

SUCCESS STORY



Creative. Visionary. Successful.

The efficient cooperation is the foundation for success. Yours and ours.

Passion for successful joining.

BÖLLHOFF

On reliability of machines relay



MineMaster – innovations in mining

Main reason for implementation of innovative solutions to mining equipment is always security of operator and efficiency of his work. Mine Master achieves this goal by development and construction of new machines, but also by improving existing ones. New demands for mining equipment manufacturers are linked with implementation of modern technologies essential to development of “smart” mines, where mainly intellectual potential of each human-being are involved, limiting load of his physical work. Mine Master is one of the main suppliers of KGHM Polska Miedź. But thank to application of innovative solutions and many years of expertise, company sells its products worldwide: to Turkey, Estonia, Portugal, Kazakhstan, Russia, Australia, South Africa, Zimbabwe, Zambia and Chile.

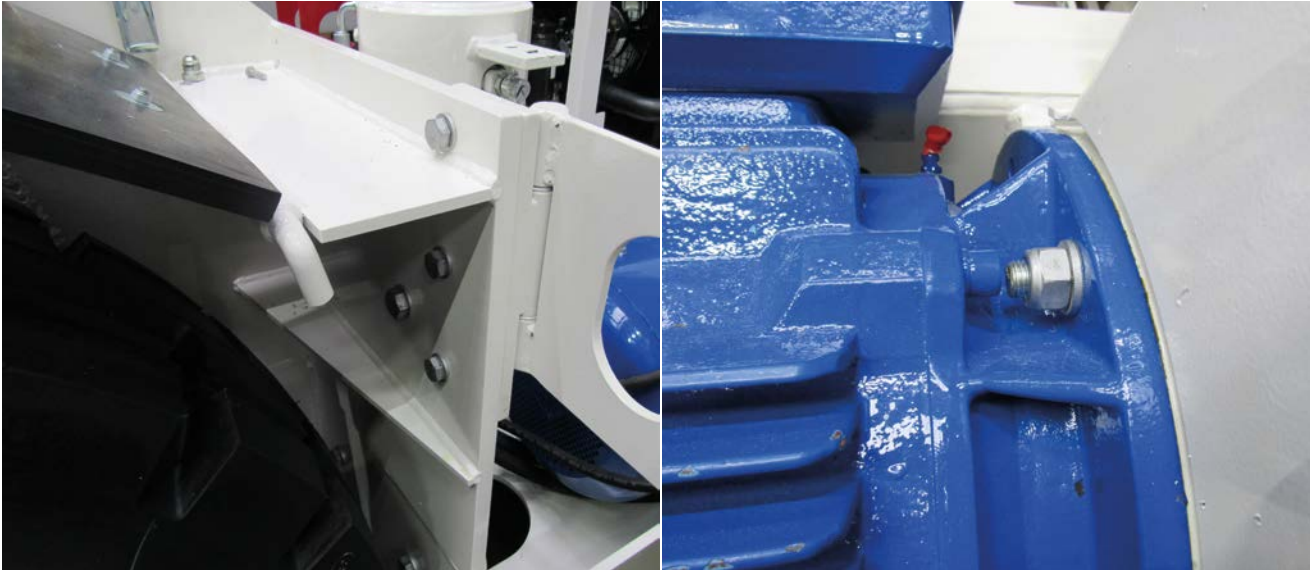
Initial situation

Work underground is one of the most dangerous – for people and to the most demanding – for machines. Each mine has different special extreme conditions, but always on reliability of machines depends security of humans. Considering security of people and reliability of machines spring washers according to DIN were replaced by RIPLOCK® washers. Suggestion from Böllhoff was similar to decision of German Institute for Norms (Deutsches Institut für Normung, DIN), which cancelled from the norms all records about thread-locking properties, referring among others to spring washers.

Products

Drilling machine FACE MASTER 1.7L is best-selling product of Mine Master. It's advantages are modern technical solutions. It is equipped with drilling process support system FGS, which gives to the operator possibility to position drilling-frame precisely and to drill holes according to pre-recorded metrics. Drilling machine has innovative option online data transfer. These are data monitoring work of drilling machine and it's operator are transferred directly from underground. Machine has also air-conditioned, hydraulically lifted cabin.

human's security



Solution: RIPP LOCK®

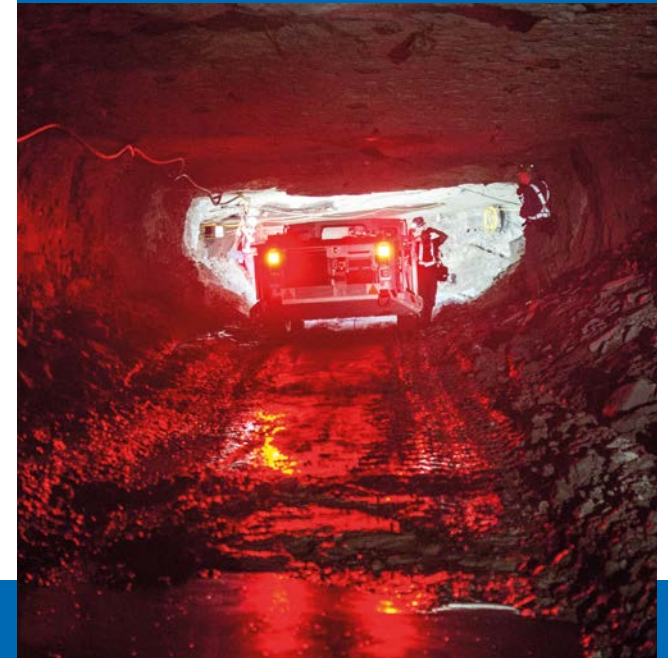
RIPP LOCK® washers efficiently secure screw connections due to their mechanical properties. Radial ribs' angle of inclination is wider than thread pitch. After tightening an excellent securing effect is received – even under vibrations and dynamic load. RIPP LOCK® washers are cost-effective and versatile solution – external diameter is the same as washer according to DIN 125 / ISO 7089. This is why it suits to nearly all applications. High quality lamely zinc coating ensures efficient protection against corrosion. Salt spray test demonstrates protection against red corrosion through 480 hours.

Customers benefit

- Excellent locking against self-unscrewing
- Corrosion resistance
- Abrasion-proof
- Increased quality

Product characteristics

- Screw lockings
- Corrosion and temperature resistant
- Possible to use with all property classes up to 12.9
- Easy assembly and removal
- Multiple re-use
- Gentle to contact surface



Böllhoff International with companies in:

Argentina	Mexico
Austria	Poland
Brazil	Romania
Canada	Russia
China	Slovakia
Czechia	South Korea
France	Spain
Germany	Switzerland
Hungary	Thailand
India	Turkey
Italy	United Kingdom
Japan	USA

Apart from these 24 countries, Böllhoff supports its international customers in other important industrial markets in close partnership with agents and dealers.

Archimedesstraße 1 – 4 · 33649 Bielefeld · Germany · Phone +49 521 4482-515 · Fax +49 521 4482-350
www.boellhoff.com · fasteningtechnology@boellhoff.com

Böllhoff Group

