

Product catalogue, surface blasting systems



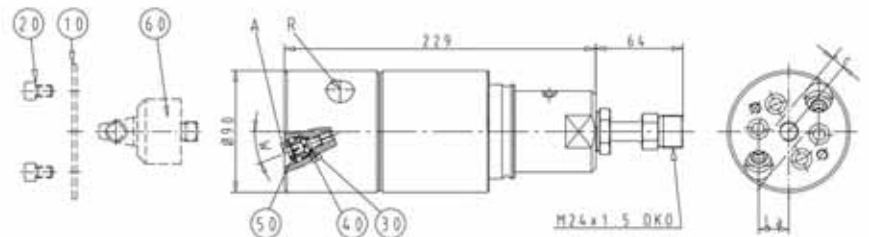
Rotorjets

**Aquablast®-
surface
blasters**

**Vacuum
units**

**Spiderjet®-
3000**

**Abrasive-
injection
nozzle**



Rotorjets for manual water blasting

- Type RD 400 with accessories
- Type RD 1000 with accessories
- Type RD 1600 with accessories
- Type RD Flex 3000 with accessories
- Rotorjet with pneumatic motor



Rotorjets for mechanical deployment

- Type RDM 200 with accessories
- Type RDM 250 with accessories
- Type RDM 300 with accessories
- Type RDM 400 with accessories
- Type RDM 400 R with accessories
- Rotorjets with electric motors



Aquablast surface blasters

- Type FR 1000 with accessories
- Type FR 1500 with accessories
- Type FR 3000
- Type FRV 2500 with accessories
- Type FRV 3000 with accessories
- Type FRE 3000
- Type FRWV 3000
- Vacuum units and accessories



Spiderjet 3000

Abrasive injection nozzle



Hammelmann application engineering overview

Type RD 400

- For use with high pressure spray guns SP 1000, SP 1000 ME, SP 400 and high pressure lances.
- Dust tight, encapsulated eddy current brake
- Cooling sleeve
- Wear resistant rotary action with labyrinth seal
- Hollow shaft precisely supported by bearings
- Nozzle inserts recessed in nozzle head
- With protective cover (against blast back).



Typical applications

- Cleaning facades, removing old paint
- Cleaning concrete, floor tiles and paving
- Cleaning heat exchanger externals
- External cleaning of construction equipment and tracked vehicles
- Cleaning mining machinery and equipment

Technical data

Operating pressure:	max. 400 bar
Flow rate:	max. 80 l/min.
Pressure loss at 25 l/min.:	5 bar
Pump power:	22 – 70 kW
Speed of rotation:	500 – 2000 r.p.m.
Weight:	approx. 1,2 kg
Length:	168 mm
Diameter:	60 mm
Connection A/F:	24 mm
Connection thread:	3/8 inch BSP
No. of nozzles:	2
For nozzle inserts see reverse.	



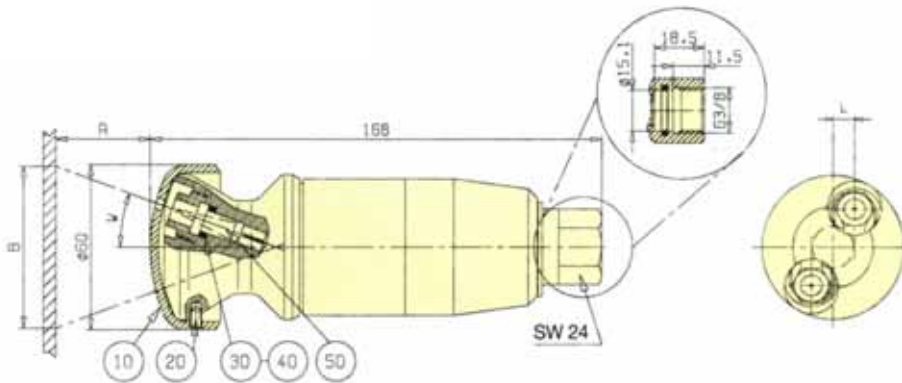
When working with hand held guns or lances the max. permissible reaction force is 250 N. If the reaction force is over 150 N then the jetting tool must be fitted with a support device such as a shoulder stock.

Code no.

09.00530.2523

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Rotorjets accessories for Type RD 400



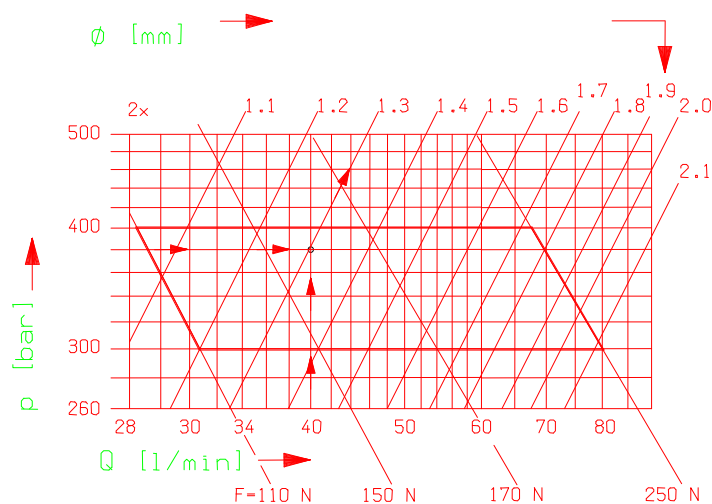
W Nozzle angle	L Nozzle offset (mm)	A Stand off distance (mm)	B Working width (mm)
27°	8	15	55
		45	85
		95	140

Item no.	Nozzle inserts: Design "A", Round jet efficiency factor 0,95					
	Code no. 04.05318.0xxx xxx = see table for last 3 digits of code no.					
50	Ø (mm)	xxx	Ø (mm)	xxx	Ø (mm)	xxx
	1,0	075	1,3	078	1,6	080
	1,1	076	1,4	079		
	1,2	077	1,5	025		

Item no.	Qty	Description	Code no./ single item
10	1	Protect. cover	01.01894.0021
20	3	Set screw	02.00894.0107
30	2	O-ring	04.00730.0033
40	2	Support ring	04.00738.0405

Example: Nozzle insert Design "A", Ø 1,0 mm
= Code no. 04.05318.0075

Nozzle insert selection and optimum performance range



Example

Parameters:

Operating pressure: 380 bar
Flow rate: 40 l/min
Select:
Correct nozzle Ø: 2 x 1,3 mm
Rotorjet with W = 27°

- Ø = Nozzle insert dia.
- p = Operating pressure
- Q = Flow rate (without leakage)
- F = Reaction force



Do not exceed right side limit of performance range:
Danger of overpowering!

For safety rules governing reaction force, see previous page!

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Rotorjets

Type RD 1000

- For use with high pressure spray guns SP 1000, SP 1000 ME, SP 400 and high pressure lances.
- Dust tight, encapsulated eddy current brake
- Cooling sleeve
- Wear resistant rotary action with labyrinth seal
- Hollow shaft precisely supported by bearings
- Nozzle inserts recessed in nozzle head
- With protective cover (against blast back).



Typical applications

- Cleaning facades, removing old paint
- Cleaning concrete, floor tiles and paving
- Paint spray booth cleaning, (oil, paint overspray etc.) booth floor grids, conveyor chains
- Cleaning heat exchanger externals
- Removing old expansion joints

Technical data

Operating pressure:	max. 1000 bar
Flow rate:	max. 60 l/min.
Pressure loss at 25 l/min.:	5 bar
Pump power:	Version 1 37 – 70 kW Version 2 22 – 55 kW
Speed of rotation:	1000 – 2000 r.p.m.
Weight:	approx. 1,2 kg
Length:	168 mm
Diameter:	60 mm
Connection A/F:	24 mm
Connection thread:	3/8 inch BSP
No. of nozzles:	2
For nozzle inserts see reverse.	

RD 1000	Code no.
Version 1*	09.00530.2532
Version 2*	.2542

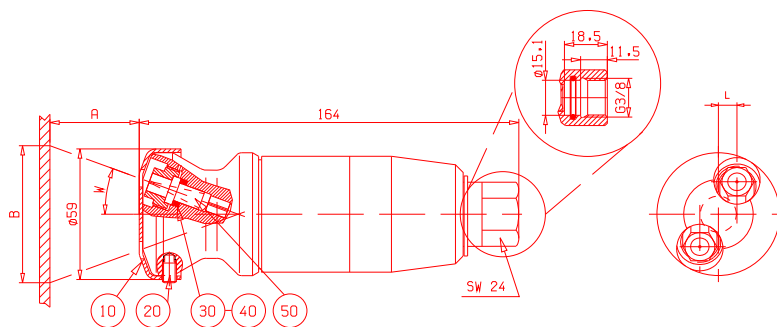
*To select see reverse



When working with hand held guns or lances the max. permissible reaction force is 250 N. If the reaction force is over 150 N then the jetting tool must be fitted with a support device such as a shoulder stock.

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Rotorjet accessories for Type RD 1000



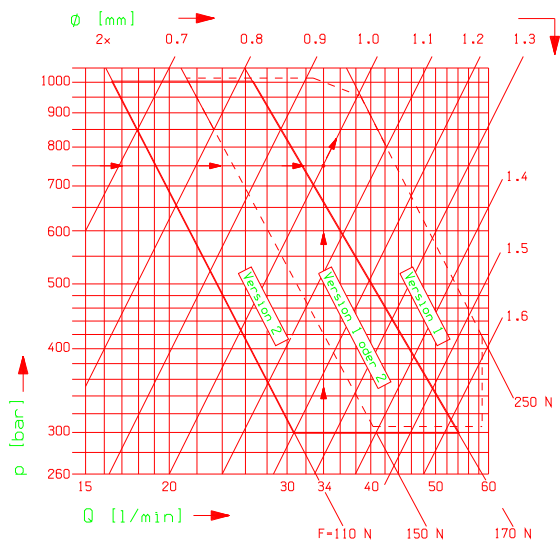
RD 1000	W Nozzle angle	L Nozzle offset (mm)	A Stand off distance (mm)	B Working width (mm)
Version 1	20°	8	15	55
			45	70
Version 2	27°	8	15	55
			45	85
			95	140

Item no.	Nozzle inserts: Design "A", Round jet efficiency factor 0,95					
	Code no. 04.05318.0xxx xxx = see table for last 3 digits of code no.					
50	Ø (mm)	xxx	Ø (mm)	xxx	Ø (mm)	xxx
	0,7	072	1,1	076	1,5	025
	0,8	073	1,2	077	1,6	080
	0,9	074	1,3	078		
	1,0	075	1,4	079		

Item no.	Qty.	Description	Code no. per single item
10	1	Protect. cover	01.01894.0021
20	3	Set screw	02.00894.0107
30	2	O-ring	04.00730.0033
40	2	Support ring	04.00738.0405

Example: Nozzle insert Design „A“
Ø 0,7 = Code no. 04.05318.0072

Nozzle insert selection and optimum performance range



Example

Parameters:

Operating pressure: 750 bar
 Flow rate: 34 l/min
 Select:
 Correct nozzle Ø: 2 x 1,0 mm
 Rotorjet with W = 20°

- Ø = Nozzle insert dia.
- p = Operating pressure
- Q = Flow rate (without leakage)
- F = Reaction force



Do not exceed right side limit of performance range:
 Danger of overpowering!

For safety rules governing reaction force, see previous page!

HAMMELMANN®

Type RD 1600

- For use with high pressure spray guns, Type SP 2500 and high pressure lances.
- Dust tight, encapsulated eddy current brake
- Cooling sleeve
- Wear resistant rotary action with labyrinth seal
- Hollow shaft precisely supported by bearings
- Nozzle inserts recessed in nozzle head
- With protective cover (against blast back).



Typical applications

- Removing two component paints
- Grid cleaning
- Removing road markings from concrete
- Removing strongly adhered old coatings
- Cleaning heat exchanger externals.

Technical data

Operating pressure:	max. 1600 bar
Flow rate:	max. 50 l/min.
Pressure loss at 15 l/min.:	5 bar
Pump power:	55 – 90 kW
Speed of rotation:	800 – 2000 r.p.m.
Weight:	approx. 1,6 kg
Length:	169 mm
Diameter:	60 mm
Connection A/F:	24 mm
Connection thread:	M 14 x 1,5 LH
No. of nozzles:	2
For nozzle inserts see reverse.	

Code no.

09.00530.2773

Disassembling tool

Code no.

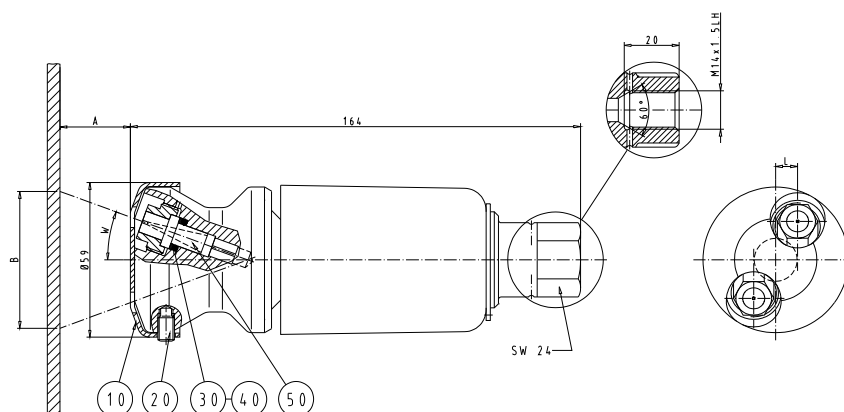
For wearing sleeve (bronze)
RD 1600/2500

00.06224.0077



When working with hand held guns or lances the max. permissible reaction force is 250 N. If the reaction force is over 150 N then the jetting tool must be fitted with a support device such as a shoulder stock.

Rotorjets accessories for Type RD 1600



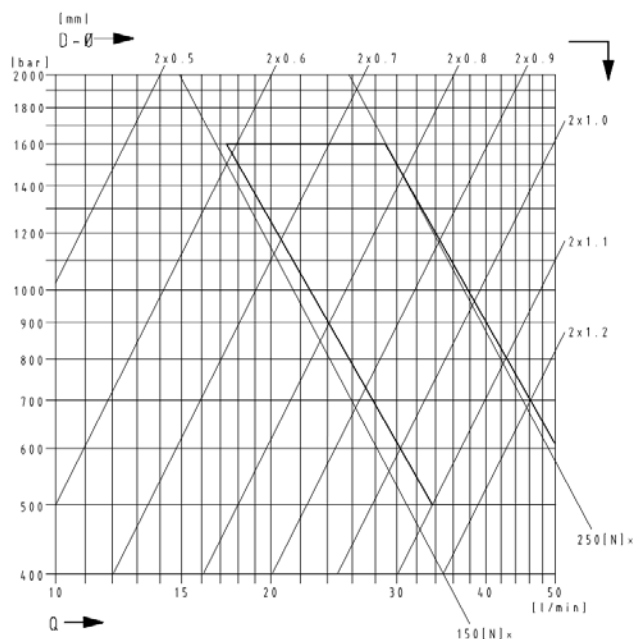
W Nozzle angle	L Nozzle offset (mm)	A Stand off distance (mm)	B Working width (mm)
20°	8	15 45 95	48 68 104

Item no.	Nozzle inserts: Design "A", Round jet efficiency factor 0,95					
	Code no. 04.05318.0xxx xxx = see table for last 3 digits of code no.					
50	Ø (mm)	xxx	Ø (mm)	xxx	Ø (mm)	xxx
	0,6	071	0,9	074	1,2	077
	0,7	072	1,0	075		
	0,8	073	1,1	076		

Item no.	Qty.	Description	Code no. per single item
10	1	Protect. cover	01.01894.0021
20	3	Set screw	02.00894.0107
30	2	O-ring	04.00730.0033
40	2	Support ring	04.00738.0405

Example: Nozzle insert Design „A“
Ø 0,6 = Code no. 04.05318.0071

Nozzle inserts selection and optimum performance range



Example

Parameters:
 Operating pressure: 1200 bar
 Flow rate: 28 l/min
 Select:
 Correct nozzle Ø: 2 x 0,8 mm

- Ø = Nozzle insert dia.
- p = Operating pressure
- Q = Flow rate (without leakage)
- F = Reaction force



Do not exceed right side limit of performance range:
 Danger of overpowering!

For safety rules governing reaction force, see previous page!

HAMMELMANN®

Rotorjets

Type RD Flex 3000

with adjustable rotation speed

- Designed for use with the SP 3000 and Ergoblast® guns, lances etc.
- Low wear, leakage free rotating components
- Internal protected brake
- Quick change seal system
- Nozzle inserts are countersunk in the nozzle carrier
- Nozzle carrier protected by blast back shield
- Plastic protective sleeve



Typical applications






- Renovation: surface layer (render etc.) removal, Paint removal, Facade cleaning
- Cleaning and washing concrete structures
- Expansion joint removal
- Side wall cleaning in phosphate plants
- Coating and paint removal from metal surfaces
- Blasting pipe externals
- Paint booth grid and skid clean up
- Hull, deck and superstructure surface preparation, Heavy machinery clean up in the ship repair industry
- Surface preparation on awkward metal profiles



When working with hand held guns or lances the maximum permissible axial reaction force is 250 N. If the reaction force exceeds 150 N the blasting tool must be fitted with a support device such as a shoulder stock

Technical Data

Op. pressure:	max. 3000 bar
Flow rate:	8,5 – 30 l/min
Pressure loss at 19 l/min:	30 bar
Pump power:	see at the table
Rotation speed:	1000 – 4000 min ⁻¹
Weight:	1,8 kg
Length:	236 mm
Diameter:	74 mm
Spanner size:	24 mm
Connection thread:	M 14 x 1,5 LH
Nozzle inserts:	max. 6
Adapter for connection 9-16 – 18 UNF LH: Code No. 01.05300.0741	

Rotorjet Type		Pump power	Suitable nozzle inserts	Code no.
	RD Flex 3001	55 – 70 kW	Type „P“ and „T“	00.00786.0079
	RD Flex 3002	70 – 120 kW	Type „P“ and „T“	00.00786.0080
	RD Flex 3003	70 – 120 kW	Type „P“ and „T“	00.00786.0093
	RD Flex 3004	70 – 120 kW	Type „K“	00.00786.0089
	RD Flex 3005	70 – 120 kW	Type „P“ und „T“	00.00786.0090

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Rotorjets

nozzle diagram for Type RD Flex 3000

RD Flex 3001

For 3 x nozzle Type „P“

Nozzle dia. in mm	Operating pressure in bar							
	1800	2000	2200	2300	2400	2500	2800	3000
0,35						8,5	9,0	9,3
0,40		9,9	10,4	10,6	10,8	11,1	11,7	12,1
0,45	11,9	12,5	13,1	13,4	13,7	14,0		
0,50	14,7	14,5						
0,55	17,7							
								Flow rate in l/min

For 3 x nozzle Type „T“

Nozzle dia. in mm	Operating pressure in bar							
	1800	2000	2200	2300	2400	2500	2800	3000
0,3						8,2	8,7	9,0
0,35		10,0	10,4	10,7	10,9	11,1	11,8	12,2
0,4	12,3	13,0	13,6	13,9	14,2			
0,45	15,6	16,5						
0,5	15,1	15,9						
								Flow rate in l/min

RD Flex 3003

For 6 x nozzle Type „P“

Nozzle dia. in mm	Operating pressure in bar							
	1800	2000	2200	2300	2400	2500	2800	3000
0,30							13,2	13,6
0,35		15,2	15,9	16,2	16,6	16,9	17,9	18,6
0,40	18,8	19,8	20,8	21,2	21,7	22,1		
0,45	23,8	25,0						
								Flow rate in l/min

For 6 x nozzle Type „T“

Nozzle dia. in mm	Operating pressure in bar							
	1800	2000	2200	2300	2400	2500	2800	3000
0,25							12,0	12,4
0,30			15,3	15,7	16,0	16,4	17,3	17,9
0,35		19,9	20,9	21,4	21,8	22,3		
0,40	24,7							
								Flow rate in l/min

RD Flex 3005

For 5 x nozzle Type „P“

Nozzle dia. in mm	Operating pressure in bar							
	1800	2000	2200	2300	2400	2500	2800	3000
0,35					13,8	14,1	14,7	15,2
0,40	15,6	16,3	16,9	17,3	17,7	18,1	19,2	20,0
0,45	19,2	20,3	21,4	22,0				
0,50	23,8	25,1						
								Flow rate in l/min

For 5 x nozzle Type „T“ For 3 x nozzle Type „T“

Nozzle dia. in mm	Operating pressure in bar							
	1800	2000	2200	2300	2400	2500	2800	3000
0,30						13,4	14,2	14,7
0,35		16,2	17,0	17,4	17,8	18,2	19,3	
0,40	20,0	21,1	22,2	22,7				
0,45	25,3	26,7						
								Flow rate in l/min

RD Flex 3002

For 3 x nozzle Type „P“

Nozzle dia. in mm	Operating pressure in bar							
	1800	2000	2200	2300	2400	2500	2800	3000
0,45							14,8	15,3
0,50			16,2	16,6	16,9	17,3	18,3	18,9
0,55		18,7	19,6	20,1	20,5	20,9		
0,60	21,1	22,3	23,3					
								Flow rate in l/min

For 3 x nozzle Type „T“

Nozzle dia. in mm	Operating pressure in bar							
	1800	2000	2200	2300	2400	2500	2800	3000
0,45							15,4	15,9
0,50			16,7	17,1	17,4	17,8	18,8	19,5
0,55		19,2	20,2	20,6	21,1	21,5		
0,60	21,7	22,9	24,0					
								Flow rate in l/min

RD Flex 3004

For 2 x nozzle Type „K“

Nozzle dia. in mm	Operating pressure in bar							
	1800	2000	2200	2300	2400	2500	2800	3000
0,50						12,3	13,1	15,3
0,55			14,0	14,3	14,6	14,9	15,8	18,9
0,60		15,9	16,7	17,1	17,4	17,8	18,8	19,5
0,70	20,5	21,6	22,7					
								Flow rate in l/min



Deviations from these nozzle combinations only after consultation with the manufacturer!

HAMMELMANN®

Rotorjet – with pneumatic rotary drive

- nozzle holder with five powerful, highly cohesive jets especially designed for metal surface preparation
- for use with high pressure spray guns Type SP 3000, high pressure lances and Ergoblast®
- high pressure connection, swivel position adjustable
- integrated pneumatic drive
- adjustable speed
- wear resistant rotary action
- high pressure seals easily replaced
- nozzle inserts recessed in nozzle head
- plastic protection cover or plastic baffle plate.



Code no.
00.00124.0135

Technical data

Operating pressure: max. 3000 bar
 Flow rate: 20 l/min
 Weight : 2,6 kg
 High pressure connection: M 14 x 1,5 LH

Technical data rotary joint (pneumatic)

Rotation speed: 100 - 3000 r.p.m.
 Performance: max. 150 W
 Operating air pressure: 4-6 bar
 Air input: max. 25 m³/h
 Medium: filtered and oiled air
 hose connection: 9 mm snap coupling.

Accessories (without picture)	Code no.
Portable pneumatic control/maintenance unit with 5 m hose and snap coupling	09.00861.0001
9 mm i/d air supply hose with fittings, 20 m long	08.99109.0043
Tool for rotary joint	00.06224.0094
Baffle plate for concrete renovation	01.04397.0045

HAMMELMANN®

Nozzle holders

12.K.1 – 09/11

Max. op. pressure: 2500 bar / 3000 bar
 Threaded conn.: M 14 x 1,5 LH
 Female (with conical seal)

DH 1



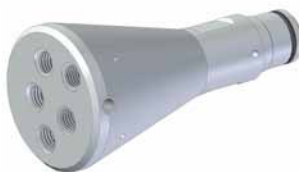
DH 2



DH 5



DH 6



DH 7



Nozzle inserts		Application	Code no. ¹⁾
Material	Weight		
2 x Nozzles M 10 "Type P" max. 3000 bar		Concrete reconstruction: scarifying, removal. Weld preparation slag removal, burnt primer stripping	00.01599.0257
stainl. steel	0,5 kg		
2 x Nozzles M 10 "Type P" max. 3000 bar		Concrete reconstruction: exposing reinforcing bars	08.00636.0105
stainl. steel	0,4 kg		
6 x Nozzles M 10 "Type P" max. 3000 bar		Surface preparation: paint stripping from metals. Use protective cover if removing abrasive non skids	00.01599.0242
stainl. steel	0,8 kg		
5 x Nozzles M 10 "Type P" max. 3000 bar		Surface preparation: paint stripping from metals. Fast, efficient removal of all types of protective coatings	00.01599.0246
stainl. steel	0,7 kg		
8 x Nozzles M 10 "Type P" max. 3000 bar		Surface preparation: paint stripping from metals. Extra wide working width.	00.01599.0243
stainl. steel	1,6 kg		

¹⁾ without nozzle inserts

Accessories to type DH 5:

Protective cover	01.04380.0954
Threaded connection	02.00825.0705

HAMMELMANN®

Nozzle holders

12.K.2 – 09/11

Max. op. pressure: 2500 bar / 3000 bar
 Threaded conn.: M 14 x 1,5 LH
 Female (with conical seal)

DH 8



DH 9



DH 10



DH 11



DH 12



Nozzle inserts		Application	Code no. ¹⁾
Material	Weight		
6 x Nozzles M 10 "Type P" max. 3000 bar		Surface preparation: paint stripping from metals. Designed for stripping in corners, structural members such as H beams stiffeners etc.	00.01599.0244
stainl. steel	0,6 kg		
6 x Nozzles M 6 x 0,75 "Type O" max. 3000 bar		Surface preparation: paint stripping from metals. As DH8 above but for tighter angles and smaller structural members.	00.01599.0245
stainl. steel	0,15 kg		
7 x Nozzles M 4 fixed with adhesive "Type N" max. 2500 bar		Surface preparation: paint stripping from metals. Extremely small dia. but with wide angles for stripping in tight, awkward situations. Can be adapted for tube cleaning	01.01599.0210 ²⁾
stainl. steel	0,1 kg		
2 x Nozzles M 6 x 0,75 "Type O" max. 2500 bar		Surface preparation: paint stripping from metals. Special hardened nozzle for very small structural members.	01.01599.0165 ²⁾
stainl. steel	0,1 kg		
5 x Nozzles M 6 x 0,75 "Type O" max. 2500 bar		Surface preparation: paint stripping from metals. Special hardened nozzle for very small structural members.	01.01599.0141 ²⁾
stainl. steel	0,1 kg		

HAMMELMANN®

Nozzle holders

12.K.3 – 09/11

Max. op. pressure: 2500 bar / 3000 bar
 Threaded conn.: M 14 x 1,5 LH
 Female (with conical seal)

DH 13



DH 14



Nozzle inserts		Application	Code no. ¹⁾
Material	Weight		
4 x Nozzles M 6 x 0,75 "Type O" max. 2500 bar		Surface preparation: paint stripping from metals. Special hardened nozzle for very small structural members.	01.01599.0140 ²⁾
stainl. steel	0,1 kg		
2 x Nozzles M 6 x 0,75 "Type O" max. 2500 bar		Surface preparation on struts, girders, U profiles etc.: weld preparation and coating removal	01.01599.0274 ²⁾
stainl. steel	0,2 kg		

¹⁾ without nozzle inserts

²⁾ for the use of the nozzle holder DH 10, 11, 12, 13, 14 (max. 2500 bar). For the SP 3000 PR you need an additional fitting code no. 00.05300.0111.

Type RDM 200

- Designed for mechanical deployment
- Stainless steel housing
- Dust tight, encapsulated eddy current brake
- Cooling sleeve
- Wear resistant rotary action with labyrinth seal
- Axial nozzle arrangement. Nozzles can be radially arranged for pipe cleaning
- Protective cover (against blast back) optional



Typical applications

- Cleaning pipes, boilers, furnaces
- Roughening concrete surfaces

Technical data

Operating pressure:	max. 1000 bar
Flow rate:	max. 160 l/min.
Pressure loss at 60 l/min.:	5 bar
Pump power:	90 – 230 kW
Speed of rotation:	100 - 1500 r.p.m.

Connection thread	Code no.
M 24 x 1,5	09.00530.2042
M 36 x 2	.2043

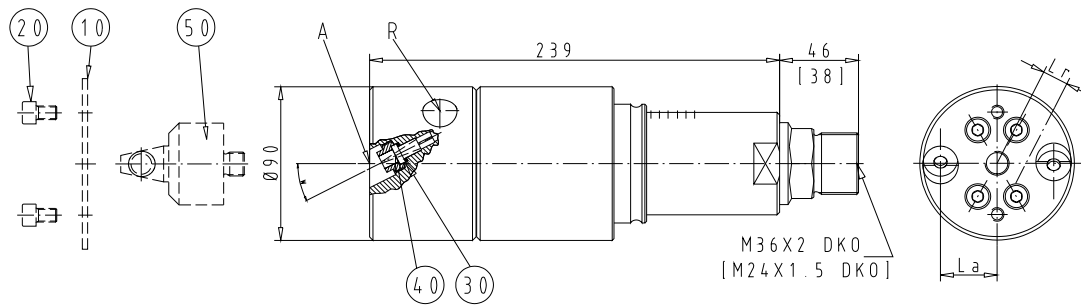
Weight:	approx. 8,0 kg
Length:	239 mm
Diameter:	90 mm
Connection A/F:	41 mm
Connection threads:	see left
No. of nozzles:	2
For nozzle inserts see reverse.	

Optional:

	Code no.
Sledge (suitable for internal diameter from 125 - 500 mm)	00.01355.0005

Rotorjets

Accessories for Type RDM 200



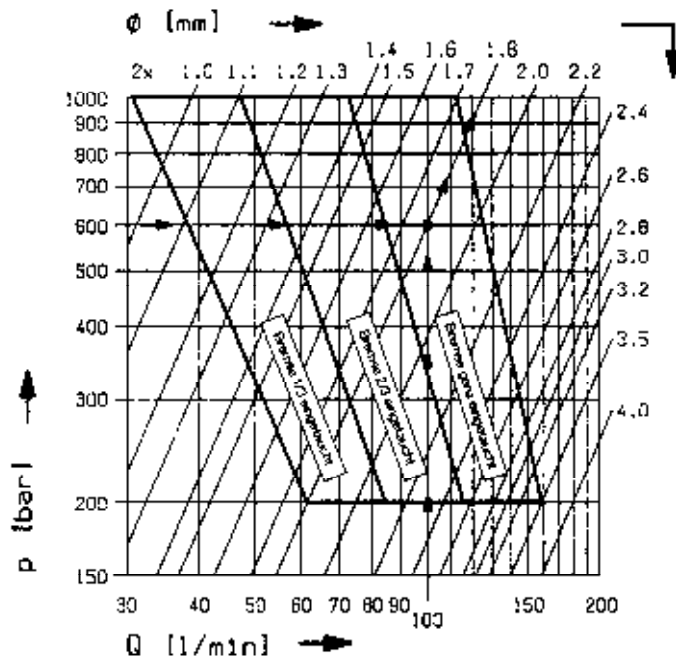
W Nozzle angle	L Nozzle offset (mm)	A	R
27°	33	axial	
90°	15		radial

Item no.	Description	Code no.
10	Protection cover	01.04397.0004
20	Screw	02.00830.0004
30	O-ring	04.00730.0033
40	Nozzle inserts	04.05318.0xxx
50	Pulling mech.	00.06048.0010*

* to be used solely with radial nozzles.
(see "R" above)

Item no.	Nozzle inserts: Design "A", Round jet efficiency factor: 0,95							
	Code no. 04.05318.0xxx xxx = see table for last 3 digits of code no.							
40	Ø (mm)	xxx	Ø (mm)	xxx	Ø (mm)	xxx	Ø (mm)	xxx
	1,0	075	1,7	081	2,4	027	3,1	091
	1,1	076	1,8	022	2,5	085	3,2	092
	1,2	077	1,9	082	2,6	086	3,3	093
	1,3	078	2,0	023	2,7	087	3,4	094
	1,4	079	2,1	083	2,8	088	3,5	095
	1,5	025	2,2	026	2,9	089		
	1,6	080	2,3	084	3,0	090		

Nozzle insert selection and optimum performance range



Example

Parameters:

Operating pressure: 600 bar
 Flow rate: 100 l/min
 Select:
 Correct nozzle Ø: 2 x 1,8 mm
 Brake fully engaged

Ø = Nozzle insert dia.
 p = Operating pressure
 Q = Flow rate
 (without leakage)

Do not exceed right side limit
 of performance range:
 Danger of overpowering!



For safety rules governing
 reaction force, see previous
 page!

Type RDM 250

- Designed for mechanical deployment
- Stainless steel housing
- Dust tight, encapsulated eddy current brake
- Cooling sleeve
- Wear resistant rotary action with labyrinth seal
- Axial nozzle arrangement. Nozzles can be radially arranged for pipe cleaning
- Protective cover (against blast back) optional



Typical applications

- Cleaning pipes, boilers, furnaces
- Roughening concrete surfaces
- Coating and paint removal

Technical data

Operating pressure:	max. 1500 bar
Flow rate:	max. 120 l/min.
Pressure loss at 35 l/min.:	5 bar
Pump power:	70 – 230 kW
Speed of rotation:	100 - 1500 r.p.m.
Weight:	approx. 8,0 kg
Length:	239 mm
Diameter:	90 mm
Connection A/F:	32 mm
Connection thread:	M 24 x 1,5 DKO
No. of nozzles:	2
For nozzle inserts see reverse.	

Code no.
09.00530.2046

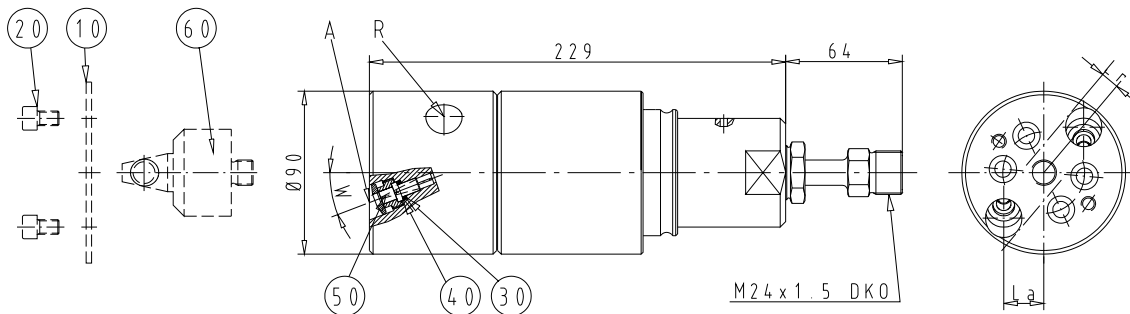
Optional:

	Code no.
Sledge (suitable for internal diameters from 125 - 500 mm)	00.01355.0005

Rotorjets

Accessories for Type RDM 250

13.B.4 – 12/08



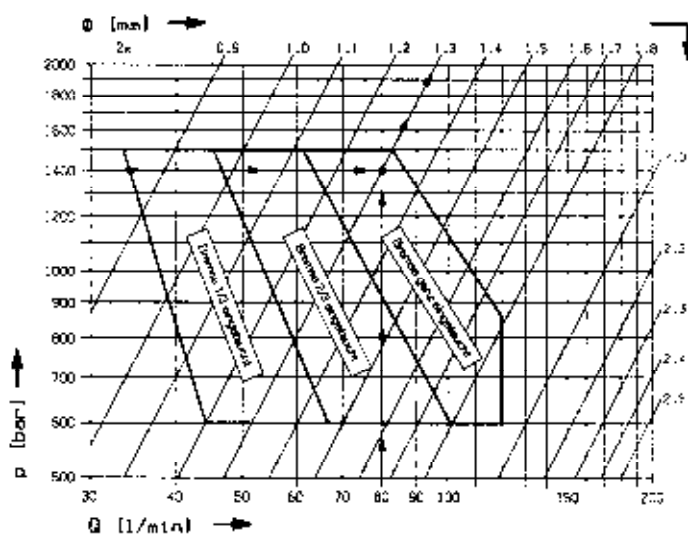
W Nozzle angle	L Nozzle offset (mm)	A	R
21°	22	axial	
90°	10		radial

Item no.	Description	Code no.
10	Protection cover	01.04397.0010
20	Screw	02.00830.0004
30	O-ring	04.00730.0033
40	Support ring	04.00738.0405
50	Nozzle inserts	04.05318.0xxx
60	Pulling mech.	00.06048.0010*

* to be used solely with radial nozzles.
(see "R" above)

Item no.	Nozzle inserts: Design "A", Round jet efficiency factor: 0,95							
	Code no. 04.05318.0xxx xxx = see table for last 3 digits of code no.							
50	Ø (mm)	xxx	Ø (mm)	xxx	Ø (mm)	xxx	Ø (mm)	xxx
	0,9	074	1,3	078	1,7	081	2,1	083
	1,0	075	1,4	079	1,8	022	2,2	026
	1,1	076	1,5	025	1,9	082		
	1,2	077	1,6	080	2,0	023		

Nozzle insert selection and optimum performance range



Example

Parameters:

Operating pressure: 1400 bar
Flow rate: 80 l/min
Select:
Correct nozzle Ø: 2 x 1,3 mm
Brake fully engaged

Ø = Nozzle insert dia.
p = Operating pressure
Q = Flow rate
(without leakage)

Do not exceed right side limit
of performance range:
Danger of overpowering!



For safety rules governing
reaction force, see previous
page!

HAMMELMANN®

Type RDM 300

- Designed for mechanical deployment
- Low rotational speed
- Stainless steel housing
- Dust tight, encapsulated eddy current brake
- Cooling sleeve
- Wear resistant rotary action with labyrinth seal
- Axial nozzle arrangement. Nozzle can be radially arranged for pipe cleaning
- Protective cover (against blast back) optional



Typical applications

- Cleaning pipes, boilers, furnaces
- Roughening concrete surfaces

Technical data

Operating pressure:	max. 1000 bar
Flow rate:	max. 180 l/min.
Pressure loss at 60 l/min.:	5 bar
Pump power:	70 – 300 kW
Speed of rotation:	50 - 250 r.p.m.

Weight:	approx. 8,2 kg
Length:	239 mm
Diameter:	90 mm
Connection A/F:	41 mm
Connection threads:	see left
No. of nozzles:	2
For nozzle inserts see reverse.	

Connection thread	Code no.
M 24 x 1,5	09.00530.2041
M 36 x 2	.2040

Optional:

	Code no.
Sledge (suitable for internal diameters from 125 - 500 mm)	00.01355.0005

Type RDM 400

- Designed for mechanical deployment
- Stainless steel housing
- Dust tight, encapsulated eddy current brake
- Wear resistant rotary action with labyrinth seal
- Axial nozzle arrangement. Nozzles can be radially arranged for pipe cleaning
- Protective cover (against blast back) optional



Typical applications

- Cleaning pipes, boilers, furnaces
- Roughening concrete surfaces
- Coating and paint removal

Technical data

Operating pressure:	max. 1400 bar
Flow rate:	max. 200 l/min.
Pressure loss at 130 l/min.:	5 bar
Pump power:	200 – 500 kW
Speed of rotation:	50 – 250 r.p.m.

Code no.
09.00530.2048

Weight:	approx. 28 kg
Length:	approx. 418 mm
Diameter:	130 mm
Connection A/F:	41 mm
Connection thread:	M 36 x 2 DKO
No. of nozzles:	2
For nozzle inserts see reverse.	

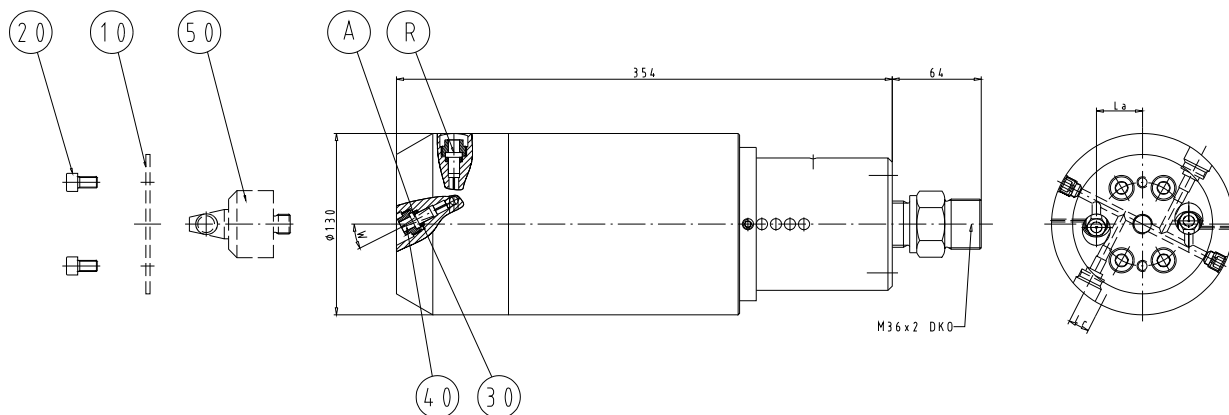
Optional:

	Code no.
Sledge (suitable for internal diameters from 125 to 500 mm)	00.01355.0006
+ Retaining ring	01.03478.0606
+ Hexagon socket head screw	02.00825.0727

Rotorjets

Accessories for Type RDM

13.B.8 – 12/08



W Nozzles angle	L Nozzle offset (mm)	A	R
27°	33	axial	--
90°	15	--	radial

Item no.	Description	Code no.
10	Protection cover	01.04397.0004
20	Screw	02.00830.0004
30	Cylinder ring	01.00742.0142
40	Nozzle inserts	04.05318.0xxx
50	Pulling mechanism	00.06048.0010*

* to be used solely with radial nozzles.
(see "R" above)

Item no.	Nozzle inserts: Design "A", Round jet efficiency factor: 0,95							
	Code no. 04.05318.0xxx xxx = see table for last 3 digits of code no.							
40	Ø (mm)	xxx	Ø (mm)	xxx	Ø (mm)	xxx	Ø (mm)	xxx
	0,9	074	1,3	078	1,7	081	2,1	083
	1,0	075	1,4	079	1,8	022	2,2	026
	1,1	076	1,5	025	1,9	082		
	1,2	077	1,6	080	2,0	023		

HAMMELMANN®

Type RDM 400 R

- Designed for pipe cleaning with pipe internal-Ø of min. 300 – max. 800 mm (standard equipment for pipe internal- Ø of 300 mm)
- Stainless steel housing
- Radial nozzle arrangement
- Reaction force driven
- Dust tight, encapsulated eddy current brake
- With interchangeable nozzle extension arms
- Wear resistant rotary action with labyrinth seal.



Typical applications

- Cleaning pipes, boilers and furnaces

Code no.
09.00530.2057

Technical data

Operating pressure:	max. 2500 bar
Flow rate:	max. 100 l/min (at $\Delta p = 30$ bar)
Pump power:	200 – 500 kW
Speed of rotation:	50 - 500 min ⁻¹
Length:	344 mm
Diameter:	260 mm (standard)
Connection:	M 30 x 2
Nozzle inserts:	4
Nozzle:	Type „I“

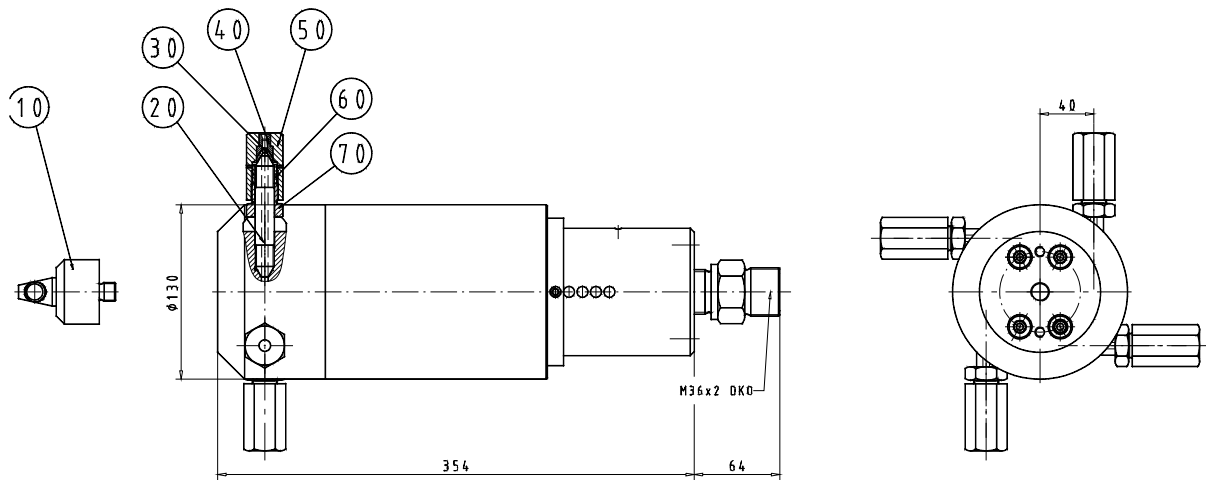
Optional:

	Code no.
Sledge (suitable for internal from min. 400 mm)	00.01599.0290

Rotorjets

Accessories for Type RDM 400 R

13.B.10 – 12/08



RDM400 R

W Nozzle angle	L Nozzle offset (mm)	A	R
90°	40	--	radial

Item no.	Description	Code no.
10	Pulling mechanism	00.06048.0010
30	Seal lens	04.00727.0019
50	Cap nut	04.02833.0086
60	Pressure ring	04.05992.0312
70	Pressure screw	04.05992.0361
80	Nozzle holder cpl. (consists of item 30, 50, 60 and 70)	00.01599.0190

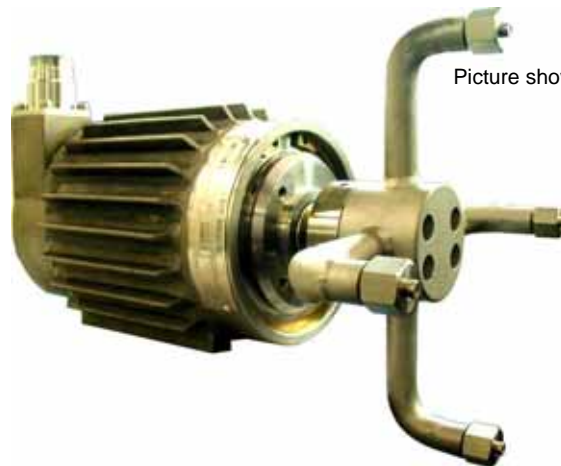
Item no.	Nozzle inserts: Design "I", round jet, Efficiency factor: 0,7							
	Code no. 04.05318.0xxx xxx = see table for last 3 digits of code no.							
40	Ø	xxx	Ø	xxx	Ø	xxx	Ø	xxx
	0,4	324	0,8	332	1,3	417		
	0,5	326	0,9	334				
	0,6	328	1,0	336				
	0,7	330	1,1	337				

Item	Nozzle extension arms for pipe internal-Ø	Code no.
20	300 mm	04.05992.0406
	400 mm	01.03535.0953
	500 mm	01.03559.0411
	600 mm	01.03535.0948
	700 mm	01.03559.0245
	800 mm	01.03559.0407

HAMMELMANN®

Rotorjets – with electrically powered rotary joint

13.N.1 – 05/07



Picture shows rotorjet 09.00530.4639

Technical data

Operating pressure: max. 1000 bar
 Flow rate: 100 l/min
 High pressure water connection thread: M 26 x 1,5 female
 With high pressure packing version.
 Complete with electric plug and 6 m connecting cable.
 (cable protection hose not included)

4 pole Electric motor:

Power: 1,5 kW
 Rotation speed: 1450 min⁻¹
 Voltage: 3 x 400 V
 Frequency: 50 Hz
 Protection: IP 67

8 pole Electric motor:

Power: 0,55 kW
 Rotation speed: 720 min⁻¹
 Voltage: 3 x 400 V
 Frequency: 50 Hz
 Protection: IP 67

Spray bar	Working diameter	Code no.
2 nozzles	305 mm	09.00530.4647
	320 mm	09.00530.4642
	406 mm	09.00530.4648
4 nozzles	203 mm	09.00530.4682
	220 mm	09.00530.4655
	241 mm	09.00530.4639
	370/110 mm	09.00530.4650
	400 mm	09.00530.4643
8 nozzles	400/280 mm	09.00530.4657

Spray bar	Working diameter	Code no.
2 nozzles	215 mm	09.00530.4654
4 nozzles	203 mm	09.00530.4630
6 nozzles	185 mm	09.00530.4627
	500 mm	09.00530.4644

HAMMELMANN®

Type FR 1000

- Spray bar driven by reaction force of the water jets
- Wear resistant rotary action with labyrinth seal
- Optional pressure on/off control. Mechanical bypass valve or electric in 4-pole system signal to pump. Special controls available upon request.
- On/Off control by twin trigger action
- Height adjustable spray bar
- Three wheel carriage



Typical applications

- Grid cleaning
- Floor cleaning
- Coating removal

	Code no.
Conversion set to change from 4-pole system to 1-wire system	00.06700.0642
Spray bar for concrete removal (abrasive action)	00.03567.1299

Technical data

Working width:	300 mm	500 mm
Operating pressure:	max. 1000 bar	1000 bar
Flow rate:	max. 160 l/min.	160 l/min.
Pressure loss at 100 l/min.:	5 bar	5 bar
Pump power:	max. 170 kW	170 kW
Speed of rotation:	1500 r.p.m.	1500 r.p.m.

Weight:	100 kg	122 kg
Length:	approx. 1610 mm	1825 mm
Height:	approx. 880 mm	900 mm
Unit width:	approx. 370 mm	550 mm

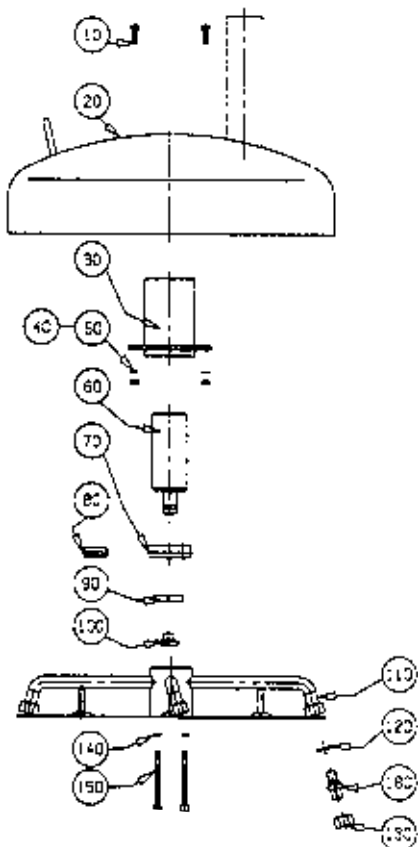
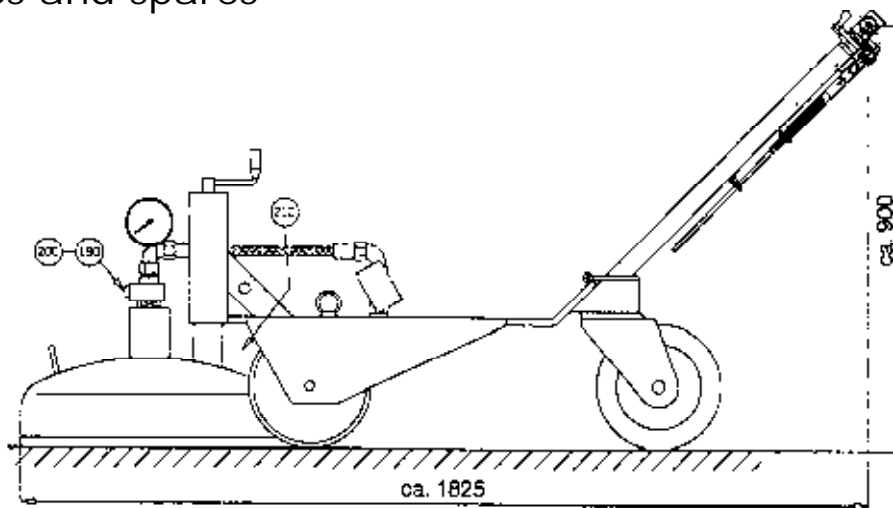
Pressure on/off	Code no.	
	Ø 300	Ø 500
mechanical	09.00661.0229	09.00661.0180
electrical	09.00661.0230	09.00661.0179



Connection nipple see reverse!
Nozzle inserts "A" and "B"

AQUABLAST® FR 1000 accessories and spares

13.D.2 – 02/08



Item no.	Qty.	Description	Code no. per single item			
10	4	Screw	02.00671.0105			
20	1	Spray bar housing	00.00387.0002			
30	1	Sleeve	00.01750.0419			
40	4	Spring washer	02.00380.0005			
50	4	Nut	02.00309.0005			
60	1	Rotary joint	00.00062.0105			
70	1	Ring	01.03465.0544			
80	1	Set screw	02.00888.0308			
90	1	Split ring	01.03465.0619			
100	1	Seal lens	01.00727.0058			
110	1	Spray bar complete: items 70 – 150	00.03567.1230			
120	4	O-ring	04.00730.0033			
130	4	Retaining nut	04.02833.0064			
140	4	Spring washer	02.00384.0006			
150	4	Screw	02.00825.0009			
180	4	Nozzle insert design "A"	see chapter 12			
190	1	Glyd ring	04.00731.0222			
200	1	Connection nipple		Operating pressure		
		M 22 x 1,5	DKO	NW 10	1500 bar	01.02981.0335
		M 22 x 1,5	DKL	NW 12	1350 bar	.0077
		M 24 x 1,5	DKO	NW 12	1800 bar	.0197
		M 30 x 2	DKO	NW 16	1000 bar	.0473
		M 30 x 1,5	DKM	NW 20	1050 bar	.0154
		M 36 x 2	DKO	NW 20	1400 bar	.0331
		M 42 x 2	DKO	NW 25	950 bar	.0355
210	1	Stability weight	01.01390.0010			
	2	Screw	02.00671.0121			
	2	Spring washer	02.00380.0007			

HAMMELMANN®

Type FR 1500

- Spray bar driven by reaction force of the water jets
- Wear resistant rotary action with labyrinth seal
- Optional pressure on/off control. Mechanical bypass valve or electric in 4-pole system signal to pump. Special controls available upon request.
- On/Off control by twin trigger action
- Four wheel carriage
- Choice of version with or without protection for spray bar.



Typical applications

Aquablast without protection

- Grid cleaning
- Paint removal on steel plates

Aquablast with protection

- Floor cleaning
- Roughening concrete surfaces
- Removing road markings from concrete

Technical data

Working width:	400 mm
Operating pressure:	max. 1500 bar
Flow rate:	max. 150 l/min.
Pressure loss at 50 l/min.:	5 bar
Pump power:	max. 200 kW
Speed of rotation:	1000 r.p.m.
Length:	approx. 1350 mm
Height:	approx. 900 mm
Unit width:	approx. 450 mm
Connection thread:	M 24 x 1,5 DKO-S

Conversion set	Code no.
to change from 4-pole system to 1-wire-system	00.06700.0642



AQUABLAST® may only be driven with four nozzles. Nozzle inserts Type "A" and "B"

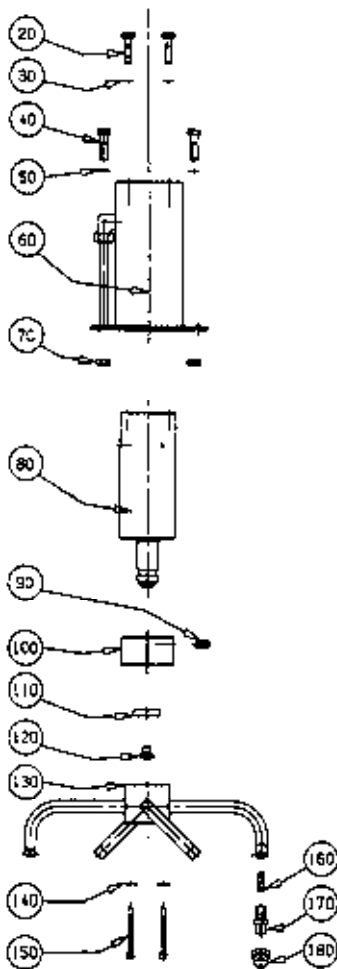
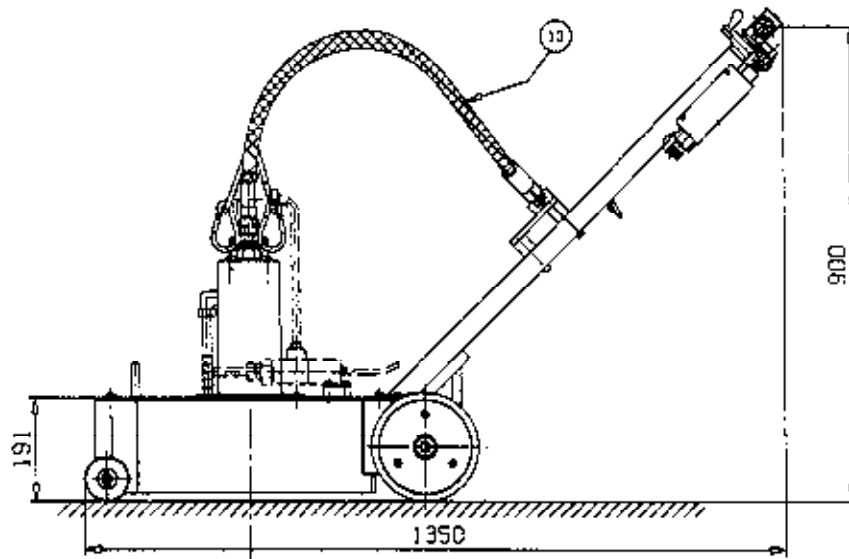
	Pressure on/off	Weight [kg]	Code no.
Grid cleaning (without protection)	mechanical	90	09.00661.0159
	electrical	73	.0150
Concrete removal (with protection)	mechanical	--	---
	electrical	81	09.00661.0173

Description	Code No.
Extra weight, 33 kg	01.01390.0020

HAMMELMANN®

AQUAJET® FR 1500
accessories and spares

13.D.4 – 02/08



Item no.	Qty.	Description	Code no. / per single item
10	1	High pressure hose	04.04599.1262
	1	Hose arrester	04.04608.0038
	2	Karabiner hook	02.01360.0003
20	4	Screw	02.00825.0047
30	4	Spring washer	02.00384.0008
40	4	Screw	02.00671.0121
50	4	Spring washer	02.00380.0007
60	1	Sleeve	00.01750.0432
70	4	Nut	02.00309.0007
80	1	Rotary joint	00.00062.0130
90	1	Set screw	02.00888.0308
100	1	Flange	01.01055.0681
110	1	Split ring	01.03465.0510
120	1	Seal lens	01.00727.0044
130	1	Spray bar for grid cleaning	00.03567.1138
	1	Spray bar for concrete removal	00.03567.1178
140	4	Spring washer	02.00384.0006
150	4	Screw	02.00825.0020
160	4	Sleeve	00.01750.0426
170	4	Nozzle insert Design „A“	see chapter 12
180	4	Retaining nut	01.02833.0066

Spray bar complete: items 90 – 180 without nozzle inserts	00.03567.1139
---	---------------

HAMMELMANN®

Type FR 3000

- Spray bar driven by reaction force of the water jets
- Height adjustable spray bar
- Wear resistant rotary action with labyrinth seal
- Spray bar housing with special seal and suction outlets
- Electrical pressure on/off control in 4-pole system
- Four wheel carriage



Typical applications

- Cleaning up petrol, oil and grease deposits

Construction industry

- Removing paints, mastics, laitance, adhesion inhibitors, renderings etc.
- Brightening thermoplastic flooring
- Scarifying concrete and asphalt

Marine industry

- Removing paint, deck coatings, rust etc.

Technical data

Working width:	215 mm
Operating pressure:	max. 3000 bar
Flow rate:	max. 40 l/min.
Pressure loss at 40 l/min.:	60 bar
Speed of rotation:	max. 3000 r.p.m.

Weight:	76 kg
Length:	approx. 1410 mm
Height:	approx. 900 mm

Connections:

Bypass control cable:	ITT-plug
High pressure hose:	M 14 x 1,5 LH

Pressure on/off	Code no.
electrical 3000 bar	09.00661.0232



Nozzle inserts
Type "P" (16 pieces)

Type FRV 2500

- Available with and without direct vacuuming of water and waste material
- Spray bar driven by reaction force of the water jets
- Optimum spray bar design with 4 nozzle arms enabling the fitting of up to 16 nozzle inserts.
- Height adjustable spray bar
- Wear resistant rotary action with dynamic high pressure seal
- Spray bar housing with special seal and suction outlets
- Mechanical bypass valve
- Four wheel carriage



Technical data

Working width:	215 mm
Operating pressure:	max. 2500 bar
Flow rate:	max. 40 l/min.
Pressure loss at 40 l/min.:	60 bar
Pump power:	max. 100 kW
Perm. speed of rotation:	max. 3000 r.p.m.

Weight with 10 m suction hose:	130 kg
Weight without suction hose:	82 kg
Length:	approx. 1430 mm
Height:	approx. 960 mm

<u>Connections:</u>	
High pressure hose:	M 14 x 1,5 LH, bs.
Suction hose:	B coupling

Pressure on/off	Code no.
mechanical with suction and pressure hose	09.00680.0013
mechanical without suction and pressure hose	09.00680.0012

Description	Code no.
Suction and pressure hose	00.04590.0019

Typical applications

- Direct vacuuming allows the use of high pressure water in factories and machine shops without halting production or on roads, upper storeys of buildings etc. without the need for closure
- Cleaning PLUS vacuuming of petrol, oil and grease deposits

Construction industry

- Removing PLUS vacuuming paints, mastics, laitance, adhesion inhibitors, renderings etc.
- Brightening PLUS vacuuming thermoplastic flooring
- Scarifying PLUS vacuuming concrete and asphalt

Marine industry

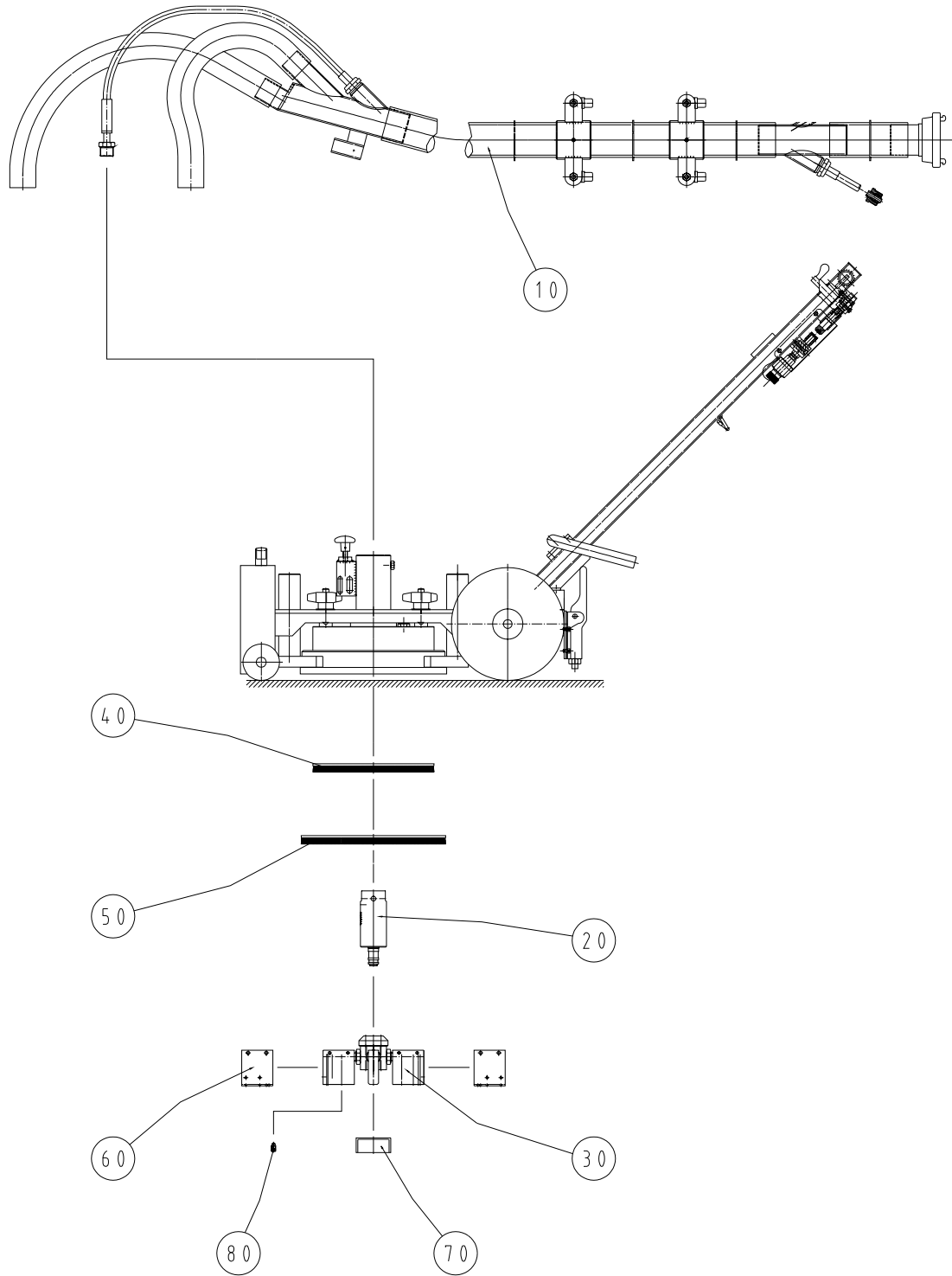
- Removal PLUS vacuuming paint, deck coatings, rust etc.



Nozzle inserts
Type "P" – 16 pieces

AQUABLAST[®] PLUS FRV 2500 accessories and spares

13.E.2 – 12/06



HAMMELMANN[®]

AQUABLAST[®] PLUS FRV 2500

Accessories and Spares

13.E.3 – 12/08

AQUABLAST[®] PLUS FRV 2500			
Item No.	Quantity	Description	Code no. / per piece
10	1	12 m hose assy. incl. HP hose, suction hose	00.04590.0019
20	1	Rotary joint	00.00062.0137
30	1	16 jet spray bar	00.03567.9139
40	1	Inner brush, large (standard) only for Q ≥ 25 l/min.	04.00594.0023
	1	Inner brush, fine, only for Q ≥ 25 l/min.	04.00594.0026
50	1	Outer brush, large (standard) for rough surfaces i.e. concrete	04.00594.0024
	1	Outer brush, fine, for smooth surfaces i.e. steel plate	04.00594.0025
60	1	Protective cover for spray bar 01.01599.0373	01.04870.0066
	1	Protective cover for spray bar 01.01599.0375	01.04870.0068
	1	Protective cover for spray bar 01.01599.0374	01.04870.0067
	1	Protective cover for spray bar 01.01599.0376	01.04870.0069
70	1	Protection for hub	01.04380.1061
80	total 16	Nozzle inserts Type "P", M 10	04.007900.xxxx
		Plug M 10 (as required)	01.05214.0045

HAMMELMANN[®]

Type FRV 3000

- Available with and without direct vacuuming of water and waste material
- Spray bar driven by reaction force of the water jets
- Optimum spray bar design with 4 nozzle arms enabling the fitting of up to 16 nozzle inserts.
- Height adjustable spray bar
- Wear resistant rotary action with dynamic high pressure seal
- Spray bar housing with special seal and suction outlets
- Electrical pressure on/off control in 4-pole system.
- Four wheel carriage



Typical applications

- Direct vacuuming allows the use of high pressure water in factories and machine shops without halting production or on roads, upper storeys of buildings etc. without the need for closure
- Cleaning up PLUS vacuuming petrol, oil and grease deposits

Construction industry

- Removing PLUS vacuuming paints, mastics, laitance, adhesion inhibitors, renderings etc.
- Brightening PLUS vacuuming thermoplastic flooring
- Scarifying PLUS vacuuming concrete and asphalt

Marine industry

- Removing PLUS vacuuming paint, deck coatings, rust etc.



Nozzle inserts
Type "P" – 16 pieces

Technical data

Working width:	215 mm
Operating pressure:	max. 3000 bar
Flow rate:	max. 40 l/min.
Pressure loss at 40 l/min.:	60 bar
Pump power:	max. 100 kW
Perm. speed of rotation:	max. 2500 r.p.m.

Weight with 10 m suction hose:	130 kg
Weight without suction hose:	82 kg
Length:	approx. 1430 mm
Height:	approx. 960 mm

Connections:

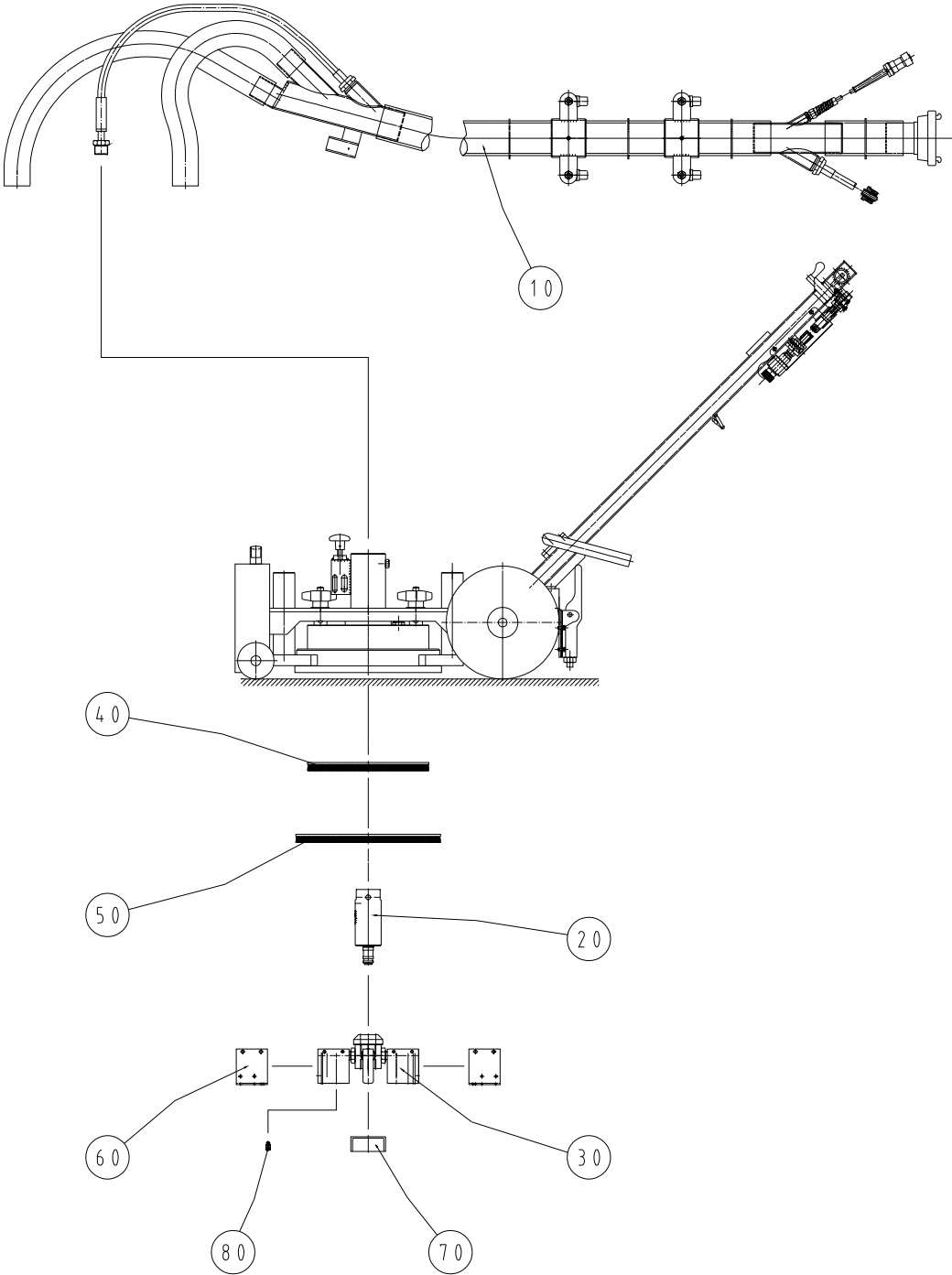
Bypass control cable:	ITT-plug
High pressure hose:	M 14 x 1,5 LH, bs.
Suction hose:	B coupling

Pressure on/off	Code no.
electrical with suction and pressure hose	09.00680.0015
electrical without suction and pressure hose	09.00680.0014

Suction and Pressure Hose	Code no.
with control cable	00.04590.0028

Conversion set	Code no.
to change from 4-pole system to 1-wire system	00.06700.0642

AQUABLAST® PLUS FRV 3000
accessories and spares



AQUABLAST[®] PLUS FRV 3000

accessories and spares

13.E.6 – 12/06

AQUABLAST[®] PLUS FRV 3000			
Item No.	Quantity	Description	Code no. / per piece
10	1	12 m hose assy. incl. HP hose, suction hose, E-cable	00.04590.0028
20	1	Rotary joint	00.00062.0137
30	1	16 jet spray bar	00.03567.9139
40	1	Inner brush, large (standard) only for Q ≥ 25 l/min.	04.00594.0023
	1	Inner brush, fine, only for Q ≥ 25 l/min.	04.00594.0026
50	1	Outer brush, large (standard) for rough surfaces i.e. concrete	04.00594.0024
	1	Outer brush, fine, for smooth surfaces i.e. steel plate	04.00594.0025
60	1	Protective cover for spray bar 01.01599.0373	01.04870.0066
	1	Protective cover for spray bar 01.01599.0375	01.04870.0068
	1	Protective cover for spray bar 01.01599.0374	01.04870.0067
	1	Protective cover for spray bar 01.01599.0376	01.04870.0069
70	1	Protection for hub	01.04380.1061
80	total 16	Nozzle inserts Type "P", M 10	04.00790.xxxx
		Plug M 10 (as required)	01.05214.0045

HAMMELMANN[®]

AQUABLAST® for marking removal

13.D.6 – 02/08

Type FRE 3000

- Electrically driven spray bar and drive carriage controlled by a frequency converter to achieve optimal speed combination to suit the job in hand.
- Twin handgrip pressure control.
- Four wheel drive carriage.
- "Anti splash" brush seal.
- Carriage drive cut out for manual deployment.



Typical applications

- road marking removal

Code no.
09.00661.0228



Technical data

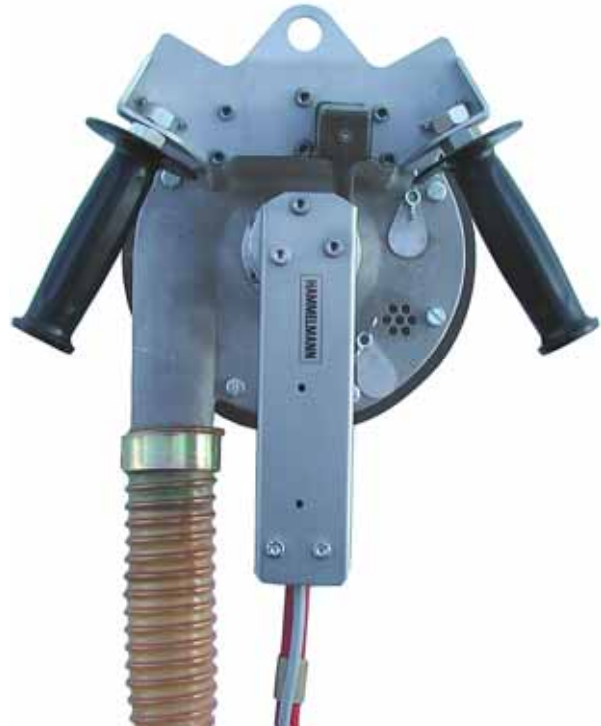
Working width:	350 mm
Op. pressure:	max. 3000 bar
Flow rate:	max. 40 l/min
Pressure loss at 40 l/min:	5 bar
Pump power:	max. 170 kW
Spray bar speed:	
2-pole motor:	0 – 2400 1/min
4-pole motor:	0 – 1500 1/min
<u>Power requirement:</u>	3 kW
	400 V
	50 Hz
Removal rates: (depending upon marking material)	ca. 200 – 1600 m/h.
Weight:	approx. 150 kg
Length:	approx. 1600 mm
Height:	approx. 1000 mm
Unit width:	approx. 550 mm
No. of nozzles:	20 pieces
Nozzle type:	"P"
Connection thread:	M 26 x 1,5

(Pressure collar/Pressure nut)

HAMMELMANN®

Type FRWV 3000

- Ergonomic hand held cleaning and stripping unit
- Twin trigger operation
- Aluminium housing with all water bearing parts from stainless steel
- Brush arrangement ensures that stand off distance is maintained
- Connection for vacuum system



Typical applications

- Cleaning, stripping vertical surfaces
- Ship repair – removing marine growths, stripping hull coatings above and below the water line
- Construction industry – removing paint from facades and other concrete surfaces
- Cleaning tanks

Technical data

Working width: 140 mm
 Operating pressure: max. 3000 bar
 Speed of rotation: approx. 2500 r.p.m.

System	Code no.
4 pole system	09.00661.0223
with pneumatic control	09.00661.0224

Weight

pneumatic control approx. 9,3 kg
electric control approx. 7,7 kg
 Height: approx. 174 mm
 Width incl. hand grip: approx. 350 mm

Accessory	Code no.
protection for abrasive work	00.04877.0015



8 nozzle inserts Type "P"

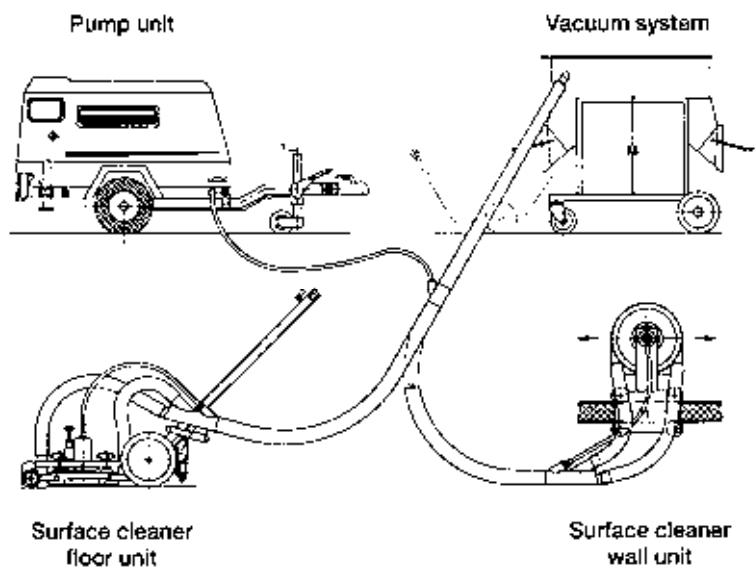
Hammelmann vacuum unit

for operation in conjunction with the Hammelmann AQUABLAST® Plus (FRV 2500 and FRV 3000) and the hand held AQUABLAST®.

comprising:

Vacuum system

- Manually deployed waste collection unit
- Waste water and solids are separated within the system for further disposal
- The pre-cleaned waste water is pumped out of the unit so that downtime is minimised
- Separator collects materials in suspension
- Hinged doors to allow solids removal
- Power connection via heavy duty plug with phase inverter
- De-watering pump with over suction protection
- Show glass for monitoring content level
- Lockable casters.



Technical data

Length: approx. 2300 mm
 Width: approx. 1000 mm
 Height: approx. 1850 mm
 Weight: approx. 525 kg

Tank capacity: 500 l
 Power required: 5,5 kW
 Vacuum: 200 mbar
 Suction volume: 200 m³/h

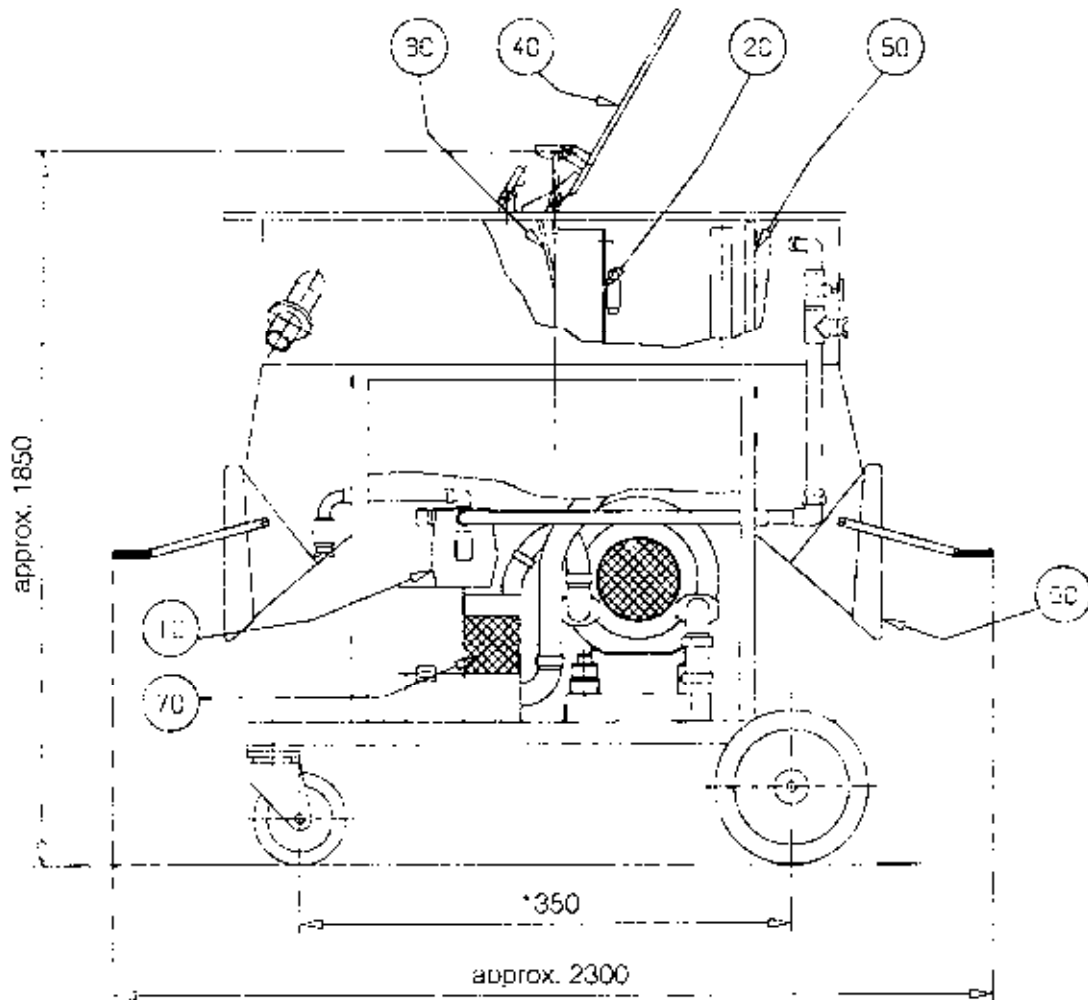
Connections

Water out: 1"GEKA coupling
 Suction in: B coupling

Code no.
09.00850.0004

Vacuum unit accessories and spares

13.K.2 – 05/07



Accessories			
Item no.	Qty.	Description	Code no. / per single item
10	1	Pressure regulating nozzle	04.04010.0004
20	1	Float switch, close (black) for pumping out	04.04290.0146
	1	Open (red) for filling	04.04290.0147
30	1	Filter sieve complete	00.01020.0004
40	1	Cover seal	01.00700.0009
50	1	Filter sieve	00.01020.0003
60	1	Seal	01.00700.0020
70	1	Condensate separator	04.00021.0001

Accessories		
1	Suction hose 50 mm i/d (standard), 15 m	00.04590.0005
1	Suction hose 65 mm i/d (extension), 10 m	.0006

HAMMELMANN®

Spiderjet® 3000

13.H.1 – 09/09

AQUABLAST® SPIDERJET 3000 surface preparation unit.

The SPIDERJET 3000 consists of:

- pneumatic twin wheel drive.
- electronically monitored vacuum with automatic UHP water shut off
- Electric-pneumatic precise control unit enabling automatic straight line running
- winch with safety arrester.
- air pressure maintenance unit.
- Optional:
air powered winch
- Standard:
two counter balance safety arresters



Code no.
09.00661.0221

Air drier



Code no.
04.00888.0009

Air drier incl. prefilter

Performance: 1800 l/min at 16 bar
 Supply: 230 V / 50 Hz / 900 W
 Dimension: 480 x 375 x 530 mm
 Weight: 40 kg
 Rate of separation: at 35°C – 95%
 at 50°C – 50%

Technical Data

- Working width: 374 mm
- Op. pressure: to 3000 bar
- Flow rate: to 50 l/min.
- Weight: 105 kg
- Length: 775 mm
- Width: 780 mm
- Conn. thread for HP hose: M 30 x 2
- Vacuum: to 0.8 bar dependant upon work surface
- Suction conn.: DN 100
- Vacuum rate: 1500 m³/h at 50 % vacuum
- No. of nozzles: 16
- Nozzle type: P
- Air pressure qty.: min. 29 l/sec.
- Air pressure: 4 – 8 bar
- Air pres. conn.: nipple f. 3/4" hose
- Stripping rate: approx. 70 m²/h dependant upon coating quality

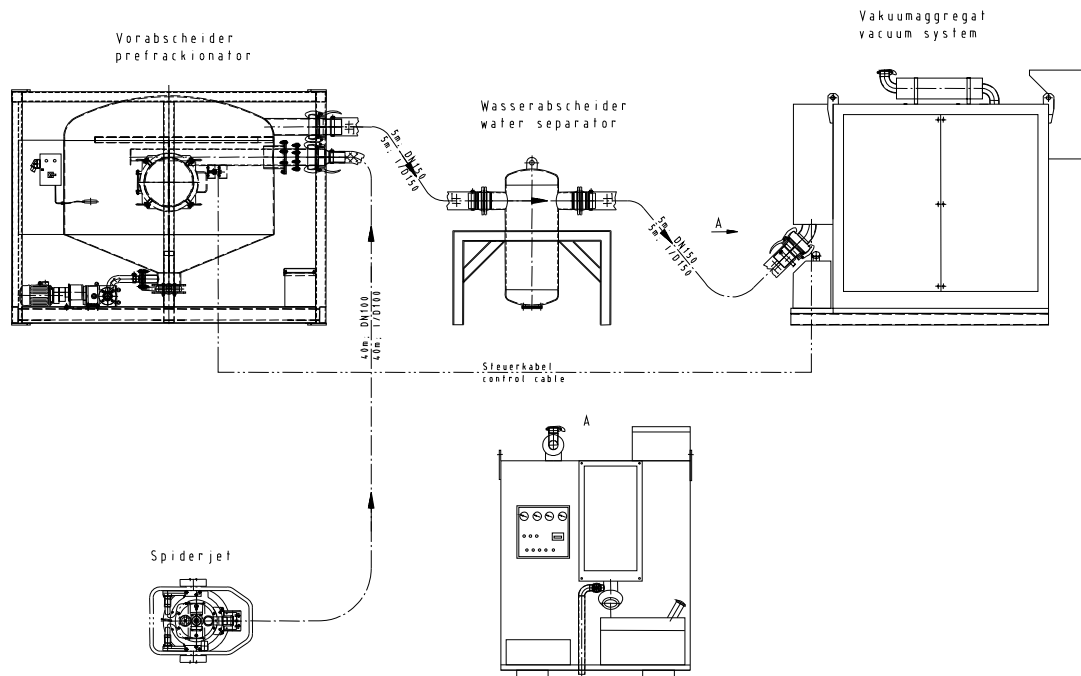
HAMMELMANN®

Vacuum system with vacuum unit and separator

Hammelmann VACU-TAINER® 2500

for operation in conjunction with the Hammelmann SPIDERJET® 3000

comprising:



Vacuum unit

- in sound damping container (H x W x L) 2500 x 2050 x 2000 mm with forklift shoes
- Roots blower
- Continuous performance approx. 2610 m³/hr. (Zero load)
- Speed of rotation approx. 1200 – 2500 rpm
- Suction connection DN 150
- Up to 50 % continuous partial vacuum
- Powered by a Deutz diesel engine
- Rating 55 kW at 2500 rpm.,
- Manual speed adjustment
- Engine complete with fuel filter and exhaust
- Approx. 120 litre capacity fuel tank
- Safety filter changeable
- Unit and diesel engine controls accessed from outside the system via a lockable door

Separator

- Prefractionator tank with approx. 2,4 m³ capacity, vacuum resistance 50 %
- Dimension (H x W x L): 2245 x 2300 x 2990 mm
- 5 inch suction connection
- 5 inch air connection
- Emptying via gate valve
- Monitors: electrical level switch and tank full signal
- Manhole
- Tank fitted with de-watering pump

Description	Code no.
Vacuum system	00.05480.0001

HAMMELMANN®

Abrasive injection nozzle

For working on surfaces an abrasive material can be added to the water jet.

- For use with high pressure water blasting guns SP 1000, SP 1000 ME, SP 400 and high pressure lances
- Boride carbide nozzle insert
- Interchangeable water nozzles
- Universal hose coupling



Typical applications

- Casting polishing
- Shaping steel components
- Profiling new metal surface to accept protective coatings
- Cleaning and shaping steel, stone and concrete surfaces

Technical data

Op. pressure: max. 1000 bar
Working pressure: max. 400 bar

Weight: approx. 1,6 kg
Length: approx. 200 mm
Diameter: approx. 60 mm
Connection thread: ½ inch BSP

For nozzle inserts see reverse.

Container for abrasives

- Robust construction, galvanised
- Stainless steel filling sieve
- Metering valve with air intake
- 6 m abrasive suction hose

Technical data

Abrasive volume: 60 litres
Weight, empty: 8 kg
Height: 880 mm
Diameter: 390 mm
Air connection:
Hose nozzle 15 mm i/d
Abrasive hose 19 mm i/d

Code no.

09.00670.0001



Recommended op. pressure:
300 – 350 bar.
Recommended flow rate:
approx. 60 l/min

**Please pay attention to
reaction force!**

**Please wear suitable
protective clothing!!**

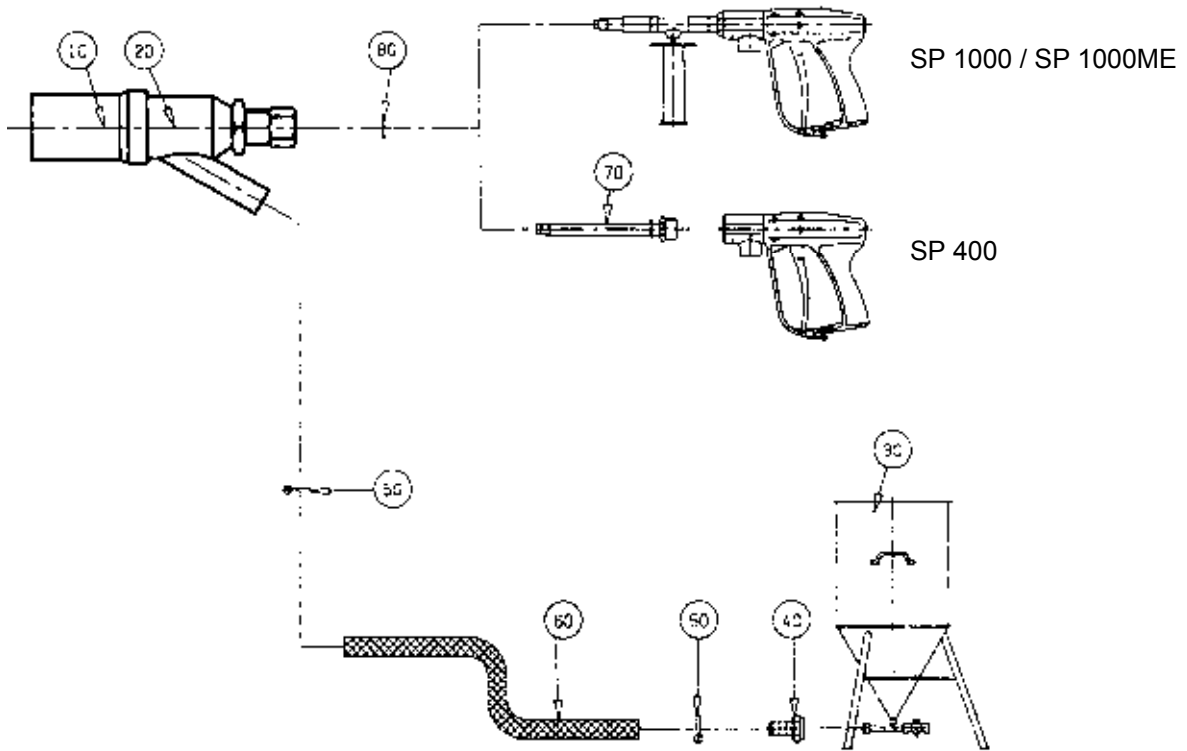
Code no.

09.00670.0002

HAMMELMANN®

Abrasive injection nozzle accessories and spares

13.L.2 – 12/08



Abrasive injection nozzle		
Item no.	Accessories	Code no.
	Description	
10	Nozzle inserts, design "B" Fan jet nozzle 15°	see chapter 12
	O-ring	04.00730.0033
	Support ring	04.00738.0405
Spare part		
20	Boride carbide nozzle insert	04.00779.0001

High pressure water blasting gun		
Item no.	Description	Code no.
	Type SP 1000, SP 1000 ME, SP 400	see chapter 12
70	High pressure lance with retaining nut	see chapter 12
80	O-ring	04.00730.0064

Container for abrasives		
Item no.	Spare parts	Code no.
	Description	
	Container for abrasives with 6 m hose, items 30 – 50	09.00670.0002
30	Abrasive container	00.00231.0015
40	Hose connector	04.05993.0647
45	Hose connector G $\frac{1}{2}$ " M30 x 2 (L)	*04.05993.0712
50	Hose clamp	04.04482.0124
60	Hose (per metre)	04.04590.0071

Connecting injector to blasting gun	
Type SP 1000 / SP 1000 ME	direct
Type SP 400	with high pressure lance (item 70)

* has to be exchanged for the nipple M22 x 1,5 (included in Pos. 30).



Application engineering

Standard



Surface blasting



Tank cleaning



Tube bundle cleaning



Pipe and sewer cleaning



Water hydraulic



Abrasive cutting

