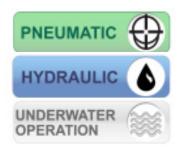
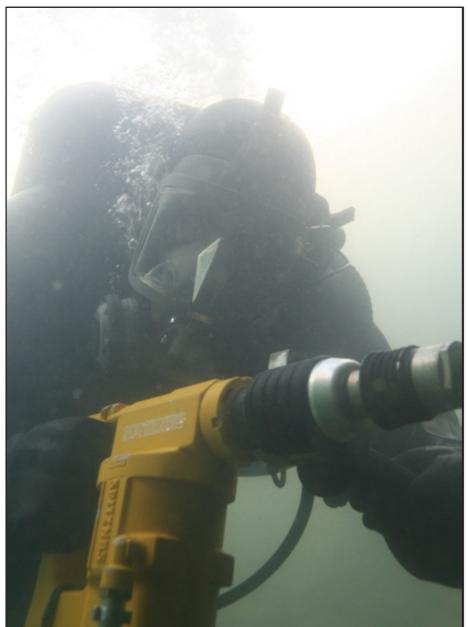


# TOOLS FOR THE SPECIALIST UNDERWATER TOOLS













# **PNEUMATIC TOOLS**

Performance data at an operating pressure of 6 bar (cont. flow)

### **ANGLE GRINDER**

This handy angle grinder is particularly usable in tight spaces even under water.

The exhaust air is discharged backwards through the working hose.







			_	_					
	Disk dia.	Free	Power	Air	Noise	Vibrations	Connection	Hose	Weight
	max.	speed		consumption	level	level		ID	
Order no.	mm	rpm	kW	m³/min	dB(A)	m/s²		mm	kg
1 4311 0050	125	11,600	0.9	1.00	88.5	<2.5	R1/4"female	10	2.5

## **AXIAL DIE GRINDER**

This grinder can be used for all small grinding work, also under water.





	Free speed	Power	Air consumption	Collet	Exhaust- air guide	Machine length	Noise level	Vibration level	Connection	Weight
Order no.	rpm	kW	m³/min	mm		mm	dB(A)	m/s²		kg
1 5077 0010	20,000	0.7	0.85	6	rear	246	85.9	<2.5	R1/4"female	1.4

#### **IMPACT WRENCHES**

Particularly developed for underwater application.





	Square drive	for screws up to	Max. torque*	Air consumption	Distance centre	e/ Connection inlet/outlet	Hose ID	Noise level	Vibration level	Weight
Order No.		mm	Nm	m³/min	mm		mm	dB(A)	m/s²	kg
6 1316 0070	3/4"	M30	1,350	1.40	45.0	R 1/2" female/ R 1/2"male	13	96	6.2	5.6
6 1316 0060	1"	M30	1,350	1.40	45.0	R 1/2" female/ R 1/2"male	13	96	4.5	5.5
*The specified m	nax. torqi	ue refers to	screws	of strength cla	ıss 8.8					

#### **CHAIN SAW**

This chain saw is the best tool for cutting wood also underwater.











										Guidelli	ne 949 EC		
	ATEX Guideline 94/9 EC	Housing material			Length without blade	Air consumption	Power	Connection	Hose ID	Chain brake time	Noise level	Vibration level	Weight w/o blade and chain
Order no.			mm	mm	mm	m³/min	kW		mm	S	dB(A)	m/s²	kg
5 1028 0010	II2GcT5	aluminium	1 520	430	400	29	3.0	R 3/4" female	15	<0.12	102.6	-25	8.5

## **CORE DRILLS**

The most powerful hydraulic and hand-operated core drill unit up to 160 mm drill diameter.





								$\sim$
	Free speed	Power	Torque	Air	Length	Drill bits diameter	Connection	Weight
				consumption	(hight)	up to		
Order no.	rpm	kW	Nm	m³/min	mm	mm		kg
2 1353 0010	400 / 900 / 1,600	1.6	49 / 31 / 16	2.20	540	160	R3/4"male	8.2
2 1355 0010	300 / 700 / 1,350	2.8	90 / 56 / 29	3.50	594	160	R3/4"male	9.2

### **DRILLS**

Handy and universally usable, drill chuck up to 13 mm drilling diameter, usable as well under water.





	Drill chuck (geared chuck)	Speed	Power	Drilling capacitiy in steel	Air consumption	Length incl. drill chuck	Connection inlet/outlet	Hose ID	Noise level	Vibration level	Weight
Order no.	mm	rpm	kW	mm	m³/min	mm	mm	mm	dB(A)	m/s²	kg
2 1267 0010	<b>)</b> 10	1,550	0.50	10	0.60	235	R1/4"female / R3/8"female	≥10	84	<2.5	2.1
2 1268 0010	<b>)</b> 13	850	0.50	13	0.60	245	R1/4"female / R3/8"female	≥10	84	<2.5	2.1

#### PISTOL HAMMER DRILL

Drilling in concrete, stone, masonry, iron and steel is possible by easy start and stop of the impact mechanism - usable as well under water.





	Drill chuck (geared chuck)	Speed	Power	Drilling capacitiy in steel/masonry	Air consumption	Length incl. drill chuck	Connection inlet/outlet	Hose ID	Noise level	Vibration level	Weight
Order no.	mm	rpm	kW	mm	m³/min	mm	mm	mm	dB(A)	m/s²	kg
2 1266 0010	13	950	0.50	13 / 20	0.60	300	R1/4"female / R3/8"female	≥10	84	<2.5	3.3

## HAMMER DRILL - SDS-plus shank holder

Drilling up to 28 mm in concrete. Impact mechanism can be switched on and off. Usable as well under water.





	ATEX Guideline 94/9 EC			per	· ·	Air consumption	Length incl. drill chuck	Connection inlet/outlet	Hose ID	Noise level	Vibration Vibrat	Weight
Order no.		rpm	kW	rpm	mm	m³/min	mm	mm	mm	dB(A)	m/s²	kg
2 2404 0040	II2GcT6	420	0.50	3,000	28/50	0.60	410	R1/2"female/ R3/8"female	≥10	93	4.5	6.6

## **HAMMER DRILL - SDS-max shank holder**

Drilling up to 50 mm in concrete. Impact mechanism can be switched on and off.





	Free speed	Power	Blows per minute	Drilling capacitiy in steel/masonry	Air consumption	Length incl. drill chuck	Connection inlet/outlet	Hose ID	Noise level	Vibration level	Weight
Order no.	rpm	kW	rpm	mm	m³/min	mm	mm	mm	dB(A)	m/s²	kg
2 2417 0010	250	1.5	2,500	50/80	1.50	490	R1/2"female/ hose fitting	≥13	90.4	9.2	15.8

## **AXIAL GRINDER**

This powerful hydraulic grinder is ideally suited for hard grinding work and for underwater work.



only use consumables approved for the maximum speed, incl. hydraulic hose set

	Free speed	Power	Operating pressure	Oil flow	Collet	Total length	Noise level	Vibration level	Connection	Weight without hoses
Order no.	rpm	kW	bar	l/min	mm	mm	dB(A)	m/s²		kg
1 5080 0010	11,500	0.8	140	10-30	6	274.5	90.7	<2.5	SAE No. 8 (3/4"x16UNF)	1.6
1 5080 0020	11,500	8.0	140	10-30	1/4"	274.5	90.7	<2.5	SAE No. 8 (3/4"x16UNF)	1.6
1 5080 0050	11,500	0.8	140	10-30	8	274.5	90.7	<2.5	SAE No. 8 (3/4"x16UNF)	1.6

### **AXIAL GRINDER**

Powerful hydraulic grinder with high removal rate, also for underwater work.

The maximum diameter of the grinding disc is 200 mm.



	Disk diameter max.	Free speed	Power	Tool holder	Oil flow	Noise level	Vibration level	Connection	Weight
Order no.	mm	rpm	kW	mm	l/min	dB(A)	m/s²		kg
1 1580 0060	200	7,000	1,8	dia.20/M14	18	80.6	<2.5	M18x1.5	8.3

## **DRILL**

This hydraulic drill is safely operated with both hands, as well under water.

Typ 2 3060 0010 additionally reversible for drilling in wood.



	Shank	Free speed	Power	Torque	Drilling capacity (in medium hard concrete)	Oil flow	Noise level	Vibration level (in medium hard concrete <sup>1)</sup> , in wood <sup>2)</sup> )	Connection	Weight
Order no.		1/min	kW	Nm	mm	l/min	dB(A)	m/s²		kg
2 3055 0010	MT3	280	1.6	60	32	10-45	85.2	15.8 <sup>1)</sup>	M18x1.5	8.5
2 3060 0010	MT3	280	1.6	60	32	10-45	85.0	<2.52)	M18x1.5	8.5
•										

## **RECIPROCATING SAWS - Industrial / Mining Design**

Our hydraulic reciprocating saw with powerful drive, increased cutting speed and safety lever control.





	ATEX Guideline 94/9 EC	Housing material	Valve	Power	Stroke	Number of strokes	Oil flow	Vibration level	Noise level	Connection	Hose ID	Weight
Order no.				kW	mm	rpm	l/min	m/s²	dB(A)		mm	kg
5 1220 0010	II2GcT5	aluminium	twist	2.8	60	500	10-50	<2.5	86	12 S	12	6.1
5 1220 0050		aluminium	lever	2.8	60	500	10-50	<2.5	86	12 S	12	6.1

## **SABRE SAW - Industrial Design**

The hydraulic sabre saw for hardest cutting demands with higher driving performance as well for underwater use.





	Cutting	capacity	Power	Stroke	Number	Oil	Noise	Vibration	Hose ID	Weight
	wood	steel			of strokes	flow	level	level		
Order no.	mm	mm	kW	mm	rpm	m³/min	dB(A)	m/s²		kg
5 1219 0010	160	19	1.50	28	1,500	22-50	89.4	<2.5	M18x1.5female	6.0

## **HAMMER DRILL - SDS-plus shank**

Drilling up to 28 mm in concrete. Impact mechanismn can be switched on and off. Usable as well under water.





	Free speed	Power	Blows per minute	Drilling capacity concrete/masonry	Oil flow	Length incl. drill chuck	Connection	Noise level	Vibration level	Weight
Order no.	rpm	kW	rpm	mm	l/min	mm	mm	dB(A)	m/s²	kg
2 2406 0010	500	1.2	4,460	28/50	15-45	460	1/2" FF	92	4.5	8.2

### **HAMMER DRILL - SDS-max shank**

Drilling up to 50 mm in concrete. Impact mechanism can be switched on and off. Usable as well under water.





- 1											
		Free speed	Power	Blows per minute	Drilling capacity concrete	Oil flow	Length incl. drill chuck	Connection	Noise level	Vibration level	Weight
ı	Order no.	rpm	kW	rpm	mm	l/min	mm	mm	dB(A)	m/s²	kg
-	2 2418 0010	270	1.2	2,300	50	15-45	640	1/2" FF	92	9	14.0

## **IMPACT WRENCHES**

Universally usable hydraulic impact wrench, also for diving work.





	ATEX Guideline 94/9 EC	Square drive	for screws up to	Max. torque*	Oil flow (adjustable)	Distance centre/outer edge	Connection	Noise level	Vibration level	Weight		
Order no.			mm	Nm	l/min	mm		dB(A)	m/s²	kg		
6 1515 0010	II2GcT6	3/4"	M30	1,700	20-40	45.0	M18x1.5	85.3	3.8	7.3		
6 1514 0010	II2GcT6	1"	M30	1,700	20-40	45.0	M18x1.5	85.3	3.8	7.3		
*The specified max.	*The specified max. torque refers to screws of strength class 8.8											

## **IMPACT WRENCH**

Powerful hydraulic impact wrench, especially designed for underwater work.





	Square drive	for screws up to	Max. torque*	Oil flow (adjustable)	Distance centre/outer edge	Connection	Noise level	Vibration level	Weight
Order no.		mm	Nm	l/min	mm		dB(A)	m/s²	kg
6 1520 0010	1"	M36	2,200	25-45	60.0	M18x1.5	99.2	6.75	10.7
*The specified max. torqu	ue refers to	screws of st	rength class	s 8.8					

## **CORE DRILL**

The most powerful hydraulic and hand-operated core drill unit up to 160 mm drill diameter.





	Free speed	Power	Torque	Oil flow (adjustable)	Length (hight)	Drill bits diameter up to	Connection	Weight
Order no.	rpm	kW	Nm	l/min	mm	mm		kg
2 1317 0030	380 / 900 / 1,800	2.8	60 / 37 / 17	22-45	490	160	M18x1.5	8.5

#### **VERTICAL GRINDER**

Our powerful vertical grinder, the ideal machine for heavy-duty rough grinding and cutting work.

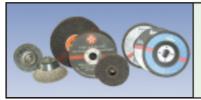




\*at 45 l/min oil flow

at 45 Milli on now							
	Disc dia. max.	Free speed	Power	Tool holder	Oil flow	Connection	Weight
Order no.	mm	rpm	kW	mm	l/min		kg
1 2060 0010	230	3,600*	3.5	dia. 22.2 / 5/8-11UNC	20-45	3/4-16 UNF	5.8

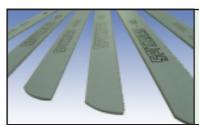
# **ACCESSORIES**



## **Grinding Wheels and Milling Cutters**

- Cutting Wheels
- Grinding Wheels
- Mounting Pins

- Brushes
- Flap Grinding Wheels
- Milling Cutters



### Saw Blades

Reciprocating Saw Blades

Sabre Saw Blades

#### quality:

- HSS
- HSS-SL
- with various T.P.I. and 150 mm up to 940 mm length.
- carbide tipped



### **Drills**

#### type:

- Straight shank
- SDS-plus
- SDS-max

Morse taper shank (MT)



### **Quick-release Chucks**

Quick-release chucks allow quick changing of drill bits without using tools.



## Core Bits and Drill Rigs

- Specific for core drills
- Core bits of various types and for various applications
- Drill rigs allow drilling big diameters and at specific angles (as well spot drilling of pipes at required angles)
- Additional accessories for water cooling, i.e. an additional water tank, allow independent working from the distribution network.



## Sockets, Adapters and Extensions

#### type:

- standard (short)
- special (long)
- non-sparking

Focus on quality by relying on us.



## Clamps and Accessories for square cuts

for:

- pipes type:
- profiles

automatic

special shapes

- mechanic
- special device:
- Magnet Clamp Device

## **Suspension Device**

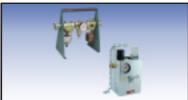
Individual suspension devices can be delivered for each machine. This makes work easier and allows comfortable handling of the machine. Ask for your individual solution.

# **GENERAL ACCESSORIES**



## Safety Block

The hydraulic safety block is used for reducing the input pressure of max. 350 bar (5000 psi) at max. volume flow of 50 L/min. (13 gpm) to an output pressure of 80 bar (1160 psi).



## **Service Units**

We custom-assemble mobile service units for your individual application and offer it with the machine.



### **Hydraulic Oil**

Naturally, biodegradable oil is available on request for your maintenance unit or your hydraulic equipment.



## **Hydraulic Power Pack**

We offer the appropriate hydraulic power pack for your individual application, powered by electric, gasoline or diesel driven motors.



#### Care

We recommend our special Multi-Oil-Spray for the maintenance of your machine.



#### Transport case

We offer transport cases for the comfortable and safe transport of your machine.

## **Operating Instruction for Underwater Tools**

Before underwater operation

- Connect the hoses properly
- Test the machine for leakage
- Test all functions of the machine (drilling, blowing, all moving parts, valves)



#### After underwater operation

- Clean the machine
- Dry the machine with compressed air
- Spray all moving parts with Multi-Oil-Spray (or similar)

For additional information see the special operating and maintenance manual.

For long-life operation of the machine we recommend a general overhaul (after 3 months of use) made by SPITZNAS. Multi-Oil-Spray = Spitznas Part Number 9 9902 0120



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