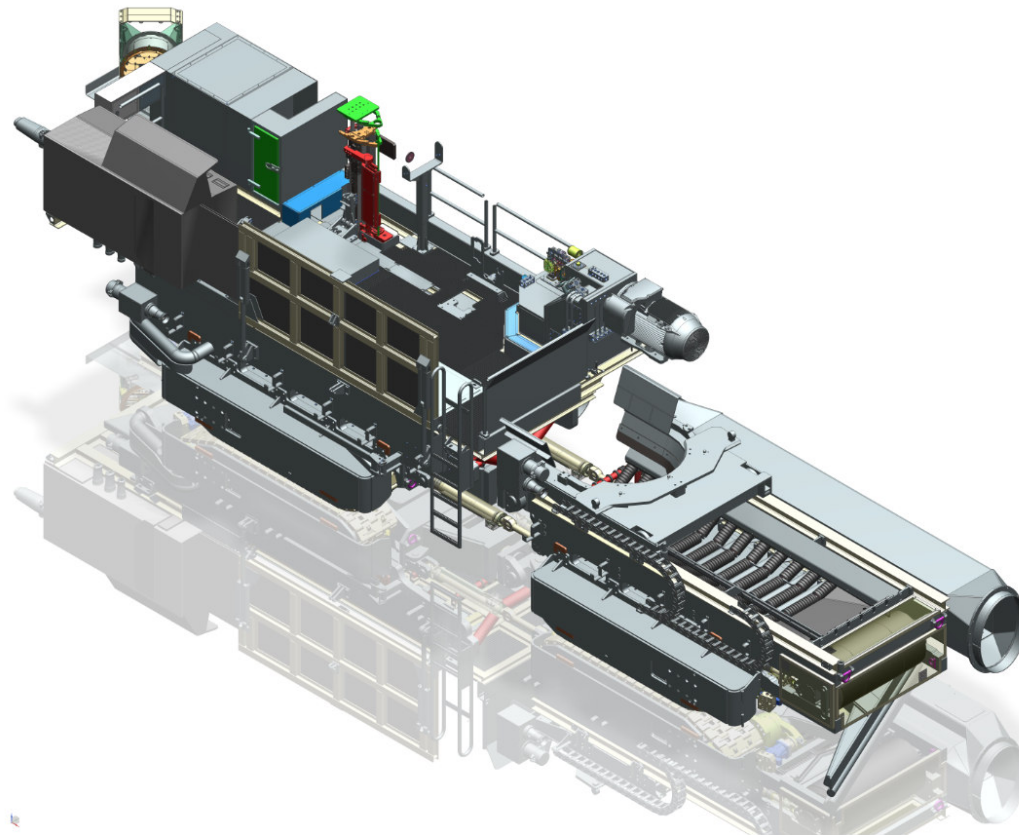
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THANK YOU FOR YOUR ATTENTION!



# MBE – MOBILE BOOT END

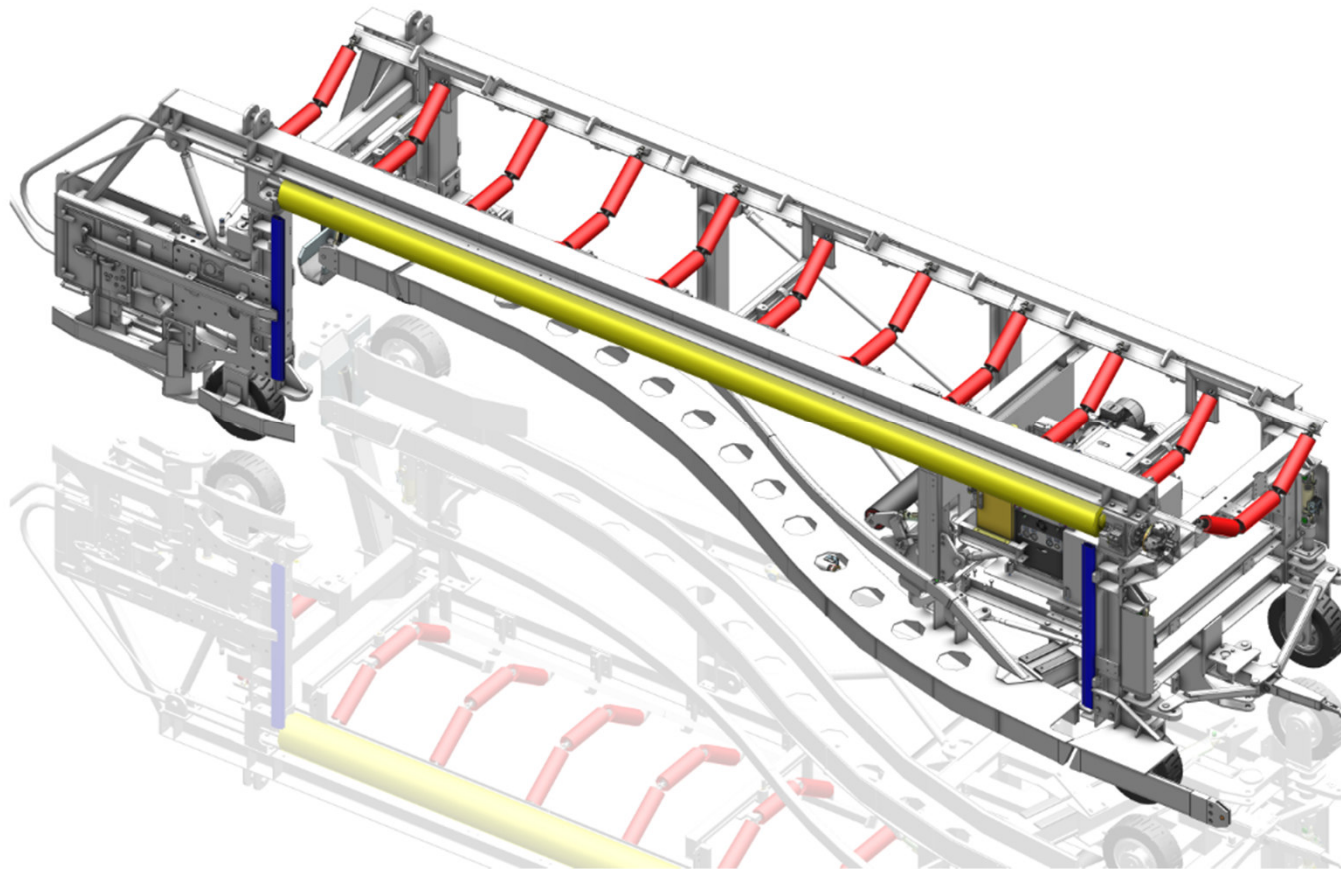


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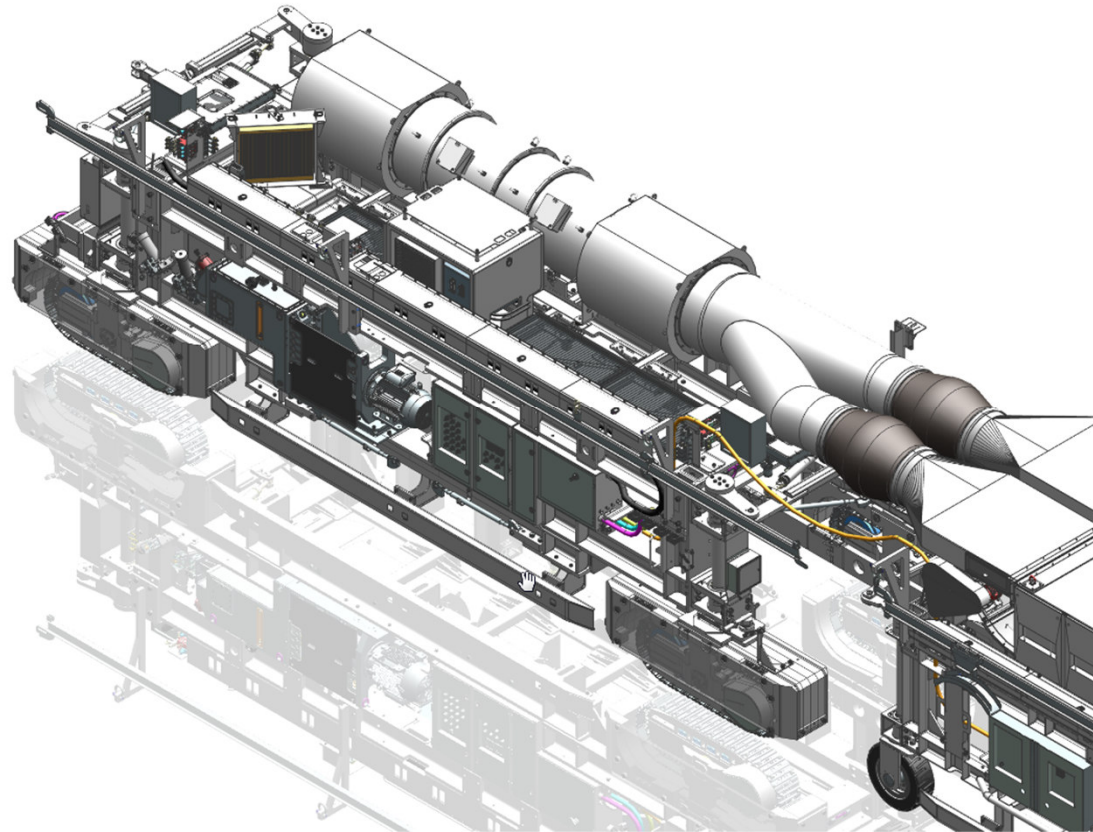
# SWITCH



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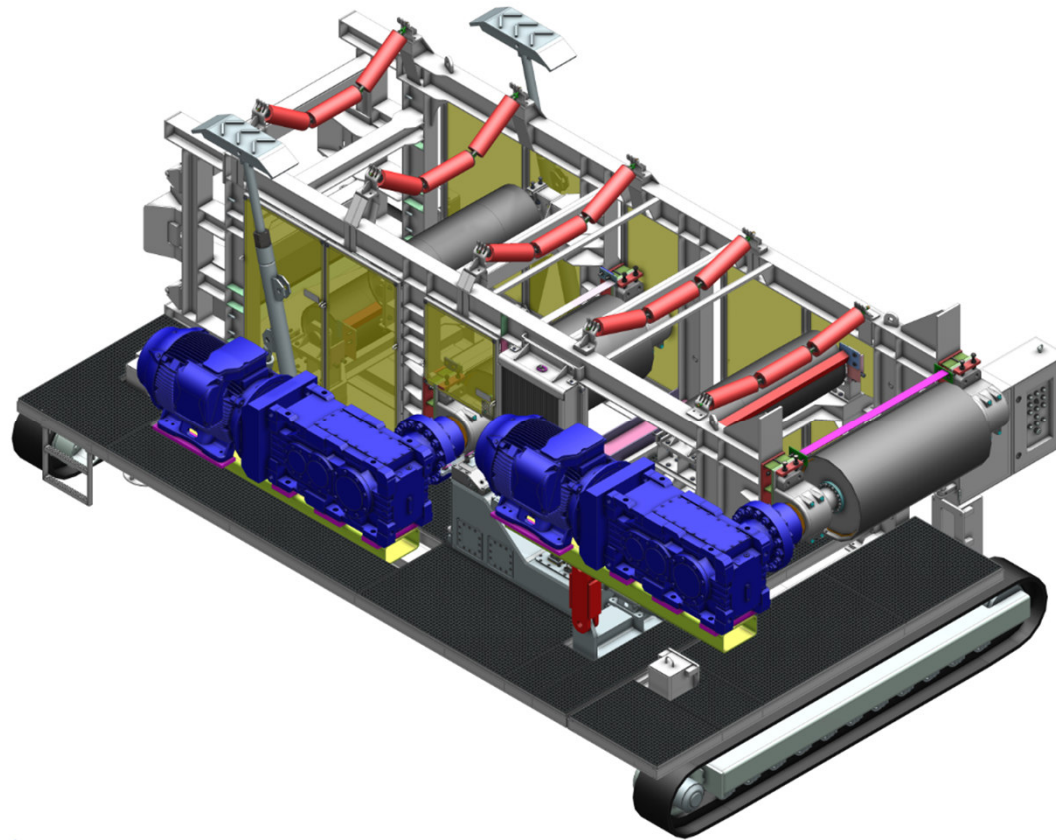
# TUNNEL SECTION



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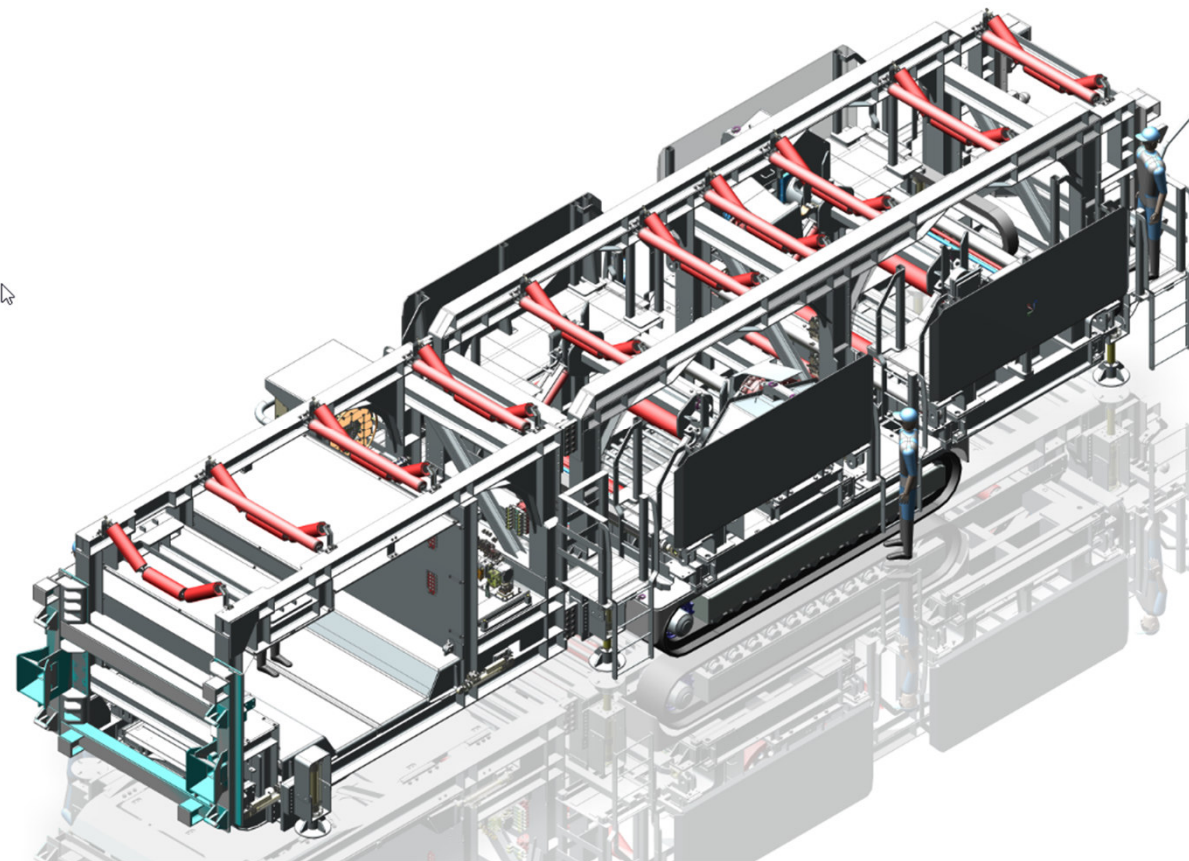
# DRIVE- AND DISCHARGE SECTION



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# SPARE BELT SECTION

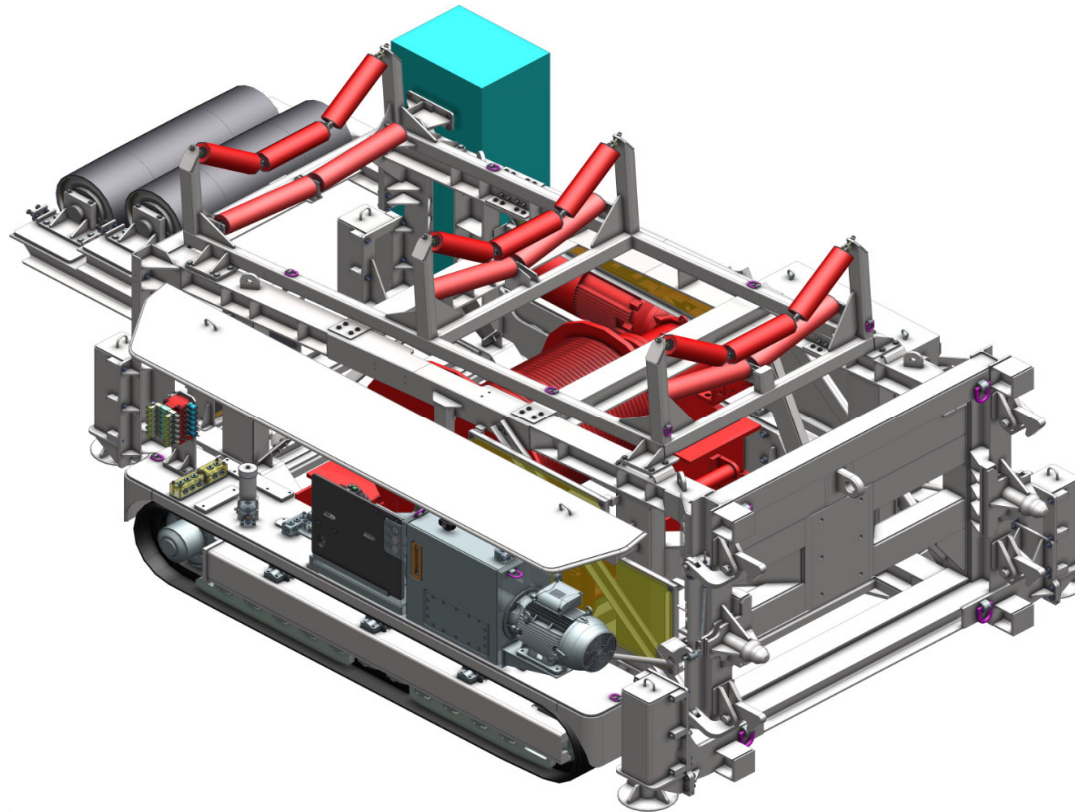


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# WINCH

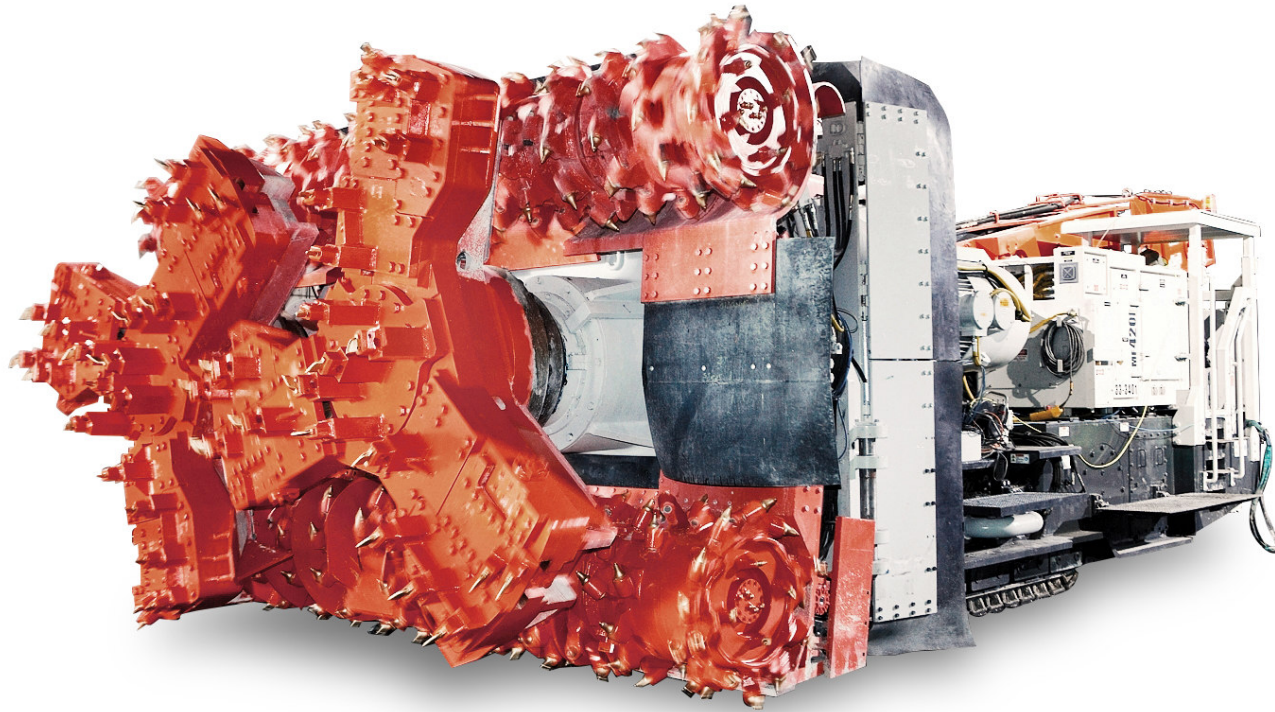


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MF460



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