

# Operating manual High-pressure cleaners

- USA -





Read and conform safety instructions before use! Keep instructions in a safe place for later use and pass them on to any future user.







# Technical data

Technical	quadro	
data	700 TST	
Operating pressure,	00 470 1	
steplessly adjustable	30 - 170 bar	
Perm. overpressure	190 bar	
Water output *1		
at 0 bar	15 l/min	
at nominal pressure	13 l/min	
Nozzle size		_
(Flat jet)	2504	144
(Turbokiller)	045	et 2
Volume	40.1	Shee
Water tank	16	l E
Max. inlet water temperature	max. 60 °C	nifo
Direct suction height (*2)	2,5 m	]   <u>4</u>
Hose drum	yes	Q
High pressure hose	20 m	
Electrical ratings	230 V/60 Hz	×
	23 A	aco
Motor speed adjustm.	1700 U/min	i=
Connect. wattage inp.	P1: 5,5 kW	5 %
output.	P2: 3,8 kW	<del> </del>   6
Weight (incl. accessories with empty water tank	89 kg	Permissible tolerance for figures ± 5 % in acc. with VDMA uniform sheet 2447
Dimensions including handle L	770 x 570 x 990	for f
x W x H in mm	770 X 070 X 000	nce
Sound level acc. to 45 635	89 dB (A)	olera
(rel. to working place) with Turbokiller	91 dB (A)	ole tr
Guaranteed sound level L <sub>wa</sub>	91 dB (A)	Ssik
Vibrations at lance	2,2 m/s <sup>2</sup>	im.
Recoil at lance	ар. 20 N	امّ
	- r	

<sup>(\*1)</sup> Min. water quantity to be supplied to the high pressure cleaner! (2-8 bar admission pressure)

<sup>\*2</sup> Direct suction is possible through by-passing of water tank! (see page 5)

#### Dear customer

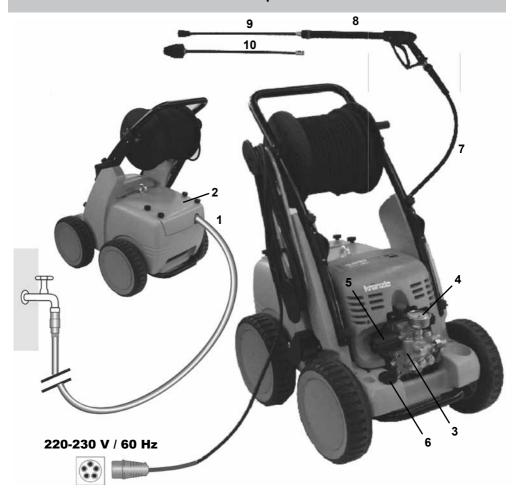
We would like to congratulate you on your new high pressure cleaner with integrated water tank and to thank you for the purchase.

To ease your introduction to the use of the cleaner, we have provided the following pages of explanations, tips and hints, which we ask you to read before using for the first time.

The equipment will assist you professionally in all cleaning tasks, e.g.:

facades
 flagstones
 terraces
 Contents
 vehicles of all types
 barrels and containers
 channels
 side

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#### Construction

The KRÄNZLE quadro 700 TST high pressure cleaners are mobile machines with hose drum and 20m industrial hose. The schematic principle can be seen from the illustration.

#### Components

- 1 Water inlet connection with filter
- 2 Cover for water tank
- 3 High pressure pump
- 4 Press. gauge with glycerin filling
- 5 Unloader valve safety valve
- 6 Detergent valve
- 7 High pressure hose
- 8 Spray gun
- 9 Interchangeable lance with Turbokiller
- 10 Interchangeable lance with flat jet nozzle and nozzle protection

#### **Water system**

The water must be lead to the high pressure cleaner under pressure (2-8 bar ad-mission pressure). A float valve regulates the water inlet. Then, the water is sucked by the high pressure pump from the water tank and supplied to the lance under the set pressure. The high pressure jet is formed by the nozzle at the end of the lance.

#### **Detergent and caring system**

The high pressure pump can also suck a detergent/caring agent and mix it with the high pressure jet. The additive is sucked through the pump and brought in with the set pressure.

Insert the detergent hose into the detergent container and open the detergent valve (6).

The detergent discharges with the water at the high pressure nozzle.





Open the dosing valve, if the chemistry sieve is placed in a liquid. Sucked air leads to destruction of the pump seals!!! The rules concerning the environment, refuse and ground water protection must be complied with!

#### Lance with spray gun

The machine can only be operated when the safety trigger is squeezed.

When the lever is squeezed, the spray gun opens. The liquid is then pumped to the nozzle. The spray pressure increases and quickly reaches the selected operating pressure.

When the trigger is released, the trigger gun closes and any further spraying of liquid from the lance is stopped and the manometer must show 0 bar.

The increase in pressure when the trigger gun is closed causes the unloader valve-safety valve to open. The pump remains switched on and continues to pump liquid through the pump at reduced pressure. When the spray gun is opened, the unloader valve - safety valve closes and the pump ressumes spraying from the lance with the selected operating pressure.



The spray gun is a safety device. Repairs should only be performed by qualified persons. Should replacement parts be required, use only components authorized by the manufacturer.

#### High pressure hose and spraying device

The high pressure hose and spraying device supplied with the machine are made of high grade material. They are also optimized for the machine and marked as required by the appropriate regulations.



If replacement parts are required, only such parts that are authorized by the manufacturer and which bear the markings required by the appropriate regulations may be used. The high pressure hose and spraying device must be connected in a pressure-tight manner. The high pressure hose may not be driven over, pulled excessively or twisted. Hose lines are wear parts. Guarantee is accepted only for manufacturing errors, not for external damages.

High pressure hose lines and spraying equipment must not be repaired, but replaced by a new hose or spraying equipment.

#### **Unloader valve - safety valve**

The unloader valve - safety valve protects the machine from a build up of excess pressure, and is designed not to permit an excess pressure to be selected for operation. The limit nut on the handle is sealed with a spray coating.

The operating pressure and spray rate can be steplessly adjusted by turning the handle.



Replacements, repairs, new adjustments and sealing should only be performed by qualified persons.

## **Delayed motor cut-out**

Frequent, work-necessitated switching on and off of motors on machines of this size puts a heavy load on the power network and causes increased wear on internal electrical parts. Therefore the motor of the new KRANZLE device only switches off 30 seconds after closing the gun and then goes to stand still. By opening the gun, the device is started again.

#### Safety cut-out

If the device is accidentally not turned off after use or the pistol is not used for 20 minutes, the device automatically goes into the safety state via deactivating. By operating the main switch again, the device is activated again.



Replacements and inspection work should only be performed by qualified persons when the machine is disconnected from the power supply, i.e. the plug pulled out from the electrical socket.

#### **Setting up**

#### Location



Neither set up and operate the machine in rooms where there is a risk of fire or explosion nor put it into puddles. Do not use the machine under water. The device must not stand in the spray area of the high pressure jet.

#### **CAUTION!**



Never suck in liquid containing solvents such as paint thinners, petrol, oil or similar liquid matter. **Pay attention to the instructions of the manufacturers of the cleaning agents.** The seals in the machine are not resistant to solvents! The spray of solvents is inflammable, explosive and poisonous.

#### **CAUTION!**



When running your high pressure cleaner with hot water of 60° C raised temperatures occur. **Do not touch the machine without safety gloves!** 



#### Electrical connection

The machine is supplied with an electrical power cord with plug.

The mains plug must be fitted to a standard grounded socket with a **30mA** residual current operated device. The socket must be protected with a fuse on the mains side.

KRÄNZLE quadro = 220-230 Volt / 60 Hz (phase-sequence not significant)

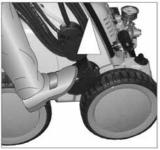
When using an extension cable, this must have a grounded lead which is properly connected to the socket. The conductors in the extension cable must have a minimum cross section of 4 mm². Plug connections must be of a spray-proof design and may not be located on a wet floor.

#### **CAUTION!**

The use of extension cables which are too long may lead to malfunctions and start up difficulty.

When using a cable drum, always keep the cable wound as far as possible.

#### **Brake**







Brake not applied

## Brief operating instructions

- 1. Connect high pressure hose with spray gun.
- 2. Connect to suitable water supply.
- 3. Connect current
- 4. Switch on machine and start cleaning.
- After having completed the cleaning process, put main switch in zero position and by opening the gun, reduce the pressure in the high pressure hose.

Then, the high pressure hose can be rolled up

- Only use clean water ! Protect from frost !

#### **CAUTION!**

Please pay attention to the regulations of your waterworks company.

Because of the water tank, the device can be connected to any drinking water line without worries.

# This is what you've purchased:



#### 1. Turbokiller

Lance with nozzle protection and high pressure nozzle Flat jet 25°

2. Spray gun Starlet with insulated grip and screw connection

#### 3. KRÄNZLE - High pressure cleaners quadro 700 TST with hose drum



**4.** Operating instructions



5. High pressure hose, 20 m NW 8 on hose drum

#### 6. Crank for hose drum



7. Water inlet part (filter is already installed)



## How to assemble and furnish your high pressure cleaner

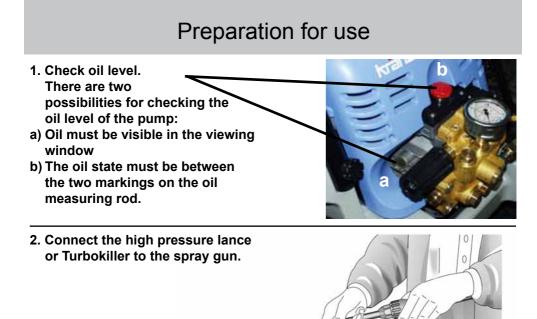


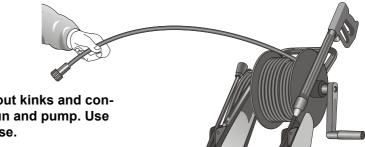
Remove the screw from the drive shaft of the hose drum. Unpack the crank and insert it onto the hexagon head. Tighten the crank again with the screw.

To check the oil level, loosen the oil cover screw and take out the oil dip stick. The oil level must be between the two markings.



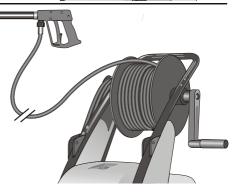






Unroll hose without kinks and connect with handgun and pump. Use max. 20 m HP hose.





# Preparation for use

5. The machine must be connected to the water line with cold water or up to 60° C warm water (see page 2).

The hose cross section must be at least 3/4" = 16 mm (free passage). Filter 1 must always be clean.

Please make sure that the filter is clean before using your high pressure cleaner.



#### CAUTION!



When running your high pressure cleaner with hot water of 60° C raised temperatures occur.

Do not touch the pump without safety gloves!

#### **External suction**

If water is to be sucked from an external container for the high pressure cleaner,



the connection hose between the high pressure pump and the water tank must be screwed off and the suction hose must be connected directly to the pump.

Make sure that the water is clean. Use the Kränzle suction hose with suction



filter. (Order N°. 15.038 3)

Maximum suction height 2.5 m, maximum water temperature for direct suc-

tion: 60°C

(see technical data on page 2)

# To shut down the pump

# When using detergents:

Put chemistry sieve number 5 into the detergent container. Open the detergent valve, then the detergent is sucked in. When closing the detergent valve, the chemistry supply is automatically closed. Allow detergent to act and then wash off. (see page 5).



Note that you must always comply with the instructions provided by the manufacturer of the detergent (e.g. instructions concerning safety clothing) and the water protection regulations!



#### To shut down the pump:

- 1. Switch off the machine. Device switch to "0" position.
- 2. Cut off the water supply.
- 3. Open the spray gun briefly until the pressure is released.
- 4. Apply the safety catch on the spray gun.
- 5. Remove the water hose and spray gun.
- 6. Pull the plug from the socket.
- 7. Winter: store the pump in rooms above 0°C.
- 8. Clean the water filter.

# Frost protection

Normally after operation, there is still some water in the device. Thus, you must take special measures to protect the device from frost.

#### - Completely drain the device

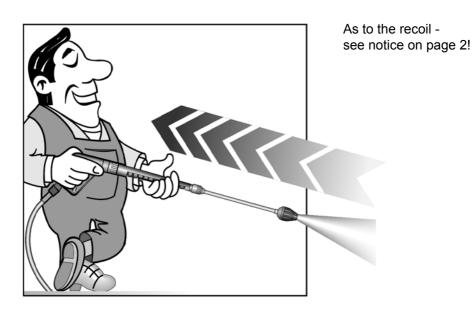
For this purpose, separate the device from the water supply. Then, turn on the main switch and open the gun. Now, the pump presses the remaining water from the water tank and the pump. However, do not allow the device to operate without water for longer than one minute.

#### - Fill the device with antifreeze agent

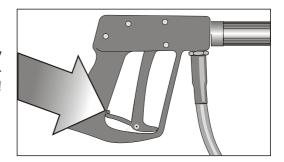
If the device is not operated for longer periods, especially over the winter, you should pump an antifreeze agent through the device. For this purpose, fill the antifreeze agent into the water box and turn on the device. Wait with opened gun, until the agent comes from the nozzle.

However, the best way to protect the device from frost is to store it at a frost-free location.

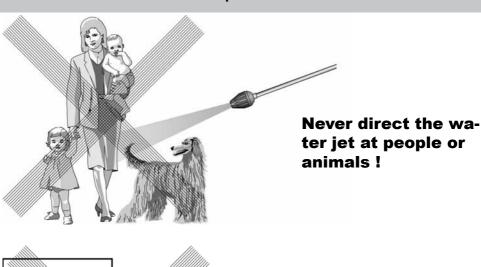
# Safety notes

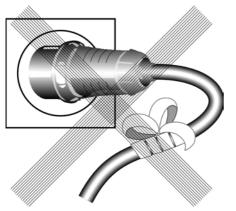


Apply the safety catch on the spray gun after each use, in order to prevent unintentional spraying!



# This is prohibited!





Do not damage the power cord or repair it incorrectly!



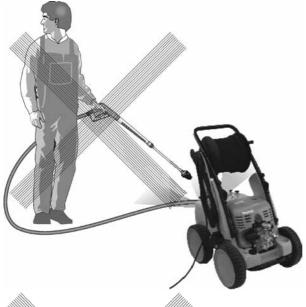
Never pull the high pressure hose if it has formed kinks or "nooses"! Never pull the hose over sharp edges!

# This is prohibited!

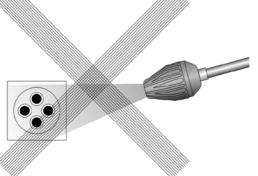




Never allow children to use the high pressure cleaner!



Never direct the water jet at the machine itself!



Never direct the water jet at a power socket!

# Additional accessories for ...

(on demand)



Rotary scrubbing brush Order No. 41.050 1



#### Drain and pipe cleaning hose

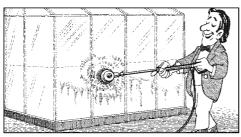
10 m - Order No. 41.058.1 15 m - Order No. 41.058





Environmental, refuse disposal and water protection regulations must be observed when using the accessories!

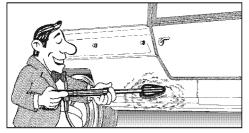
# ... further combination possibilities



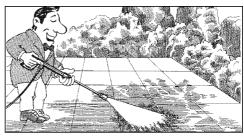
Car cleaning, glass, caravan, boat etc.: rotary washing brush with 40 cm extension and ST 30 nipple M22 x 1.5



Cleaning pipes, channels and drains: pipe cleaning hose with KN nozzle and ST 30 nipple M22 x 1.5



Cleaning cars and all smooth surfaces: brush with ST 30 nipple M22 x 1.5



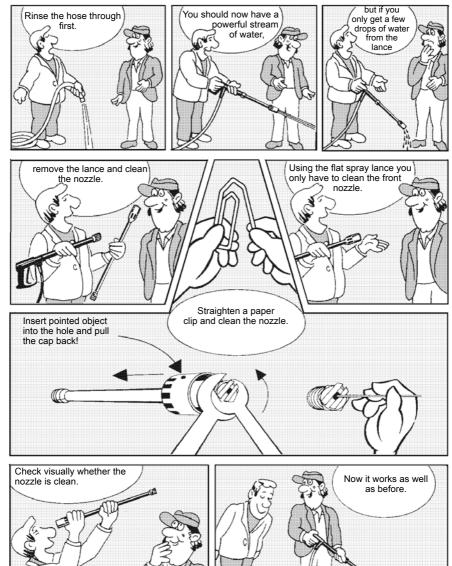
Rotary point sprayer for extreme soiling: Turbokiller with 40 cm extension and ST 30 nipple M22 x 1.5

# Small repairs ...

# The nozzle is blocked!

No water but the gauge shows full pressure!





# do it yourself!

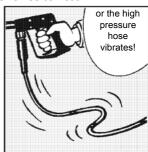
# Nozzle dirty or sticky!

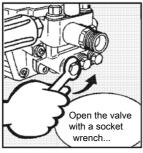
- Pressure gauge does not show full pressure
- Water comes out in spurts.

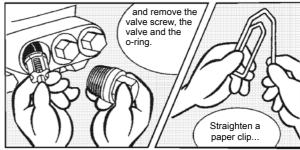
- The high-pressure hose vibrates
- If you do not use the high-pressure cleaner for some time the valves can stick

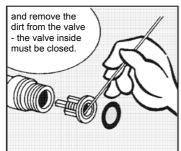




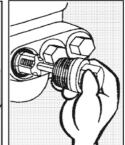


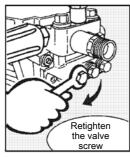


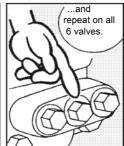






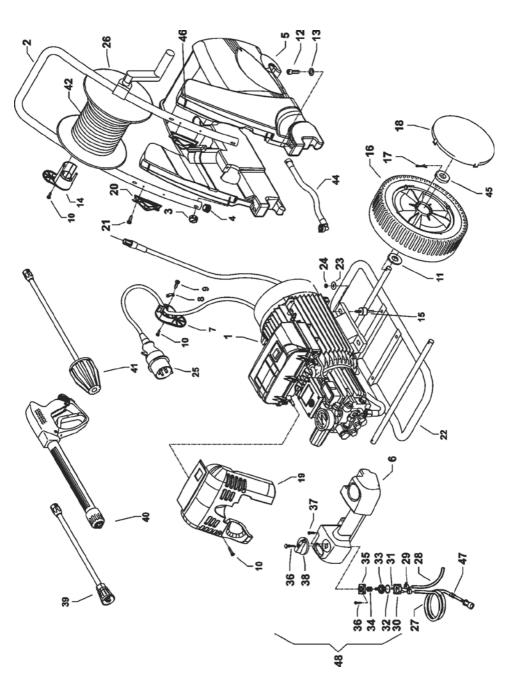








# Complete Assembly

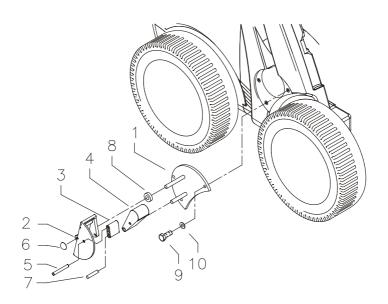


# quadro 700 TST

# Spare parts list KRÄNZLE quadro 700 TST Complete Assembly

Schubbügel       1       42.601         Sterngriffmutter M8       4       42.619         Stopfen       2       42.613         Wasserkasten       1       42.603         Lanzenablage       1       42.604         Kabelaufwicklung unten       1       42.601         Zugentlastung       1       42.611         Blechschraube 3,5 x 12       2       40.290         Kunststoffschraube 5,0 x 25       6       41.414         Schreibe 21 DIN125       2       40.207         Schraube M8x50 DIN912       2       42.612         Schraube M8x50 DIN912       2       50.186         Kabelaufwicklung oben       1       42.614         Gummipuffer 25 x 25       4       44.017         Splint 5x28 DIN94       4       42.614         Frontplatte quadro 700 TST       1       42.610         Blechschraube 3,5x16 DIN7981       4       44.161         Fahrgestell       1       41.409				
75 778 7798 7798 7798 7798 7798 7798 779	24	Elastic-Stop-Mutter M8	4	41.410
25 T7 N7981 2	22	Netzanschlußkabel 8 m (H07RNF 3x4mm²	m²)	
25 T7 1867N 17981 1867N	56	Schlauchtrommel kpl.	_	41.259 6
25 TX VX 981 TX PX	27	Chemiesaugschlauch (Gewebe) mit Filter	er 1	42.621
25 TX 05 17981 1897N	28	Gewebeschlauch 0,4m	_	42.622
25 Ti 0 0 0 1 2 2 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4 4 4	29	Schlauchklemme 9 - 9	7	44.054
25 Ti 0 0 0 1 1 2 2 2 2 2 2 4 4 4 4 4 4 4 4 4 4 4 4	30	Gehäuse Waschmittelventil	_	44.145
25 Ti 77981 77981 74 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	31	O-Ring 5 x 1,5 (Viton)	_	44.150
T2 20 20 40 40 40 40 40 40 40 40 40 40 40 40 40	32	O-Ring 28,24 x 2,62	_	44.149
TS TS 17987 17984	33	Regulierkolben Chemieventil	_	44.147
en 1 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	34	Edelstahlfeder 1,8 x 15 x 15	_	44.148
en 1 4 4 4 4 4 00 TST 0 6 DIN7981 4 4	35	Deckel für Chemieventil	_	44.146
4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	36	Blechschraube 3,5 x 16	က	44.161
4 4 4 6 DIN7981 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4 4	37	Blechschraube 3,5 x 19	7	44.162
4 4 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	38	Drehgriff Chemieventil mit Blendkappe	_	44.151
4 1 2 2 2 6 DIN7981 4 4 4	39	Lanze mit Flachstrahldüse für 700 TST	_	12.392 2-2504
00 TST 1 2 6 DIN7981 4 4 4		Please specify nozzle size:		
2 6 DIN7981 4 4	40	Starlett -Pistole mit Verlängerung	_	12.320 2
6 DIN7981 4	41.1	Turbo-Killer 045 bei quadro 700 TST	_	41.0723
← 4	42	Hochdruckschlauch 20 m NW8	_	41.083
4	43	O-Ring 13 x 2,6	7	13.272
	44	Verbindungsschlauch	_	42.625
	45	Scheibe 8mm für Rad	4	44.246
	46	Gewindestift M6x55	4	42.617 2
	47	Rückschlagventil für Chemiesaugschl.	_	44.240
	48	Chemieventil Kpl. Pos. 30-37	_	44.052

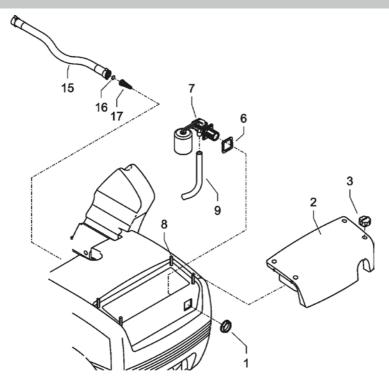
# Brake



# Spare parts list KRÄNZLE quadro 700 TST Brake

No	Description	Qty.	OrdNo
1	Grundplatte	1	42.615
2	Bremspedal	1	44.022
3	Bremshebel	1	44.023
4	Bremsklotz	1	44.024
5	Stift 6 x 50	1	44.035
6	Starlock-kappe 8 mm	1	44.165
7	Stift 6 x 40	1	44.035 1
8	Distanzring	2	42.626
9	Sechskantschraube M6x16	3	50.173
10	Unterlegscheibe DIN125-6,3	3	50.189

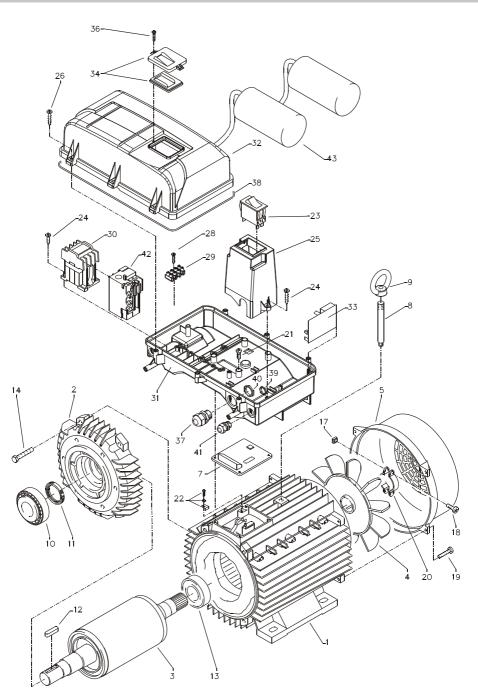
# Water inlet



# Spare parts list KRÄNZLE quadro 700 TST Water inlet

No	Description	Qty.	OrdNo
1	Mutter R3/4"	1	46.258
2	Revisionsdeckel	1	42.605
3	Sterngriffmutter M8	4	42.619
6	Dichtung für Schwimmerventil	1	46.261
7	Schwimmerventil	1	46.250
8	Gewindestift M6x40	4	42.617 1
9	Einströmschlauch	1	42.640

# Pump motor

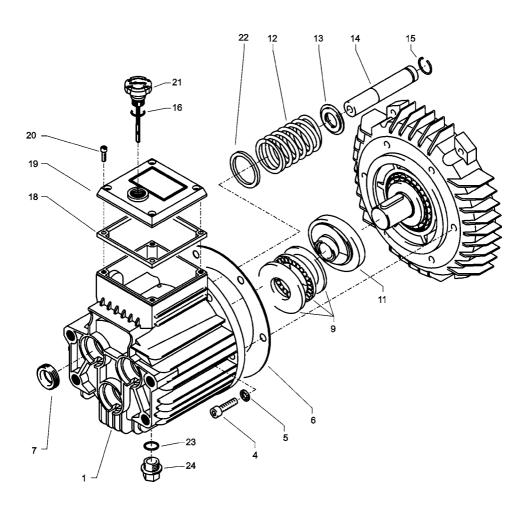


# quadro 700 TST

# Spare parts list KRÄNZLE quadro 700 TST Pump motor

No	Description	Qty.	OrdNo
1	Stator 112 3,8kW 220V / 60Hz	1	40.541 1
2	A-Lager Flansch	1	40.530
3	Rotor 112 (220V / 60Hz)	1	40.531 1
4	Lüfterrad für BG 112	1	40.532
5	Lüfterhaube BG 112	1	40.533
7	Flachdichtung	1	43.030
10	Kegelrollenlager 31306	1	40.103
11	Öldichtung 35 x 47 x 7	1	40.080
12	Paßfeder 8 x 7 x 32	1	40.104
13	Kugellager 6206 - 2Z	1	40.538
14	Innensechskantschraube M 6 x 30	4	43.037
17	Vierkantmutter M 5	2	41.416
18	Schraube M 5 x 14	2	40.536
19	Schraube M 4 x 12	4	41.489
20	Schelle für Lüfterrad 112	2	40.535
21	Schraube M 4 x 12	4	41.489
22	Erdungsschraube kpl.	1	43.038
23	Schalter 14,5 A Amazonas	1	41.111 6
24	Kunststoffschraube 4,0 x 16	6	43.417
25	Bock für Schalter	1	42.608
26	Kunststoffschraube 5,0 x 25	6	41.414
28	Kuststoffschraube 3,5 x 20	2	43.415
29	Lüsterklemme 5-pol.	1	43.326 1
30	Schütz C30 für 3x 230V / 50/60Hz	1	44.400 2
31	Schaltkasten Unterteil	1	42.606
32	Schaltkasten Deckel	1	42.607
33	Steuerplatine Abschaltverz. 230V / 50Hz	1	42.504
34	Klemmrahmen mit Schalterabdichtung	1	43.453
36	Blechschraube 3,5 x 16	2	44.161
37	PG 16-Verschraubung	1	41.419 1
38	Dichtung für Schaltkastendeckel	1	42.525
39	Gegenmutter für PG9-Verschraubung	1	41.087 1
40	Gegenmutter für PG16-Verschraubung	1	44.119
41	PG 9 - Verschraubung	1	43.034
42	Überstromauslöser 193-EEEB 5,4- 27 A	1	44.401 0
43	Kondensator 60 μF	2	41.148

# Transmission unit

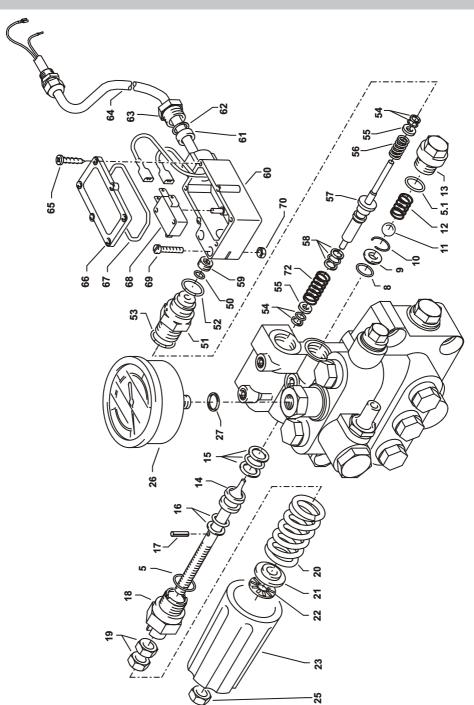


# quadro 700 TST

# Spare parts list KRÄNZLE quadro 700 TST Pump transmission unit for AQ-Pump

No	Description	Qty.	OrdNo
1	Ölgehäuse	1	40.501
4	Innensechskantschraube M 8 x 30	6	41.036 1
5	Sicherungsscheibe	6	40.054
6	Flachdichtung	1	40.511
7	Öldichtung 20 x 30 x 7	3	40.044 1
8	Wellenscheibe	1	40.043
9	Axial-Rollenkäfig	1	40.040
10	Gehäusescheibe	1	40.039
11.1	Swash plate AQ 7,0°	1	40.042 1-7,0
12	Plungerfeder	3	40.506
13	Federdruckscheibe	3	40.510
14	Plunger 20 mm (lang)	3	40.505
15	Sprengring	3	40.048
16	O-Ring 14 x 2	1	43.445
18	Flachdichtung	1	41.019 3
19	Deckel flach für Ölgehäuse	1	41.023 1
20	Innensechskantschraube M 5 x 12	4	41.019 4
21	Ölmessstab AQ	1	40.463
22	Stützscheibe für Plungerfeder	3	40.513
23	O-Ring 13,94 x 2,62	1	42.167
24	Ölablassstopfen R 3/8"	1	42.019

# Unloader valve and pressure switch

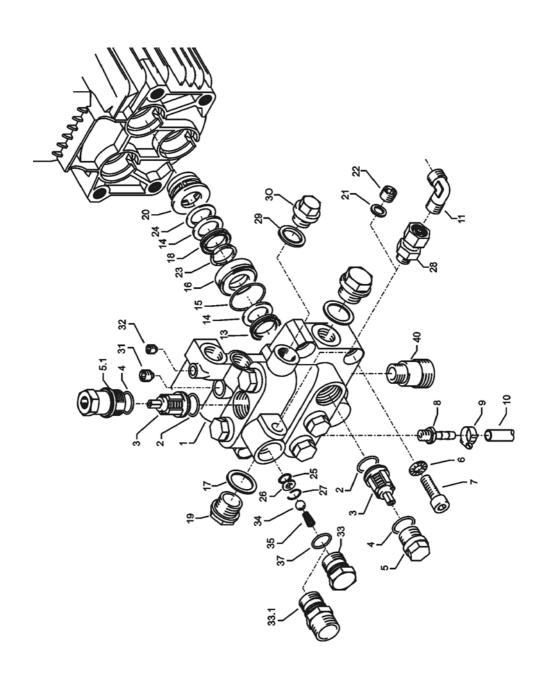


# quadro 700 TST

# Spare parts list quadro 700 TST Unloader valve and pressure switch

OrdNo	15.015 1	15.016	15.010 2	1 0 7 0	10.013	13.385 1	15.007	15.020	15.021	15.022	42.505	15.024	15.008	15.023	44.262	15.025	15.026	40.520				15.009 3						41.300 5	
Description Qty.	Stützscheibe 2	≣delstahlfeder 1	Steuerstößel	7 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	Talibaks / IIIIII	Stopfen M 10 x 1 (durchgebohrt) 1	Gehäuse Elektroschalter	Gummimanschette PG 9	Scheibe PG 9	Verschraubung PG 9	PVC-Kabel 2x 1,0 mm <sup>2</sup>	Blechschraube 2,8 x 16 6	Deckel Elektroschalter 1	D-Ring 44 x 2,5	Mikroschalter 1	Zylinderschraube M 4 x 20	Sechskant - Mutter M 4	Druckfeder 1 x 8,6 x 30		Repair kits:		Repair kit		1x Pos. 51, 1x Pos. 52, 1x Pos. 53,	3x Pos. 54, 1x Pos. 55, 1x Pos. 56,	1x Pos. 57, 1x Pos. 58, 1x Pos. 59		Pressure switch compl. No. 54 - 70	
o N	55	26	22	. 0			09	61	62	63		65	99	. 29	89	69	20	72					_						
OrdNo	13 150	42.167	5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	007.71	14.118	13.147	13.148	14 119	14 113	14 134	13 159	14 123	14 148	42.105	14.144	14 125 1	14 125	) 	14.126	14.146	14.147	14.152	15.039 4	13.275	12.136	15.009 1	15.017	43.445	12.136 2
Qty.	~	- ~		_	_		- τ	- τ-	•		τ.		٠,	- ~	- 2	ı <del></del>	τ-		<b>~</b>	~	<b>~</b>	_	_	7	_	τ-	<b>~</b>	~	2
Description	0-Bing 16 x 2	O-Ring 13 94 v 2 62	O in a 14 : 4 4 4	O-King 11 × 1,44	Edelstahlsitz	Sicherungsring	Edelstanlkugel	Edelstahlfeder	Verschlissschraube	Stellerkolben	Parhaks 16 mm	Parbaks 8 mm	Spanstiff	Opanistiit Kolbenfiihring spezial	Kontermutter M 8 × 1	Ventilfeder rot bei guadro 800	Ventilfeder schwarz	bei quadro 1000 und 1200	Federdruckscheibe	Nadellager	Handrad	Elastic-Stop-Mutter M 8 x 1	Manometer 0-400 Bar	Aluminium-Dichtrina	O-Rina 3.3 x 2.4	Führungsteil Steuerstößel	O-Ring 13 x 2,6	0-Ring 14 x 2	Parbaks 4 mm
No No		ر 1	-	_	_	0	· <del>-</del>	. 5	1 (2	2 4	بر	2 (2	2 _	- α	0 0	200	20.1		Σ.	22	23	22	9	27	0	51	22	က္သ	4

# Valve housing

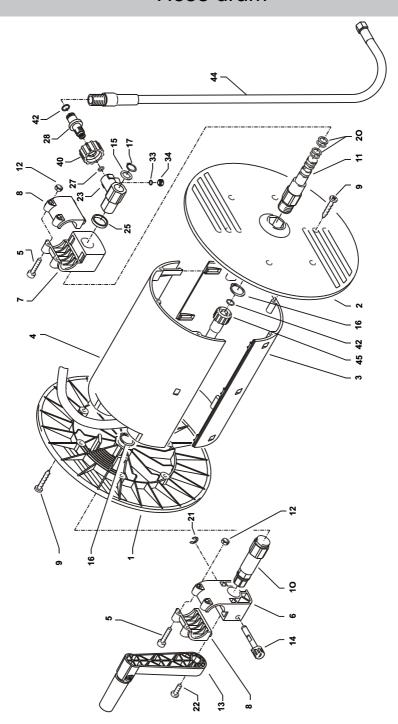


# quadro 700 TST

# Spare parts list KRÄNZLE quadro 700 TST Valve housing for integrated AQ-pump

8 N	Description	Qty.	OrdNo	No	Description	Qty.	OrdNo
_	Ventilgehäuse AQ mit integr. UL und	_	40.503 5	33	Ausgangsteil	_	40.522
	Druckschalter				für quadro 800, 1000, 1200 TST		
7	0-Ring 18 x 2	9		33.1	Ausgangsteil M22x1,5	_	40.522 1
က	Einlaß- / Auslaß- Ventil	9	42.024		für quadro 1000, 1200 TS		
4	0-Ring 21 x 2	9		34	Edelstahlkugel Ø10	_	12.122
2	Ventilstopfen	2		35	Rückschlaafeder "K"	_	14.120 1
5.1	Ventilstopfen mit R 1/4" IG	_	7	37	O-Ring 18 x 2	<b>~</b>	43 446
9	Sicherungsring	4		40	Wassereingang R3/8" AG	- ~	41.016
7	Innensechskantschraube M 12 x 45	4		2	Wasseleingarig toto Ad	-	<u> </u>
∞	Schlauchnippel R3/8" x 6	_	42.634		Repair kits:		
တ	Schlauchschelle 7 - 10	_	44.054				
9	Chemiesaugschlauch mit Filter	_	42.621		Repair kit for sleeves		40.065 1
=	Winkel 12L x 12L	_	42.630		consisting of: 3x Pos. 13; 6x Pos. 14;		
13	Gewebemanschette	က	40.023		3x Pos. 15; 3x Pos. 16; 3x Pos. 18;		
4	Backring 20 mm	9	40.025		3x Pos. 20: 3x Pos. 23		
15	O-Ring 31,42 x 2,62	က	40.508				
16	Leckagering 20 x 36 x 13,3	က	40.509		Renair kit for sleeves without		40 517
17	Cu-Dichtring 21 x 28 x 1,5	7	42.039		brase parts consisting of:		
9	Gummimanschette	က	40.512		3x Doc 13: 6x Doc 14: 3x Doc 15:		
19	Verschlussschraube R 1/2"	7	42.032		27 FOS. 13, 07 FOS. 14, 37 FOS. 13,		
20	Distanzring mit Abstützung	က	40.507		3X PUS. 16, 3X PUS. 23		
7	Aluminium-Dichtring bei quadro TS	7	13.275		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		000
22	Verschlussstopfen bei quadro TS	_	13.181		Repair Kit Valves		40.062
23	Druckring 20 mm	က	40.021		consisting of:		
24	Zwischenring 20 mm	က	40.516		6x Pos. 2; 6x Pos. 3; 6x Pos. 4		
25	O-Ring 11 x 1,5	_	12.256				
56	Edelstahlsitz Ø 7	_	14.118				
27	Sprengring	_	13.147				
28	Ausgangsteil Pumpe R1/4" x 12	_	44.215				
58	Dichtring 17 x 22 x 1,5 (Kupfer)	_	40.019				
30	Stopfen 3/8"	_	40.018				
31	Dichtstopfen M 10 x 1	_	43.043				
32	Dichtstopfen M8 x 1	7	13.158				

# Hose drum

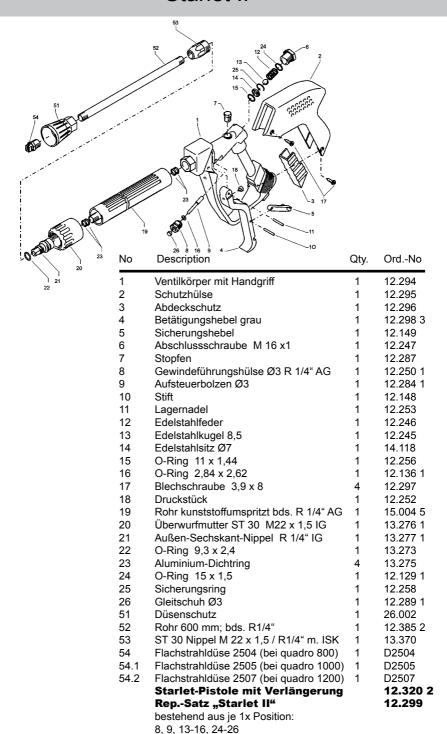


# quadro 700 TST

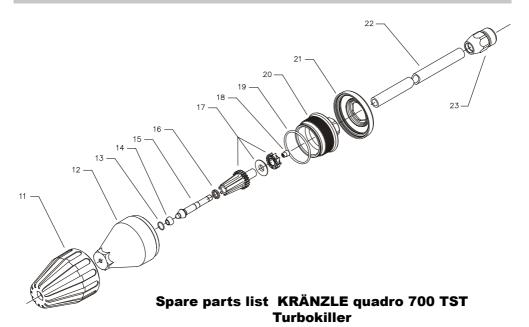
# Spare parts list KRÄNZLE quadro 700 TST Hose drum

8	Description	Qty.	OrdNo	S S	Description	Q. ÿ	OrdNo
_	Seitenschale Schlauchführung	_	40.302	23	Drehgelenk	_	40.167
7	Seitenschale Wasserführung	_	40.301	22	Distanzring	_	40.316
က	Trommel Unterteil	_	40.304	27	O-Ring 6,86 x 1,78	_	40.585
4	Trommel Oberteil	_	40.303	28	Anschlussstück	_	40.308
2	Innensechskantschraube M 4 x 25	4	40.313	33	O-Ring 6 x 1,5	_	13.386
9	Lagerklotz mit Bremse	_	40.306	34	Stopfen M 10 x 1	_	13.385
7	Lagerklotz links	_	40.305	40	Überwurfmutter	_	13.276 2
œ	Klemmstück	7	40.307	42	O-Ring 9,3 x 2,4	4	13.273
6	Kunststoffschraube 5,0 x 20	12	43.018	44	Verbindungsschlauch	_	42.624
10	Antriebswelle	_	40.310	45	Hochdruckschlauch NW 8 20 m	_	41.083
=	Welle Wasserführung	_	40.311				2 0 2 0 7 7 7 7 5 0 6
12	Elastic-Stop-Mutter M 4	4	40.111		Tose at all compi. Willout nose		1.539 0
13	Handkurbel klappbar	_	40.3200				
<del>4</del>	Verriegelungsbolzen	_	40.312				
15	Scheibe MS 16 x 24 x 2	_	40.181				
16	Wellensicherungsring 22 mm	7	40.117				
17	Wellensicherungsring 16 mm	_	40.182				
20	Parbaks 16 mm	7	13.159				
7	Sicherungsscheibe 6 DIN6799	_	40.315				
22	Schraube M 5 x 10	_	43.021				

# Starlet II

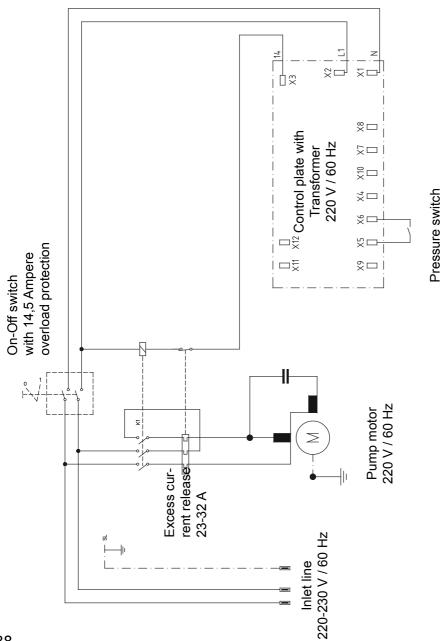


# Turbokiller



No	Description	Qty.	OrdNo
11	Sprühkörperschutz	1	41.528
12	Sprühkörper	1	41.529
13	O-Ring 6,88 x 1,68	1	41.521
14	Düsensitz	1	41.522
15	Düse 045 für quadro 800	1	41.532 1
15.1	Düse 055 für quadro 1000	1	41.532
15.2	Düse 08 für quadro 1200	1	41.537
16	Ring	1	41.533
17	Rotor	1	41.534
18	Stabilisator	1	41.524
19	O-Ring 41 x 1,78	1	41.538
20	Deckel	1	41.539
21	Deckelschutz	1	41.540
22	Rohr 500 mm lang; bds. R1/4"	1	12.385 1
23	Nippel M22x1,5 x R1/4" IG	1	13.370
	Turbokiller 045 compl. with lance		41.072 3
	Turbokiller 055 compl. with lance		41.072 4
	Turbokiller 08 compl. with lance		41.072 8
	Repair Kit Turbokiller 045 Repair Kit Turbokiller 055 Repair Kit Turbokiller 08		41.097 6 41.097 1 41.097 3

# Wiring diagram



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## General rules

#### Inspections

The machine must be inspected according to the "Guidelines for Liquid Spray Devices" at least once every 12 months by a qualified person, to ensure that continued safe operation is guarateed.

The results of the inspection are to be recorded in writing.

This may be done in any form.

#### **Accident prevention**

The machine is designed for accidents to be impossible if used correctly. The operator is to be notified of the risk of injury from hot machine parts and the high pressure water jet. The "Guidelines for Liquid Spray Devices" must be complied with. (see pages 16 and 17)

Check the oil level at the oil dip stick prior to each use (see also page 11). (Ensure horizontal position!)

#### Oil change:

The first oil change should be carried out after approximately 50 operating hours, then every year or after 1000 operating hours. If the oil turns grey or white, you must certainly change the oil of your high pressure pump.

Open the oil discharge screw at the bottom of the device over a collection resevoir.

Put the machine into a horizontal position to drain the oil. The oil is to be caught in the reservoir and disposed of in an approved manner.

New Oil: 1.0 I -

Motor oil: 10/W60 SAE halfsynthetic oil



# Inspection report

# for KRÄNZLE - High Pressure Cleaners The high pressure cleaner must be inspected by an expert every 12 months.

Appliance No.:	Type of appliance:
The following must be checked:	
1. Safety features	2. General condition
<ul> <li>a) Manometer</li> <li>b) Safety valve (pressure control)</li> <li>c) Operating pressure</li> <li>d) Cut out pressure (max. 10% above operating pressure)</li> </ul>	<ul><li>a) High pressure hose</li><li>b) Cable, plug, switch (VDE)</li><li>c) Spray gun, spray accessories.</li><li>d) Motor</li><li>e) Oil level</li></ul>

The information in the operating instructions are a part of the inspection

e) Low pressure with closed gun

Result of inspection:	Date of inspection:	Faults rectified, Stamp and signature

Excerpt from the Guidelines for Liquid Spray Equipment (ZH 1/46) by the Central Office of the Professional Trade Association.

Inspection:

Liquid spray equipment should be inspected for safe operation by a qualified person whenever necessary, but no less than every 12 months. The maker's or supplier's instructions must be followed. The inspection intervals may be extended if the equipment is not in active use.

The results of inspections must be recorded in writing and presented to the respective authorities on demand. There is no set form for these records.

# Notes

# Warranty

#### Guarantee

The guarantee is only valid for material and manufacturing errors. Wearing does not fall within this gurantee.

The instructions in our operating manual must be complied with. The operating instructions form part of the guarantee. The Guarantee is void if other parts are used than genuine Kränzle accessory parts or genuine Kränzle spare parts.

For high-pressure cleaners sold to the user the guarantee period is 24 month.

For high-pressure cleaners sold for industrial use the guarantee period is 12 month. In the case of a guarantee please contact your dealer or authorized seller delivering accessories and your purchase receipt. You can find them in the internet under <a href="https://www.kraenzle.com">www.kraenzle.com</a>.

The guarantee is also void if the machine is used with exceeding the temperature and speed limits, a voltage below the required rating, with less than the required amount of water or with dirty water. Pressure gauge, nozzle, valves, sleeves, high pressure hose and spray equipment are wear parts and are not covered by the warranty.



# High-pressure-cleaners



I. Kränzle GmbH Elpke 97 . 33605 Bielefeld



# **EC** declaration of conformity

We hereby declare,

that the high-pressure models:

Kränzle quadro 700 TST

(techn. documentation available from): Manfred Bauer, Fa. Josef Kränzle

Rudolf-Diesel-Str. 20, 89257 Illertissen

Nominal flow: K quadro 700 TST: 780 I/h

comply with the following guidelines and Machine guideline 2006/42/EEC specifications and their amendments for Specification for electromagnetic

high-pressure cleaners:

compatibility 2004/108/EEC

Outdoor noise directive 2005/88/EC,

Art. 13, High-pressure water jet machines Appendix 3, part B, chapter 27

Sound power level

measured:

89 dB (A)

guaranteed:

91 dB (A)

Applied conformity evaluation procedu- annex V, noise directive 2005/88/EC

res:

EN 60 335-2-79 / A2:2007

Applied specifications and standards: EN 55 014-1 / 2006

> EN 55014-2/ A2:2008 EN 61 000-3-2 :2006

EN 61 000-3-3:2008

Bielefeld, den 24.01.12

Kränzle Josef (Managing Director)



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I. Kränzle GmbH Elpke 97 D - 33605 Bielefeld

Reprint only allowed with the authorization of Kränzle

As date of 04/18/2013

Made

in

Germany