

HWGU/SMW HYDRAULIC IMPACT MINING DRILLS



Device description:

HWGU/SMW hydraulic impact mining drills are designed for drilling holes in hard coal and soft shale with typical spiral drill rods up to 48 mm in diameter.

The driving element of the drills is a hydraulic satellite motor of the SMW type adapted to be supplied with oil water emulsion of the HFA type coming, for example, from emulsion hydraulic buses of mechanized casings. Oil supply from other hydraulic power sources is also possible. An additional design element is a simple impact mechanism that makes drilling in harder materials easier and more efficient.

In addition, the HWGU/SMW hydraulic mining drills are equipped with a slotted filter to eliminate larger dirt from the feed medium.

The detailed design of the equipment is the result of direct long-term cooperation with the end users of such tools.

The handlebar with a double-sided handle with optimum spacing, the slider control system, the built-in filtration system and the low noise level emitted (77dB(A)) make the tools ergonomic, functional, durable and safe to use. These features undoubtedly help optimize operating costs.

MANUFACTURE AND SERVICE

Grupa SM Hydro

ul. Karolinki 10B, 40-467 Katowice

tel.: +48 (32) 353 03 75

e-mail: biuro@smhydro.com.pl

www.smhydro.com.pl



Drive unit description:

HWGU/SMW type mining drills are powered by SMW type hydraulic satellite motors developed and manufactured by SM Hydro company. These motors are distinguished by their simple and compact design and high torque combined with high efficiency.

The particular advantages of SMW-type hydraulic satellite motors are due to the precision measured in microns and the quality of manufacturing based on state-of-the-art construction materials with high durability, including, among others, the use of sintered carbides. The use of hydraulic satellite motors in mining is most often associated with the use of water-oil emulsion type HFA, but oil supply is also possible. Hydraulic satellite motors of SMW types that drive drilling machines vary in size and torque, making it possible to select a tool with the right power to achieve a specific purpose while ensuring the desired performance and drilling depth.

Hydraulic impact mining drills type HWGU/SMW can operate in potentially explosive atmospheres.



MANUFACTURE AND SERVICE

Grupa SM Hydro

ul. Karolinki 10B, 40-467 Katowice

tel.: +48 (32) 353 03 75

e-mail: biuro@smhydro.com.pl

www.smhydro.com.pl



Technical characteristics of the HWGU/SMW hydraulic impact mining drills

| # | Parameter | Unit | HWGU/SMW 0,7 | |
|-----|--------------------------|---------|---------------------------------------|-----------|
| 1. | Motor type | | SMW 0,7/20 | SMW 07/25 |
| 2. | Geometrical displacement | | 26,3 | 32,9 |
| 3. | Nominal pressure* | MPa | 22 | |
| 4. | Nominal torque | Nm | 77,5 | 100 |
| 5. | Optimal drilling speed | rev/min | do 500 | |
| 6. | Noise level | dB/(A) | <77 | |
| 7. | Filtration | μm | 100 | |
| 8. | Hole diameter | ø mm | do 48 | |
| 9 | Weight | kg | 11 | 11,5 |
| 10. | Feed liquid | | water-oil emulsion HFA, hydraulic oil | |

^{*} When fed with low-percentage HFA emulsion, continuous operation at pressures higher than nominal will result in accelerated wear of the toothed working mechanism of the motor. Pressures higher than nominal in continuous operation are recommended only when fed with hydraulic oils.

All SM-type and SMW-type motors are suitable for operation on HFA water-oil emulsion. They can also be operated with hydraulic and also vegetable oils.

Detailed information on motors range can be found at www.smhydro.com.pl

MANUFACTURE AND SERVICE

Grupa SM Hydro

ul. Karolinki 10B, 40-467 Katowice

tel.: +48 (32) 353 03 75

e-mail: biuro@smhydro.com.pl

www.smhydro.com.pl