

HYDRAULIC DRILLING MACHINE VHS 1 WK (EMULSION DRIVE)

Use and description:

Hydraulic drilling machine **VHS 1 WK** (hereinafter only drilling machine – see fig. 1) is intended for drilling of holes with diameter up to 200 mm in coal for the positioning of the support parts necessary for the roof stabilisation based on the requirements of the extraction technology (e.g. during the final phases of the working face operation, during the raising operation etc.). Then the support temporary ensures the roof. Using the special console (it is not part of delivery – individual manufacture) the drilling machine is fastened to the cutter loader arm (see fig. 2) or to the individual stand (it is not delivered together with the drilling machine).

The drilling machine consists of the welded frame, on which the driving unit with the drilling rod and the spindle are shifting. The shifting action is ensured with the endless chain going along two return pulleys. One of these pulleys is driven with the hydraulic motor. Both hydraulic motors (one driving the spindle, the second for feeding the drilling rod into the hole) are the ones fed with the working medium – water emulsion HFA (min. 1.5%).

The control of the drilling machine is executed with the hydraulic control cube consisting of two individual distributors. The connection between the drilling machine and the control cube is with forth 5 m long high pressure hoses DN 10. The cube is connected to the mine distribution system of the water emulsion HFA (min. 1.5%).

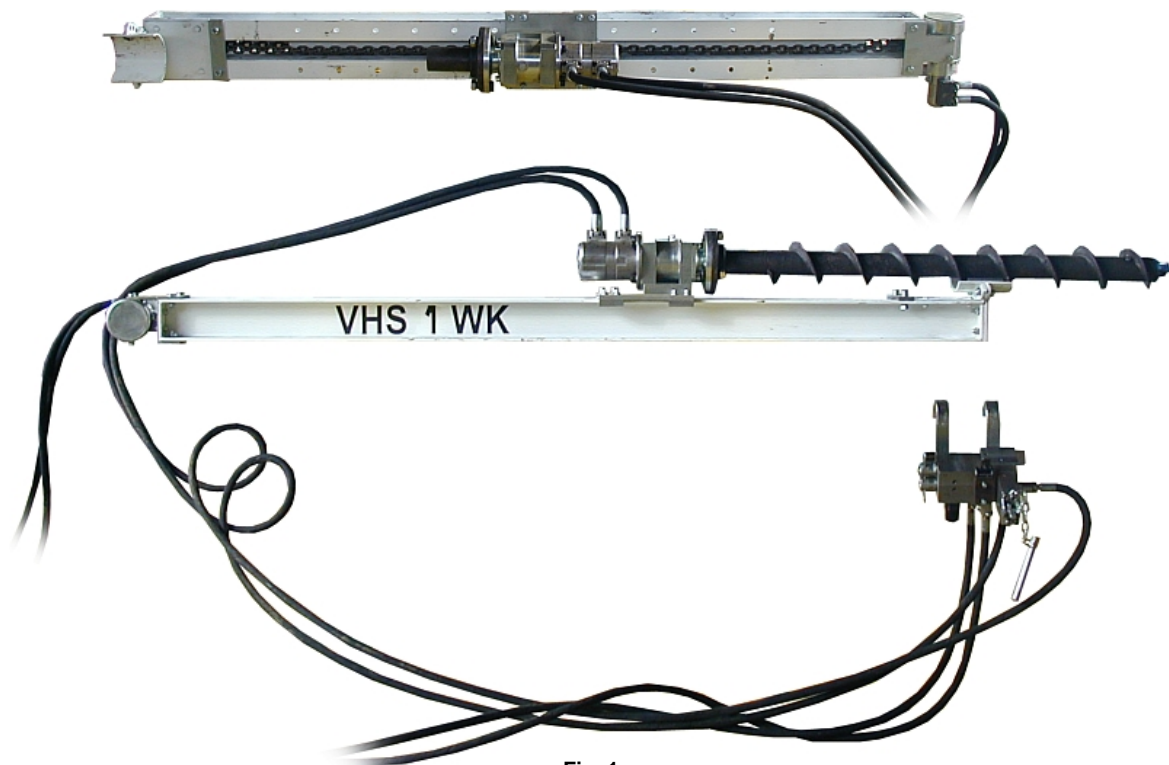


Fig. 1

The product has been designed and constructed as the equipment group I (mine), category M2 according to the Directive 94/9/EC-ATEX of the European Parliament and of the Council and meets the requirements for using in areas “hazardous atmospheric conditions 2” according to EN 1127-2+A1 on condition that all employer’s national regulations are fulfilled.

Characteristics:

Type		VHS 1 WK
Torque moment	Nm	200 - 240
Speed	rpm	do 550
Maxim. stroke	mm	1 512
Feeding speed without loading	m.s ⁻¹	up 0.85
Feeding force	kN	5
Operation pressure	MPa	20
Maxim. Pressure	MPa	30
Flow rate at 300 rpm	dm ³ .min ⁻¹	55
Working medium	emulsion HFA with min. 1.5% concentration or hydraulic liquid having a viscosity of 46 mm ² .s ⁻¹ at 40°C	
Dimensions w x h x l	mm	283x270x2 217
Weight	kg	95.0

Type marking:

VHS 1 WK
HYDRAULIC DRILLING MACHINE
type
working medium water emulsion

EXAMPLE – FASTENING THE DRILLING MACHINE TO THE CUTTER LOADER KSW 50 ARM

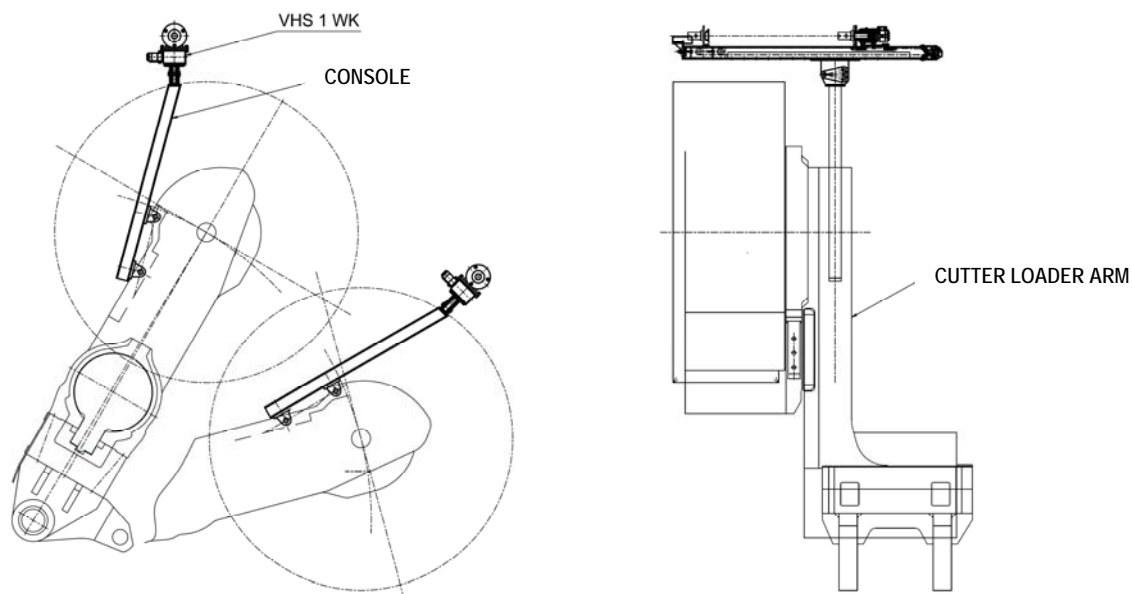


Fig. 2