# WELCOME TO MECHANICAL CUTTING SANDVIK MINING AND ROCK SOLUTIONS





# SAFETY FIRST



Sandvik's objective is zero harm to our people, the environment we work in, our customers and our suppliers.





FIRST AID KIT



ALARM





EMERGENCY EXIT



ASSEMBLY POINT



HEALTH & WELLBEING



PSYCHOLOGICAL SAFETY



SITE ZELTWEG

← CLICK ICON FOR MORE DETAILS



# COMPLIANCE

### **COMPLIANCE**

We've always been committed to conducting business with high integrity and in a legal and ethical manner. We embrace our corporate responsibility to combat corruption.





# MECHANICAL CUTTING DIVISION WITH SITE ZELTWEG

# **MECHANICAL CUTTING**

### **DIVISION MAIN FACTS**

~1,050

**EMPLOYEES** 

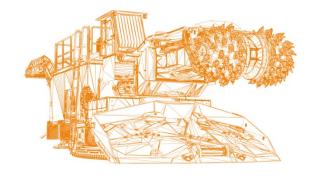
**SALES IN** 

**SALES AREAS** 

2,912 **BILLION SEK IN REVENUES**  18.3% **EBIT IN % OF INVOICING** 

2,910 **BILLION SEK IN ORDERS** 







Figures refer to Mechanical Cutting Division total 2020

# MECHANICAL CUTTING DIVISION

### **WORLD-LEADING POSITIONS**





**Underground continuous mining and tunneling** comprises activities continuously **cutting** and **conveying** of material (soft and hard rock) directly along the excavation, including comprehensive **parts and services** offering to improve your productivity and reduce your operating costs.



# MECHANICAL CUTTING FOOTPRINT

MeCu



#### A ZELTWEG, AUSTRIA

 Competence Center Mechanical Cutting

#### B BRIER HILL, USA

Rebuild Center
 Mechanical Cutting

#### C KHOMANANI, SOUTH AFRICA

 Rebuild Center Mechanical Cutting, Assembly Center for Flameproof Load and Haul (shared with other divisions)

#### D TYCHY, POLAND

 Repair Center Mechanical Cutting

#### E KEMEROVO, RUSSIA

Rebuild Center
 Mechanical Cutting
 (shared with P&S)

#### F BAOTAO, CHINA

Rebuild Center
 Mechanical Cutting

#### G HEATHERBRAE, AUSTRALIA

Rebuild Center
Mechanical Cutting

#### H MACKAY, AUSTRALIA

Repair Center

Mechanical Cutting



# MAKE THE SH/FT

### OUR SUSTAINABILITY **GOALS 2030**

We will lead the shift in our industry and build a successful long-term business that advances the world through engineering. Our aim is to be the innovative business partner for our customers by making sustainability part of every aspect of business, delivering value for everyone. Our full lifecycle approach means we work relentlessly in our operations, across our supply chain and through our customer offerings to drive more sustainable, resilient business





#### CUSTOMERS

Material and resource efficiency improvement part of all development projects

Develop business models for recycling/circularity for our customers

#### **OPERATIONS**

Our products including packaging material shall have at least 90% material circularity Halve waste in our production processes

#### SUPPLIERS.

Require 90% circularity for key suppliers

**WEBUILD CIRCULARITY** 

More than



#### CUSTOMERS

CO2 improvement part of all product development projects

Value proposition to our customers shall always include verified CO<sub>2</sub> reduction potential

#### OPERATIONS

Halve the CO2 foot print from our own production Halve the CO2 foot print for transportation of people and products

Require halving of CO2 foot print from our key suppliers

### WESHIFT CLIMATE

Halve the CO<sub>2</sub>

### WE CHAMPION **PEOPLE**

Zero harm to people



#### CUSTOMERS

Health & Safety improvements part of all product development projects Health & Safety/risk analyses with all products and services

OPERATIONS Halve Total Recorded Injury Frequency Rate (TRIFR) and occupational illnesses All Sandvik employees to be offered

health and well-being programs

#### SUPPLIERS

Require health & safety improvements plan to reach Sandvik standards from key suppliers

#### PERFORMANCE MANAGEMENT

Integrated within performance management systems and part of the incentive program for top managers

Create sustainability idea program with 100,000 sustainability ideas or innovations proposed by 2030

#### THE SHIFT CHAMPIONS

Sustainable business partner award implemented (like Wilhelm Haglund Medal)

#### GOOD GOVERNANCE

Well functioning and efficient governance, through The Sandvik Way and the Sandvik Code of Conduct

#### TRANSPARENCY

We will drive change through transparency of our progress, learnings and ways of working

### OUR **ENABLERS**

How we'll drive the change

### WEPLAY FAIR

Always do the



#### CUSTOMERS

Know Your Customer (KYC) process leading to active, sustainable choices Increased transparency on sustainability targets and results

Proactive and agile Compliance system fully embedded in business operations Diverse and inclusive workforce with at least one third female managers Everyone engaged in community involvement with a significant positive impact on society

All suppliers compliant with Sandvik Supplier Code of Conduct

## **OUR GOAL: MORE THAN 90% CIRCULAR**

CIRCULAR BUSINESS MODEL WITH REBUILDS OF EQUIPMENT AND COMPONENTS

LAUNCH OF CUTRONIC FOR CUTTING AUTOMATION

USE HIGHLY AUTOMATED CUTTING AND BOLTING FEATURES TO SAVE RESOURCES

SANDVIK LS312 WITH EHS IMPROVEMENTS OF 20% FUEL AND RELATIVE CO<sub>2</sub> SAVINGS

NEW WASTE MANAGEMENT SYSTEM, WASTE PROCESSES AND TRAINING IN OUR PRODUCTION UNITS



#### LIFECYCLE 1

YEAR 1-5 Original purchase

#### LIFECYCLE 2

YEAR 5–10 Rebuild of equipment & components

#### **LIFECYCLE 3**

YEAR 10–15 Rebuild of equipment & components



# OUR GOAL: HALVE THE CO<sub>2</sub> IMPACT

AUTOMATED CUTTING TO REDUCE CARBON FOOTPRINT

**ELECTRICATION OF FLAME PROOF LOADERS** 

SANDVIK LS312: -20% FUEL

PRODUCTION UNITS INITIATIVES

- GREEN ENERGY
- REDUCED ENERGY USAGE WITH 25% SINCE 2017
- NEW PHOTOVOLTAIC SYSTEM ON THE WORKSHOP ROOF CLICK ICON FOR ENVIRONMENTAL BENEFITS
- CLICK ICON FOR ENVIRONMENTAL BENEFITS



TRANSPORT TRANSFORMATION FOR BUSINESS TRIPS









## **OUR GOAL: ZERO HARM TO PEOPLE**

LAUNCH OF CUTRONIC AND MECHANIZED BOLTING REDUCES HUMAN EXPOSURE TO HAZARDOUS WORK AREA

CONTINUE 0 LTI JOURNEY FOR MECU, CURRENTLY <= 0.51 INCL. 2 SALES AREAS

TOTAL RECORDED INJURY FREQUENCY RATE (TRIFR) TARGET <= 3.1

DETAILED HEALTH & WELLBEING PROGRAM

BIKES AND ALTERNATIVE MEANS TO GO TO WORK

RAISE MATURITY LEVEL OF SAFETY CULTURE AT OUR KEY SUPPLIERS





### OUR GOAL: ALWAYS DO THE RIGHT THING



JOINT CUSTOMER PRODUCT DEVELOPMENT PROGRAM

TOP @ COMPLIANCE LEAGUE TABLE

TOP @ CODE OF CONDUCT LEAGUE TABLE

TOP @ INTERNAL CONTROL LEAGUE TABLE

KEY FOCUS ON ENTERPRISE RISK MANAGEMENT (ERM) AND HOUSE OF COMPLIANCE

PROMOTE DIVERSITY AND INCLUSION

SOCIAL RESPONSIBILITY

GOOD CORPORATE CITIZEN

EQUAL OPPORTUNITIES AND WORKING CONDITIONS FOR ALL

>90% CONTRACT COVERAGE FOR SUPPLIER

# ALL CUTTING EQUIPMENT ALREADY ELECTRIC

### CURRENT MAIN ELECTRIC OFFERING

#### MINING

- Room & Pillar
- Long room

#### MINE INFRASTRUCTURE

- Access roadways
- Longwall gate roads

### CONSTRUCTION AND TUNNELING

### CONTINUOUS HAULAGE SYSTEMS

 >50% more productive than industry



### PLANS TO FURTHER EVOLVE OFFERING

#### HARD ROCK CONTINUOUS MINING

- MX650 Rapid mine development
- MN330 Narrow reef production system

#### CONTINUOUS HAULAGE

PO140 – Extendable Belt system

### ELECTRIFICATION OF FLAMEPROOF LOADERS





# 1851

**FOUNDED** 

# COMPETENCE CENTER

MECHANICAL CUTTING ZELTWEG, AUSTRIA

~447
EMPLOYEES

99 PERCENT EXPORT MORE THAN

2,750

MACHINES

DELIVERED AROUND THE GLOBE

>55 YEARS

EXPERIENCE IN MINING &
CONSTRUCTION INDUSTRY

# MECHANICAL CUTTING MAIN FACTS SITE ZELTWEG





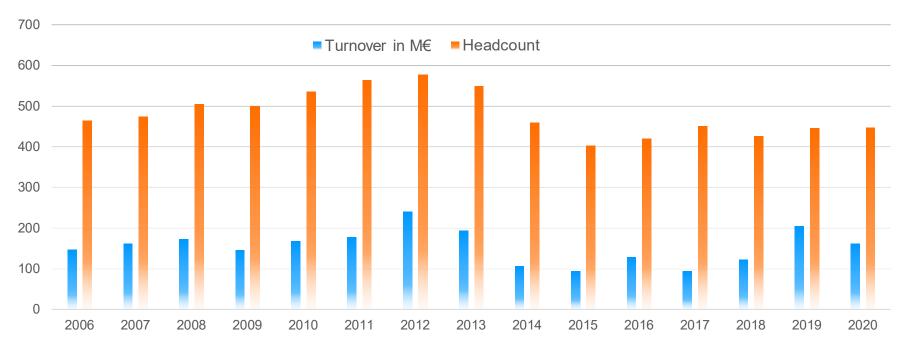
~162.5

MEUR TURNOVER



# SITE ZELTWEG

### TURNOVER / HEADCOUNT





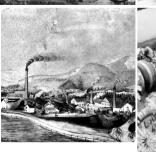
# **ZELTWEG SITE**

### **SHORT HISTORY**

| 1851 | First historic reference: Count Hugo<br>Henckel von Donnersmark founded steel<br>mill in Zeltweg |
|------|--|
| 1862 | 1200 employees, manufacturing railway material for K&K Monarchy                                  |
| 1865 | Assembly work for the roof structure of State Opera House, Vienna                                |
| 1961 | First tunneling machine: Wohlmeyer-tunnel machine  |
| 1965 | First roadheaders (F6-A) to Austria, Italy, France, Morocco                                      |









## **ZELTWEG SITE**

### SHORT HISTORY

1971 First own design: ALPINE MINER AM 50

1991 First Bolter Miner: ABM 20

for Tahmoor Colliery, Australia

1996/98 Takeover by TAMROCK, later taken

over by SANDVIK

2007 Start of Continuous Miner Product Line

2010 Borer Miner MF420, the most powerful machine

of its kind

2013 Roadheader MR341

2015 Bolter Miner MB670-1 upgrade

2015 Inaugeration of new High Load Hardrock Cutting

test rig

2018-2019 Development of new Rapid Mine Development System MX650

2020-2021 Development of new Reef Mining System MN330





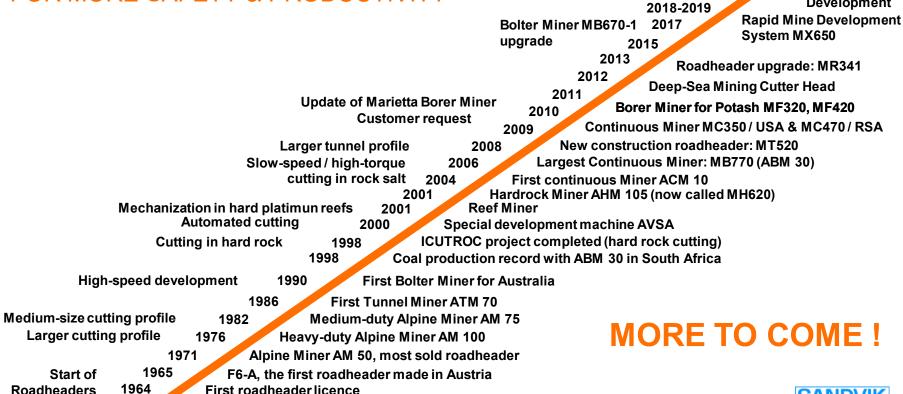






### MECHANICAL CUTTING

### FOR MORE SAFETY & PRODUCTIVITY



First mechanical cutting machine "Wohlmeyer Tunnel Machine"



2020-2021



Reef Miner MN330

**Development** 

1961

# MECHANICAL CUTTING PORTFOLIO OVERVIEW

### UNDERGROUND MINING AND TUNNELING APPLICATIONS





#### **COAL AND MINERALS PRODUCTION**

Room & Pillar mining for coal and minerals

Long room mining for salt minerals

### MINE INFRASTRUCTURE DEVELOPMENT

Access roadways

Longwall gate roads

Shafts, boxholes

CONSTRUCTION AND TUNNELING

CONTINUOUS HAULAGE SYSTEMS
PARTS AND SERVICES



















## **CORE PRODUCTS**

### COAL AND SOFT ROCK MINING

- Bolter miners for development and production
- Continuous miners for room & pillar mining
- Roadheaders for roadway development
- Roadheaders for potash production
- Borer miners for potash production
- Mobile bolters, longwall face bolters
- Feeder breakers
- LHD utility vehicles, shield haulers and trailers



















# **CORE PRODUCTS**

### HARDROCK MINING

- Box hole borers
- Reef miners
- Roadheaders
- Rapid mine development system



# **CORE PRODUCTS**

### **CONSTRUCTION AND TUNNELING**

- Roadheaders for soft rock and hard rock tunneling with CUTRONIC and ICUTROC technology
- Cutting attachments

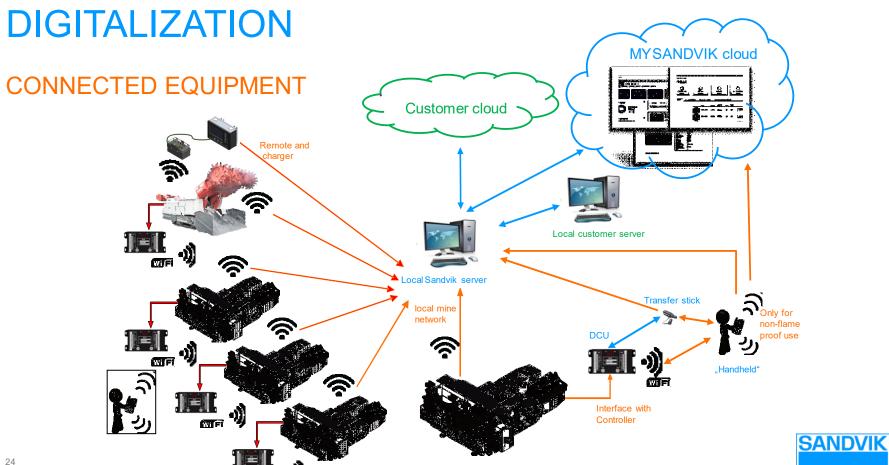








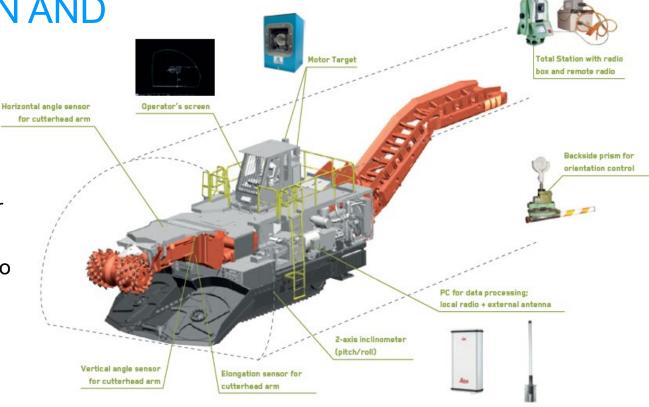




DIGITALIZATION AND AUTOMATION

### **CUTRONIC**

- Profile and tunnel planning with office tool and transfer of plans to machine
- Solution fully integrated into machine control system
- Profile control and automated cutting





### PARTS AND SERVICES YOU CAN COUNT ON

### SANDVIK 365 - MECHANICAL CUTTING OFFERING







- MY SANDVIK Digital Service Solutions
- Service Solutions
- Inspections
- Rebuild Solutions
- Component Solutions
- Genuine Consumable and Kits
- Upgrades and engineered Solutions
- Safety Solutions
- 24/7 Customer Support









## PARTS AND SERVICES – LOGISTICS NETWORK





# MACHINES IN ACTION WORLDWIDE



MB670 / Norway



MC470 / South Africa



MB650 / Australia



MT520 / Germany



MH621 / USA



MB670-1 / Russia



MT720 / Australia



MF420 / Canada



# MACHINES IN ACTION WORLDWIDE



MB670 / Canada



MC430 / South Africa



MT520 / Spain



MR341 / Poland



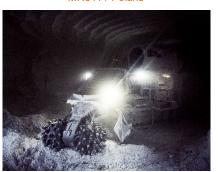
MH620 / Poland



MB770 / Germany



MB650 / Australia



MT520 / Germany



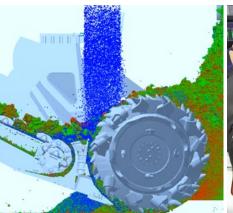
# **INNOVATION FOCUS**

### TECHNOLOGY LEADERSHIP

- Engineering
- Simulation
- Process optimization
- Design for product safety
- Risk assessment







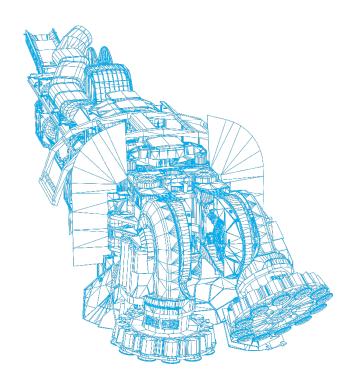




### INNOVATION IN HARD ROCK MINING

### WITH RAPID MINE DEVELOPMENT SYSTEM

- Environment, health and safety benefits
- Speed and reduced time to full production
- Improved tunnel quality reducing support and rehabilitation costs
- Reduced operating costs
- Lower manpower requirements





### **EXCEPTIONAL PEOPLE**

# ATTRACTING, DEVELOPING AND RETAINING

- Geotechnical expertise
- Engineering excellence
- Manufacturing know-how
- Customer focus
- Apprentice training























## **PARTNERS**

### **R&D AND MANUFACTURING**











- EU-funded research projects
- Universities
- Research institutes
- Sandvik partner companies







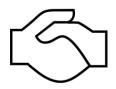




# CORPORATE SOCIAL RESPONSIBILITY

### COMMUNITY INVOLVEMENT STRATEGY

- Regional apprentices strategy
- Regional initiative "KRAFT.das Murtal"
- Partner of CARITAS
- Summer students







# TEAM SPIRIT WITH PASSION TO WIN







