



EUROPEAN UNION



GOVERNMENT OF ROMANIA



SERBIAN GOVERNMENT



Structural Funds
2007-2013



Romania - Republic of Serbia IPA Cross-border Cooperation Programme

Presentation of the Martenzit firm, Bor

Miroslav Đorđević



Romania-Serbia

Common borders. Common solutions.

<http://www.martenzit.rs>



MARTENZIT



alati i pribor za istražna geološka, hidrogeološka, eksploataciona i druga bušenja
tools and equipments for geological prospecting, hydro geological, exploitation and other drilling



- Started in 2003. with production of bits and accessories for geological exploration
- Expanded on national and international market
- Cooperation with national institutions
e.g. Mining and Metallurgy Institute Bor



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Production of diamond bits by hot compacting is one of the main activities. The process is taking place in the sintering furnace (power 10kW, pressure 350 bar). Some of the technological characteristics are:

- pressure (cold compacting) - 42 bar
- pressure (hot compacting) - 45 bar
- Isothermal time - 15 min
- The time under the final pressure - 20-30 s



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Metal powders which are used in this kind of sintermetallurgy are:

- W powder (44 μm)
- WC powder (44 μm)
- Fe powder (74 μm)
- Co powder (2-3 μm)
- CuZnNi (74 μm)
- Diamond powder (25/35 mesh)
- Diamond grains (40/50 spc)



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Sintering technology is also used in bronze bushings production. These kind of bushings are made of CuSn15 and are used as spare parts for drilling hammers in underground conditions.



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KRUNE



MARTENZIT proizvodi sve tipove i standarde kruna za bušenje:

- Dijamantske kruna:

- za bušenje sa jezgrom
- za bušenje bez jezgra

-Kruna sa ugrađenim tvrdin metalom(vidija):

- kruna za bušenje sa jezgrom
- kruna za bušenje bez jezgra
- za rotaciono bušenje
- za udarno bušenje

BITS

MARTENZIT produced different qualities and standards drilling t

- Diamond bits:

- coring bits
- non coring bits

-Tungsten carbide bits:

- coring bits
- non coring bits
- for rotation drilling
- for percussion drilling



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DIJAMANTSKI ALATI

DIJAMANTSKE KRUNE

Dva glavna tipa dijamantskih kruna su na raspolaganju:

- kruna sa površinski ugrađenim dijamantima (zrnaste)
- kruna sa dijamantskom prašinom (impregnirane)

DIAMOND TOOLS

DIAMOND BITS

Two main types of diamond bits are available:

- surface-set bits, usually used in soft to hard formation
- impregnated diamond bits, essential for difficult coring operations in very hard fractured rock





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Thank you for your attention!