ENERGY EFFICIENCY

GEEE

EE IN UNDERGROUND MINING

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UNDERGROUND MINING - OVERVIEW

- ONE OF THE BIGGEST PRODUCTION SECTOR
- GLOBAL IMPORTANT SECTOR
- LARGE QUANTITY OF EQUIPMENT AND MACHINES
- HIGH CONSUMPTION OF ENERGY AND FUEL
- DIFFERENT TYPE OF ENERGY CONSUMPTION
- LARGE QUANTITY OF EMISSIONS
- SIGNIFICANT FUEL AND HEAT POLLUTION
- EXPENSIVE EQUIPMENT
- VERY BAD CONTROL OF ENERGY CONSUMPTION
- USE LARGE & HEAVY PRODUCTION MACHINES
UNDERGROUND MINING – EE OPPORTUNITIES

- IMPORTANT INVESTMENT TO NEW PRODUCTION TECHNOLOGY
- INVESTMENT TO R&D
- NEW GENERATION OF DRIVING EQUIPMENT
- NEW MINING PROFILE
- REDUCE THE ENERGY CONSUMPTION – MACHINERY
- REDUCE THE ENERGY CONSUMPTION – EQUIPMENT
- REDUCE THE CO₂ & HEAT EMISSIONS
- REDUCE THE PRODUCTION COSTS
- NEW JOBS FOR HIGH EDUCATED AND SKILLED WORKFORCE
NEW UNDERGROUND MINING - TARGETS

- R&D INVESTMENT
- NEW MINING PROFILE
- REDUCE THE ENERGY CONSUMPTION – MACHINERY
- REDUCE THE ENERGY CONSUMPTION – EQUIPMENT
- REDUCE THE CO₂ & HEAT EMISSIONS
- NEW GENERATION OF DRIVING EQUIPMENT
- REDUCE THE PRODUCTION COSTS
- CONTROL IN FUEL CONSUMPTION AND ENERGY
- ROBOTISATION AND PROCESS AUTOMATION
NEW MINING EQUIPMENT - CHARACTERISTICS

- BETTERY OR FUEL CELL POWERED
- MODULAR TYPE OF MACHINES – NEW STANDARDS
- REMOTE CONTROL MACHINES
- ULTRA LOW PROFILE MACHINES
- BETTER CONTROL AND MANAGEMENT OF MACHINES
- DRAMATICALLY REDUCING ENERGY CONSUMPTION
- DISTINCTIVE FEATURES AND SAFETY EQUIPMENT
- LOW ENERGY CONSUMPTION
- PERMANENT CONTROL ENERGY CONSUMPTION
- WEIGHT REDUCTION OF EQUIPMENT
- LARGE REDUCTION OF EMISSIONS
NEW MINING TECHNOLOGY - PROVIDES

- NEW MINES CONSTRUCTION PROFILE
- MODULAR MACHINES & SIMPLE
- LOWER INVESTMENT IN MINES DEVELOPMENT
- REDUCTION OF INVESTMENT TO THE NEW EQUIPMENT
- REDUCE THE PRODUCTION PANEL SIZE
- NEW PRODUCTION TECHNOLOGY & PROCESSES
- NEAR ZERO POLLUTIONS
- NEAR ZERO EMMISIONS
- LOWER INVESTMENTS TO AIR CONDITIONING
- HIGH LEVEL OF PROFITABILITY
- SIGNIFICANT REDUCTION IN WASTE ROCK EXCAVATION
- BETTER SERVICE AND SIMPLIFIED MAINTENANCE
NEW EQUIPMENT PROVIDES SIGNIFICANTLY REDUCE THE ENERGY & DIESEL FUEL AT THE NATIONAL AND GLOBAL LEVEL

DRASTICALLY REDUCING THE INVESTMENT IN MINING DEVELOPMENT AND PROVIDE GREATER PROFITABILITY OF THE MINING SECTOR

INVESTMENTS IN DEVELOPMENT OF NEW MACHINERY AND EQUIPMENT HAS SIGNIFICANT IMPACT ON DEVELOPMENT OF THE NATIONAL ECONOMY

CONSIDERABLY ENCOURAGES JOB CREATION FOR HIGHLY EDUCATED AND QUALIFIED PERSON
CROATIAN CASE

- LARGE R&D INVESTMENT
- THE NEW GENERATION OF MACHINES DESIGNED
- MODULAR & INNOVATIVE EQUIPEMENT
- EXCELLENT PERFORMANCE
- EXTRIMELLY LOW ENERGY CONSUMPTION
- NO EMISSIONS AND POLLUTIONS
- ULTRA LOW PROFILE & REMOTE CONTROL MACHINES
  - DOZER, DRILL RIG, SWEEPER, BOLTER, LOADER
  - WIRELESS DOZER
  - UNDERWATER SPECIAL PURPOSE REMOTE CONTROL MACHINES
- PROTOTYPES TESTED
- THE MACHINES DO NOT USE DIESEL FUEL
- FEW MACHINES OPERATED ABROAD
THANKS

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