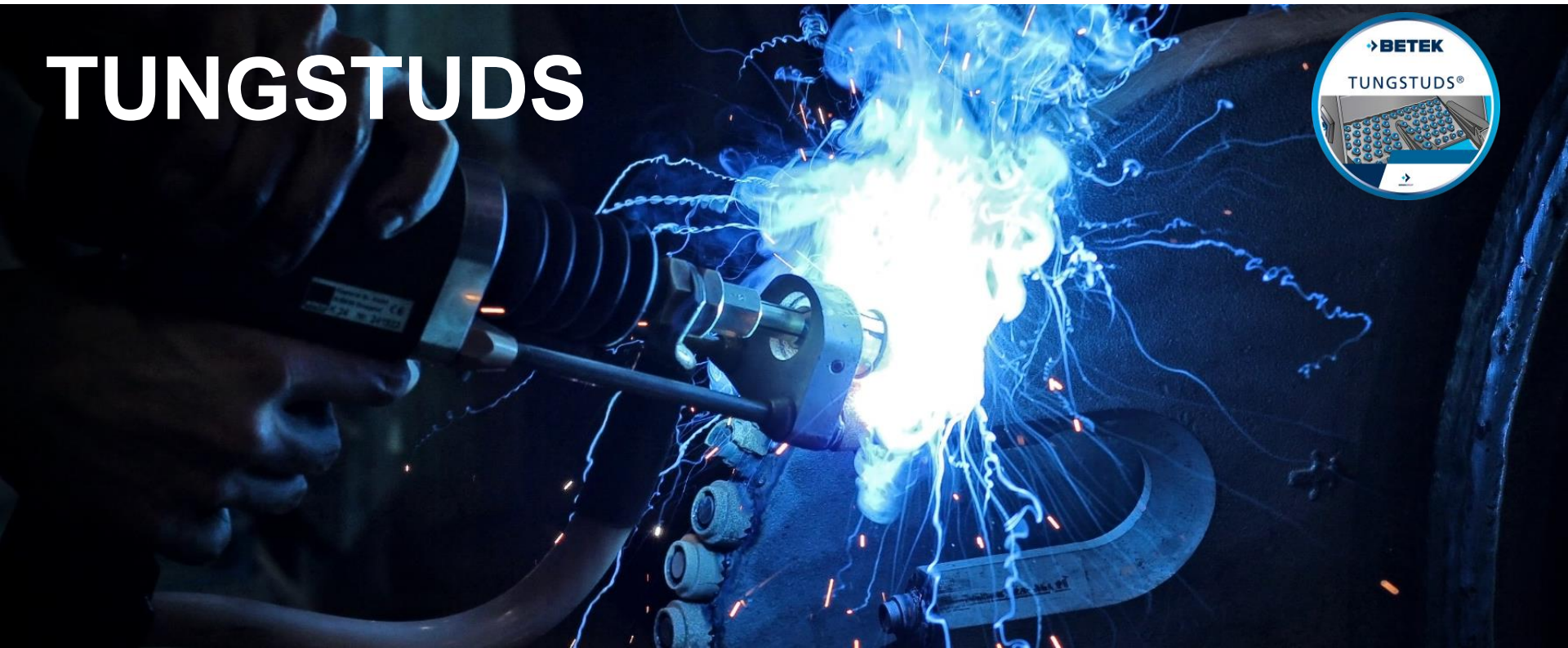


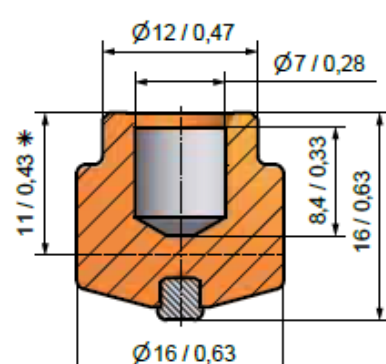


TUNGSTUDS

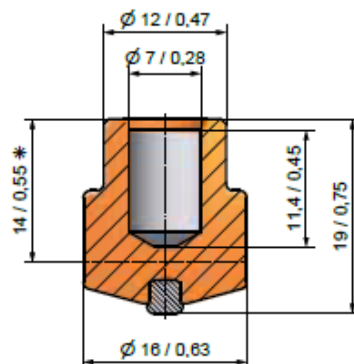


TUNGSTUDS

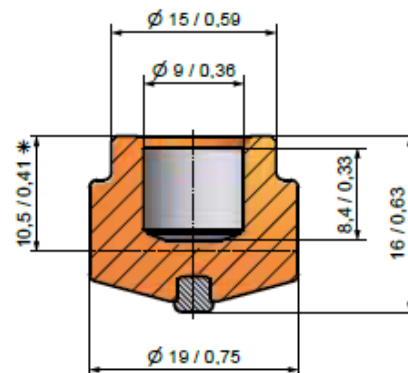
WEAR PROTECTION



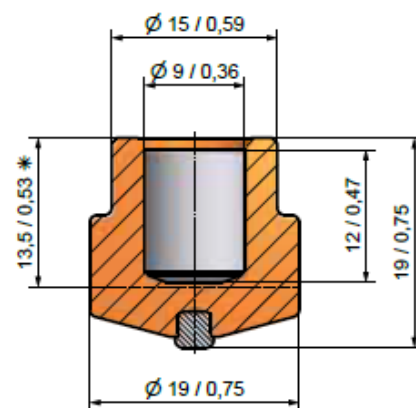
■ **BTS01**
BTSD16/16



■ **BTS02**
BTSD16/19



■ **BTS03**
BTSD19/16

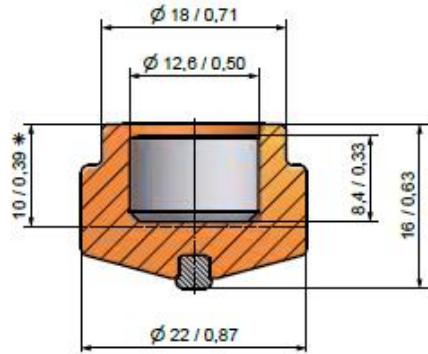


■ **BTS04**
BTSD19/19

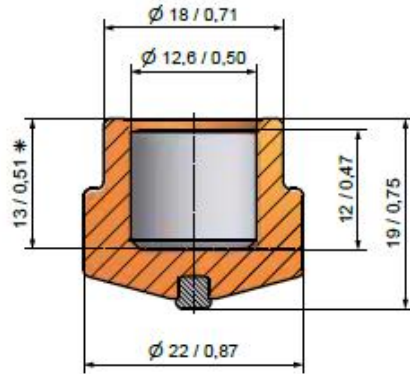


TUNGSTUDS

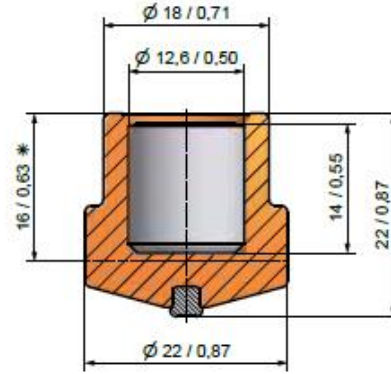
WEAR PROTECTION



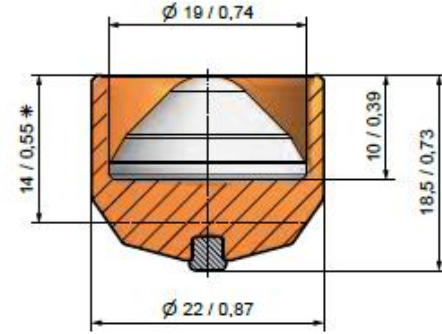
■ **BTS05**
BTSD22/16



■ **BTS06**
BTSD22/19



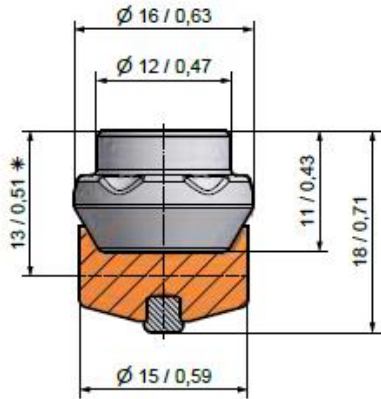
■ **BTS07**
BTSD22/22



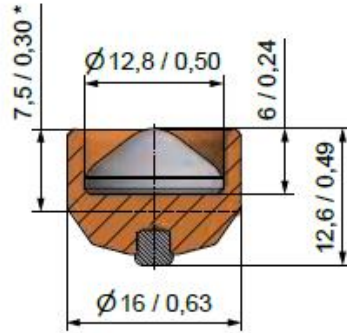
■ **BTS08**
BTSD22/18,5SG



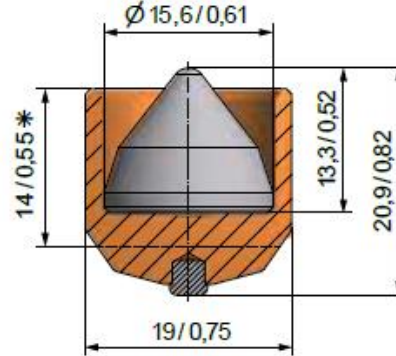
TUNGSTUDS WEAR PROTECTION



■ **BTS10B**
BTSD16/18B



■ **BTS20**
BTSD16/12,5SG

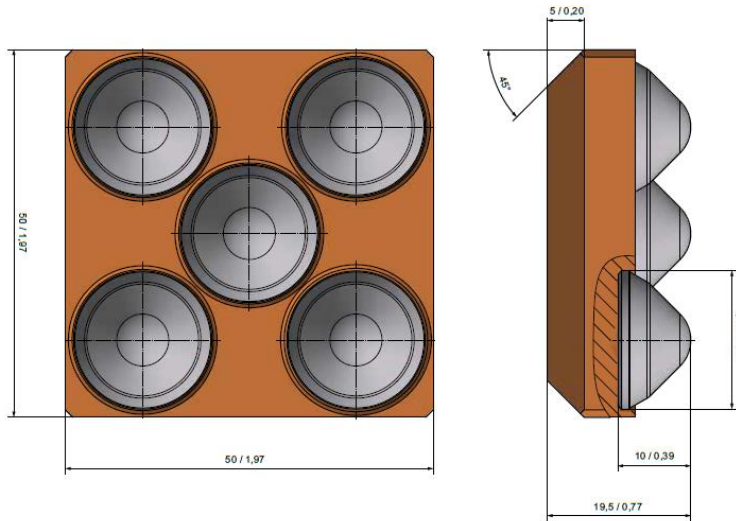


■ **BTS100**
BTSD19/15,6SG



TUNGSTUDS

WEAR PROTECTION



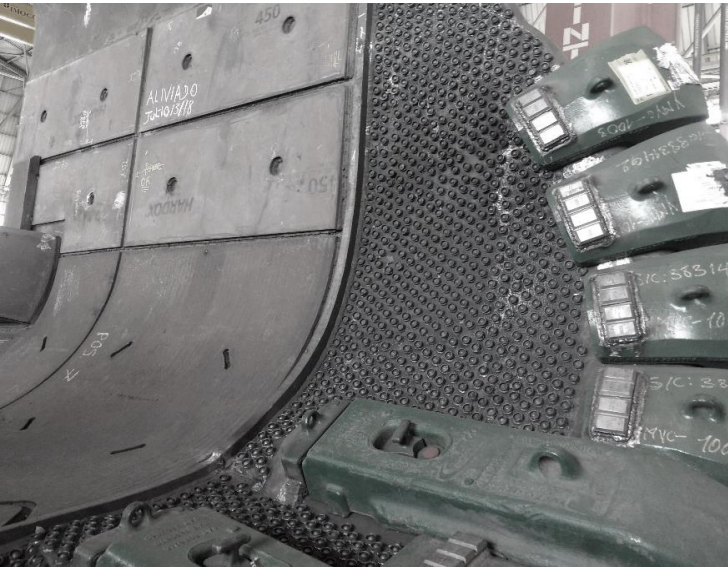
DIMENSIONS

Width in mm	Length in mm
50	50
75	75
100	100
125	125
150	150

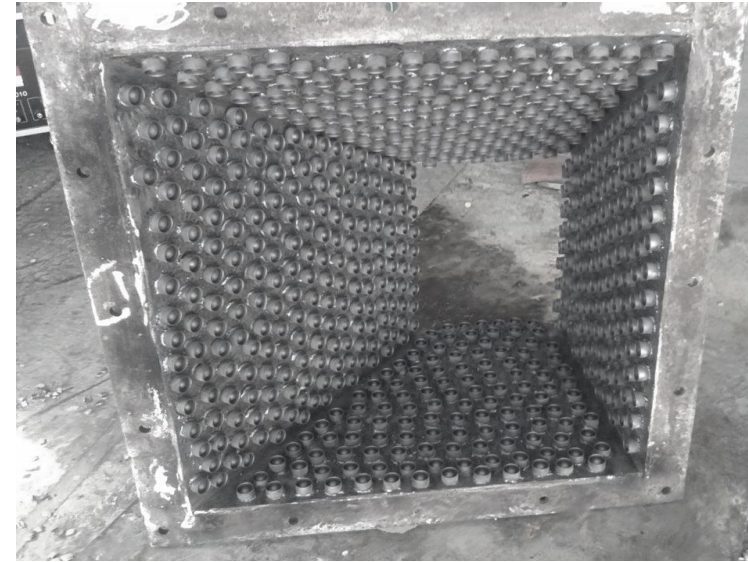
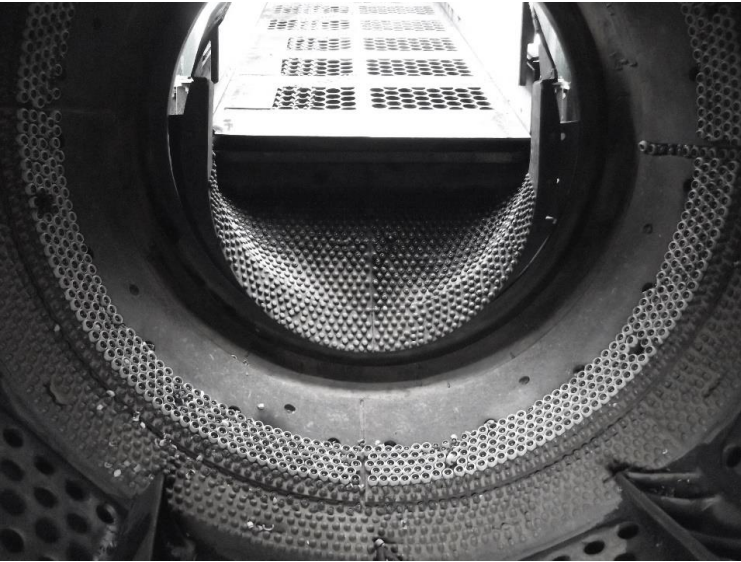
Other sizes on request

TUNGSTUDS

GENERAL MINING EXAMPLES

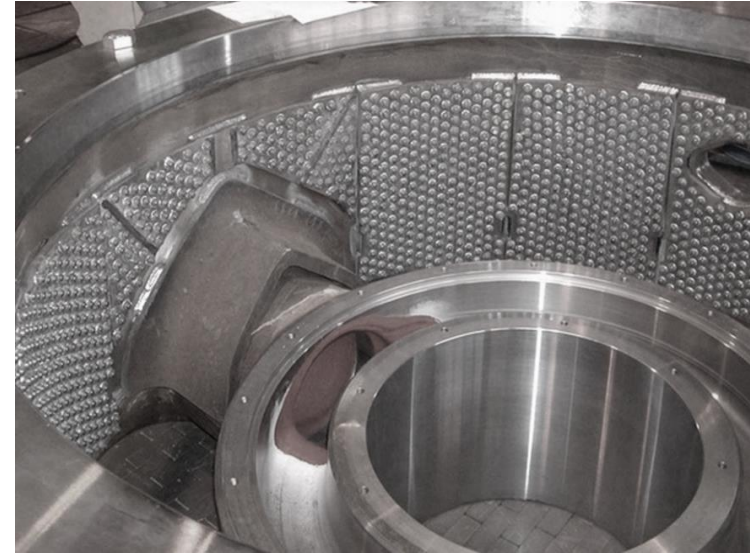
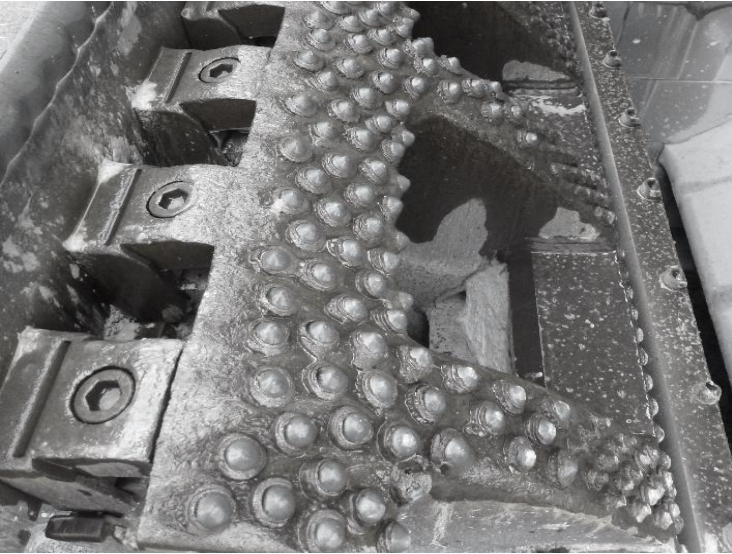


TUNGSTUDS CHUTES



TUNGSTUDS

CRUSHING & MIXING



TUNGSTUDS

UNDERGROUND MINING



TUNGSTUDS PLATES



TUNGSTUDS

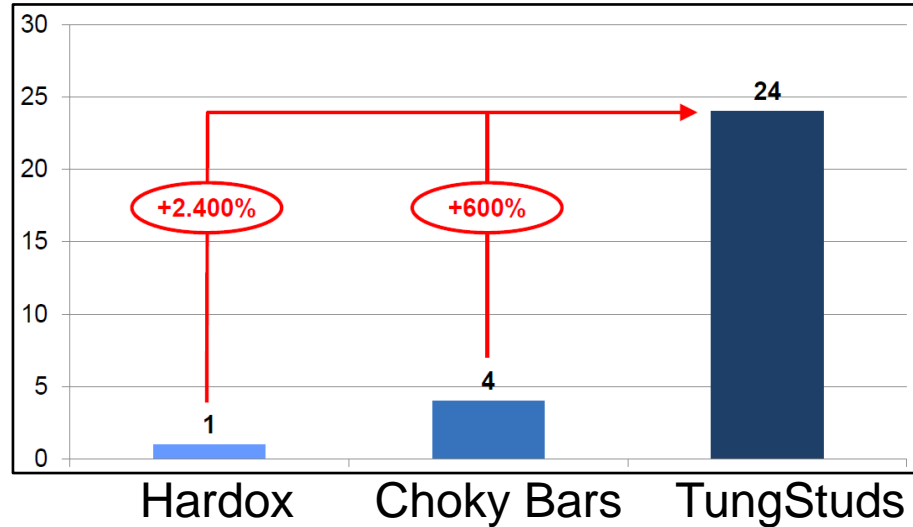
OPEN PIT MINING - EXAMPLES



TUNGSTUDS

GENERAL LIFETIME COMPARISON (IN MONTHS)

Application: Chutes, raw material up to 6% of quarz



TUNGSTUDS

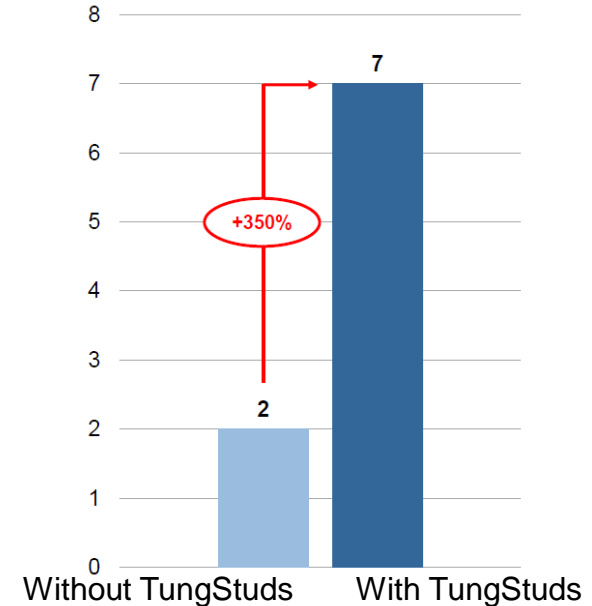
MAIN CLIENTS



TUNGSTUDS

APPLICATION: IMPACT PLATE, HAZEMAG HSI-CRUSHER

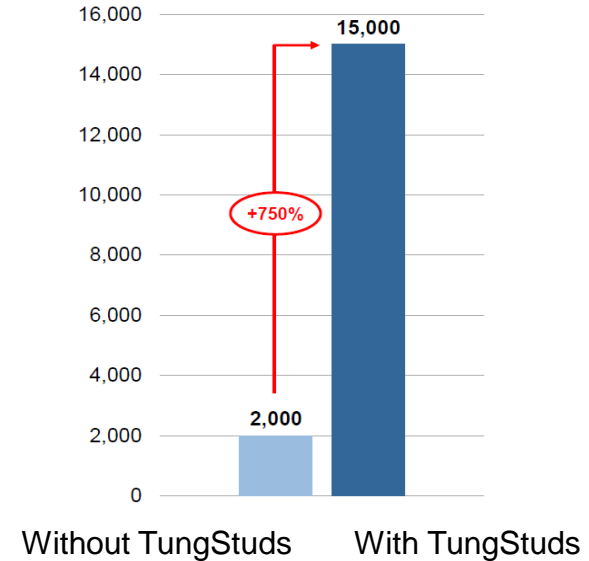
Lifetime in months without and with TungStuds at a Cemental Mine



TUNGSTUDS

APPLICATION: EXCAVATOR BUCKET

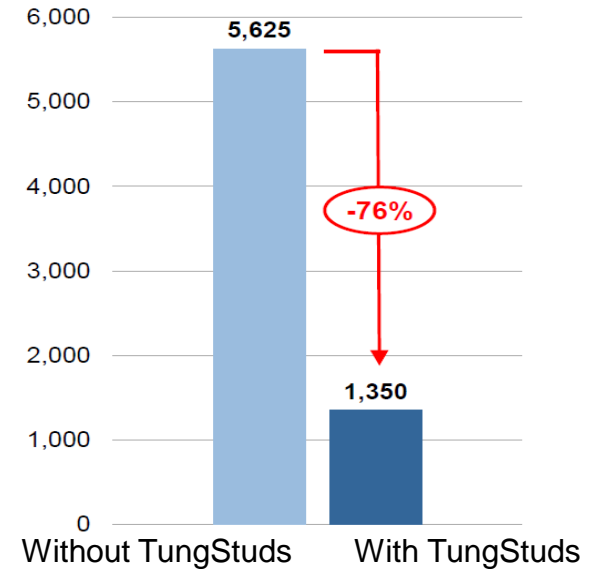
Lifetime in hours without and with TungStuds at a Coal Mine



TUNGSTUDS

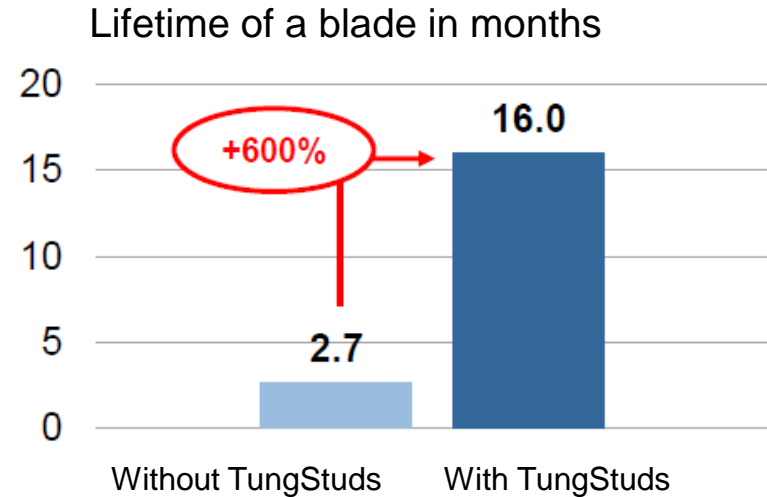
APPLICATION: EXCAVATOR BUCKET

Total costs for 15.000 hours without and and with TungStuds at a Coal Mine



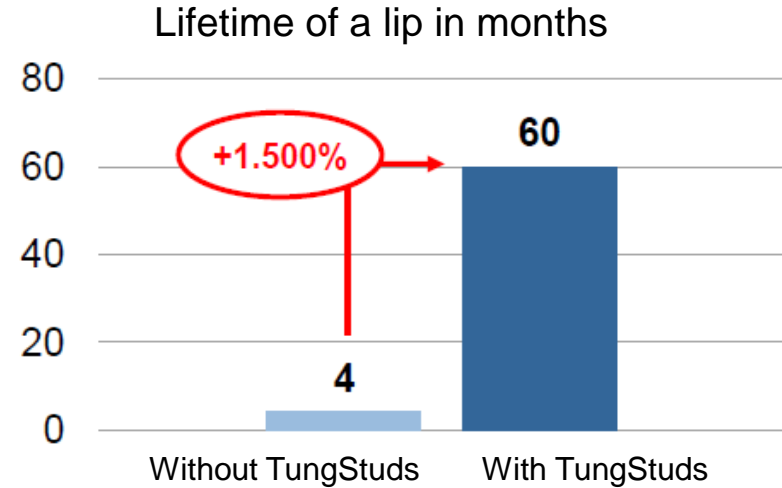
TUNGSTUDS

APPLICATION: EXCAVATOR BUCKET IN CONCRETE MINE



TUNGSTUDS

APPLICATION: EXCAVATOR BUCKET LIP IN CONCRETE MINE

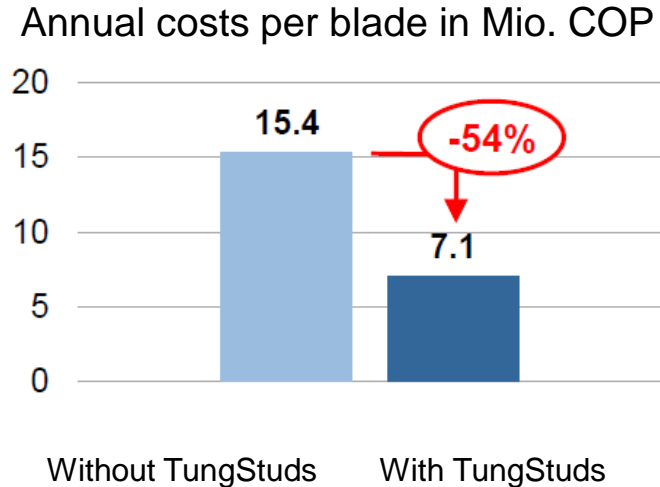


TUNGSTUDS

APPLICATION: EXCAVATOR BUCKET IN CONCRETE MINE



Costs of a Blade 3.400.000 COP
(approx. 1.180 USD)
Lifetime without Tungstuds: 2,7 months
New Lifetime with Tungstuds: 16 months
Hourly costs for technical setup: 22.000 COP

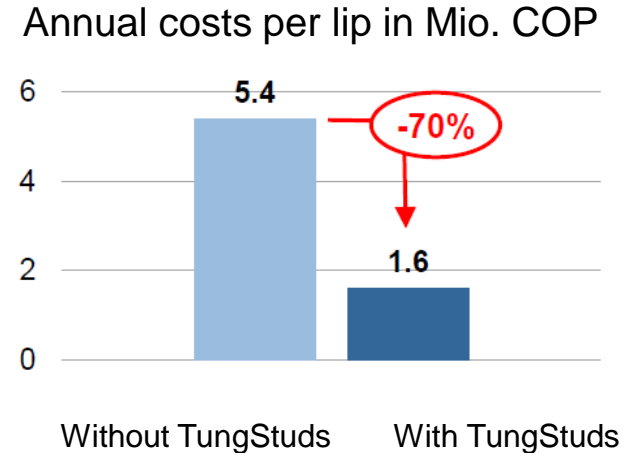


TUNGSTUDS

APPLICATION: EXCAVATOR BUCKET IN CONCRETE MINE



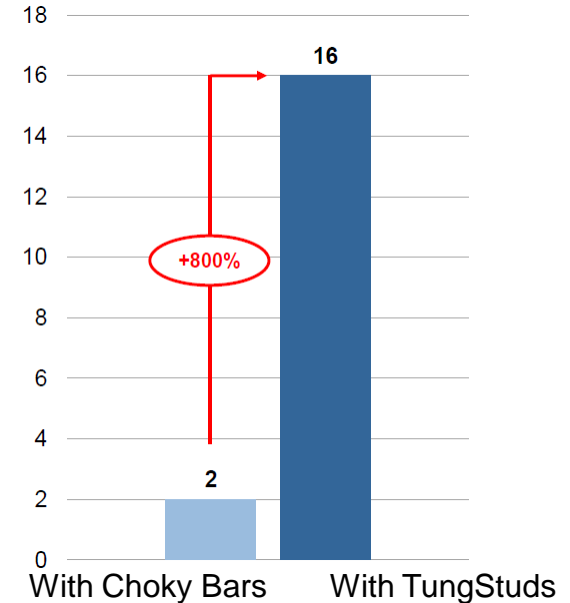
Costs of a Lip 1.800.000 COP
(approx. 625 USD)
Lifetime without Tungstuds: 4 months
New Lifetime with Tungstuds: 60 months



TUNGSTUDS

APPLICATION: SIDE PLATES OF ROLLER PRESS

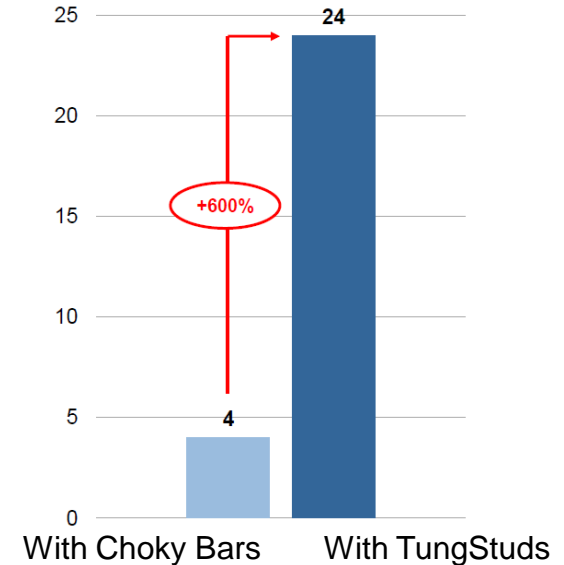
Lifetime in months without and with TungStuds at a Cemental Mine



TUNGSTUDS

APPLICATION: CHUTES OF RAW MATERIAL (QUARZ 6%)

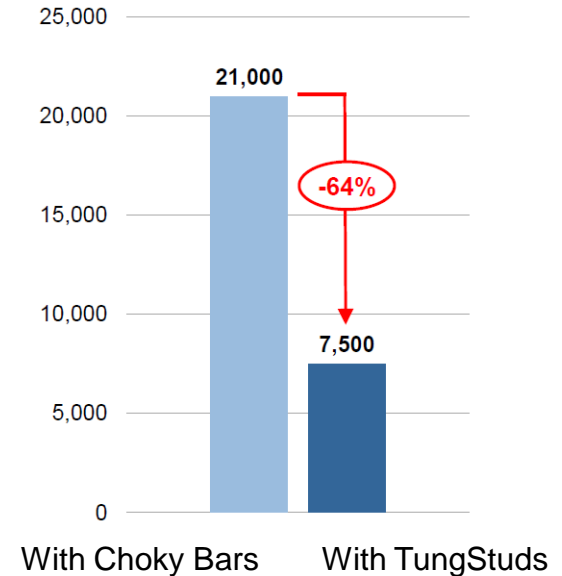
Lifetime in months with Choky Bars and TungStuds at a Cemental Mine



TUNGSTUDS

APPLICATION: CHUTES OF RAW MATERIAL (QUARZ 6%)

Annual costs each m² with Choky Bars and TungStuds at a Cemental Mine



TUNGSTUDS

BENEFITS

- Quick – Fast and easy welding procedure
- Flexible – Can also be applied in irregular surfaces
- Replaceable – TungStuds can be replaced when worn
- Tough – High wear resistance due to tungsten carbide core
- Effective – Less maintenance and higher productivity
- Efficient – Cost reduction through less downtime



