

STEEL MILL EQUIPMENT MESSER CUTTING SYSTEMS



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SMB 663

HEAVY DUTY HAND CUTTING TORCHES



HEAVY DUTY HAND CUTTING TORCH SMB 663E

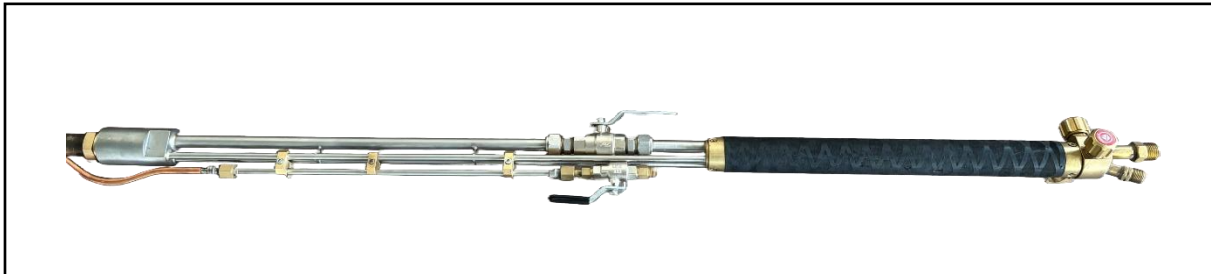
with ball valve for cutting oxygen, for cutting slabs, ingots, billets, non-alloy and low-alloy steel castings and forgings, and for cutting steel scrap, for cutting range check the part about nozzles.

The weight of the 1200mm version is approx.. 3,2kg.

Hose connections according to EN 560, G1/2" RH-11 for oxygen and G3/8" LH-9 for fuel gas.

Heavy-duty hand cutting torch				SMB 663E
Description			Art. No.	Cat. No.
SMB 663E	length 1200 mm	Head 180°	716.14300	006

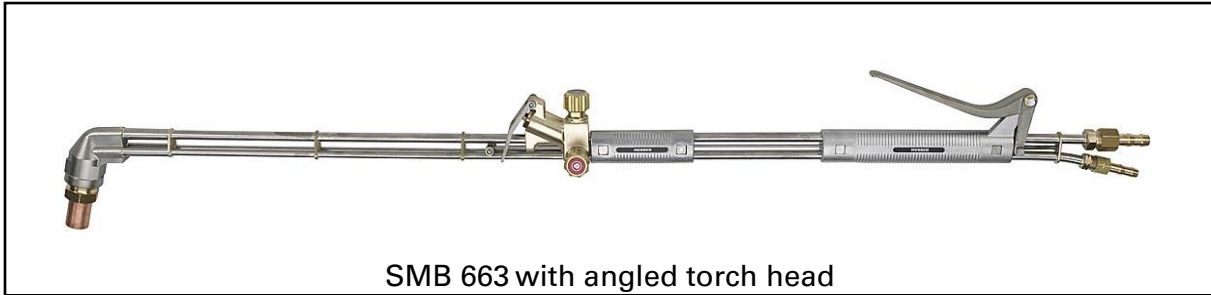
ADDITIONAL POWDER ATTACHMENT for SMB 663E



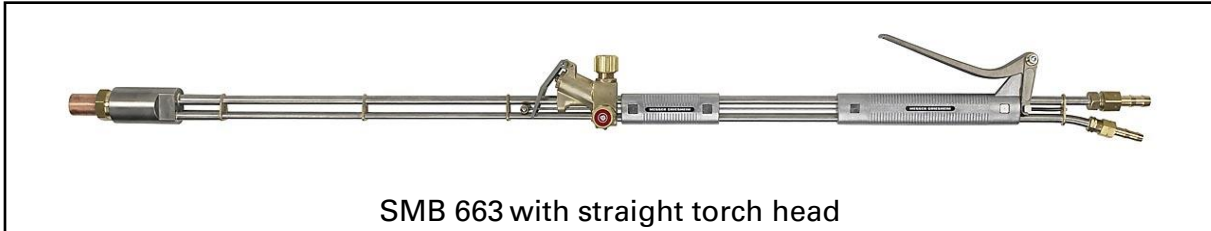
Powder equipment				SMB 663E
Description			Art. No.	Cat. No.
SMB 663E + powder attachment	length 1200 mm	Head 180°	716.14302	006
Powder attachment without SMB 663E			716.14301	006

SMB 663

HEAVY DUTY HAND CUTTING TORCHES



SMB 663 with angled torch head



SMB 663 with straight torch head

HEAVY DUTY HAND CUTTING TORCH SMB 663

with spring lever for cutting oxygen (version with hand wheel valve available upon request), for cutting of slabs, ingots, billets, non-alloy and low-alloy steel castings and forgings, and for cutting steel scrap. for cutting range check the part about nozzles.

The weight of the 1200mm version is approx. 3kg.

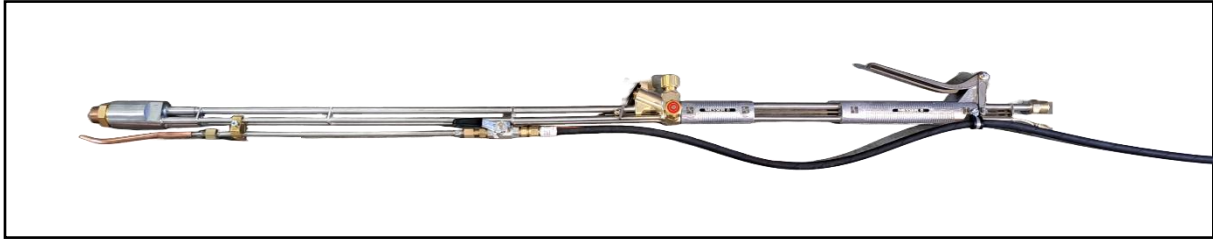
Hose connections according to EN 560, G1/2" RH-11 for oxygen and G3/8" LH-9 for fuel gas.

SMB 663		Heavy-duty hand cutting torch without accessories		
Description			Art. No.	Cat. No.
Version with angled torch head	length 1260 mm	Head 105°	716.50265	006
	length 1500 mm	Head 105°	716.50319	006
	length 3000 mm	Head 90°	716.14050 *	006
	length 4000 mm	Head 90°	716.14051 *	006
Version with straight torch head	length 1260 mm	Head 180°	716.50277	006
	length 1500 mm	Head 180°	716.50320	006
other torch lengths available upon request				
* Available upon request				

SMB 663

HEAVY DUTY HAND CUTTING TORCHES

ADDITIONAL POWDER EQUIPMENT FOR SMB 663



SMB 663 with powder attachment and powder hose



Torch head with powder-attachment

Additional powder equipment		SMB 663	
Description	Art. No.	Cat. No.	
Powder equipment complete incl. powder nozzle and ball valve for torch length 1260 mm and torch head angle 105° (SMB 663 only)	716.14145*	006	
Powder equipment complete incl. powder nozzle and ball valve for torch length 2500 mm and torch head angle 105° (SMB 663 only)	71650339*	006	
Standard cutting nozzles are used			
Powder distributor P75 (see page 13) Inlet pressure 10 bar max., Container pressure 1.0 bar max., Powder charge 75 kg max. *Available upon request	731.29840	006	

Heavy-Duty Hand-Cutting-Torch SMB 663 completely with powder equipment		SMB 663	
Description	Art.-No.	Cat.-No.	
SMB 663 PZFD torch length 1260 mm with angled torch head and powder equipment	716.14186 *	006	
SMB 663 PZFD torch length 1260 mm with straight torch head and powder equipment	716.14188 *	006	
SMB 663 PZFD torch length 1500 mm with angled torch head and powder equipment	716.14187 *	006	
SMB 663 PZFD torch length 1500 mm with straight torch head and powder equipment	716.14189 *	006	
SMB 663 PZFD torch length 2500 mm with angled torch head and powder equipment	716.14196 *	006	

* Available upon request

SMB 663 / SMB 663E

CUTTING DATA

DPCA and DBH-PM for SMB 663 / SMB 663E

DPCA / DBH-PM

Gas mixing cutting nozzles



Description	Cutting range	Art. No.	Cat. No.
DPCA	50 - 300 mm	731.07433	006
	300 - 600 mm	731.07434	006
DBH-PM	100 - 300 mm	731.17353	006
	300 - 500 mm	731.17315	006
	500 - 700 mm	731.17317	006

Useable with SMB 663 and SMB 663E
 DPC-A for fuel gas acetylene
 DBH-PMY for fuel gas propane, methane, MAPP

CUTTING NOZZLES DPCA

Cutting thickness [mm]	Cutting nozzle	Art. No.	Nozzle clearance [mm]	Oxygen pressure [bar]	Acetylene pressure [bar]	Cutting kerf width [mm]	Oxygen consumption [m³/h]	Acetylene consumption [m³/h]
Fuel gas acetylene								
50			20	6,0	0,5	5 - 7	36,0	3,0
100				7,5		5 - 7	43,0	3,0
150	50-300	731.07433	to	8,0	to	6 - 7	46,0	3,5
200				8,5		7 - 8	48,0	4,0
250				9,0		8 - 9	51,0	4,0
300			25	9,5	1,0	9 - 10	54,0	4,0
300			25	8,5	0,8	12	65,0	5,0
350				9,5		14	73,0	5,0
400	300-600	731.07434	to	10,5	to	17	80,0	5,0
450				11,5		18	85,0	6,0
600			30	12,0	1,2	19	90,0	6,0

SMB 663 / SMB 663E

NOZZLES

CUTTING NOZZLES DBH-PM								
Cutting thickness [mm]	Cutting nozzle	Art. No.	Nozzle clearance [mm]	Oxygen pressure [bar]	Propane pressure [bar]	Cutting kerf width [mm]	Oxygen consumption [m ³ /h]	Propane consumption [m ³ /h]
Fuel gas propane								
100			30	2,5	0,6	6	16,3	0,3
150			30	5,0	0,6	7	25,3	0,7
200	100-300	731.17353	30	7,0	0,6	8	34,0	1,0
250			30	8,5	0,6	9	42,6	1,3
300			30	10,5	0,6	10	51,7	1,7
300			30	6,5	1,1	13	60,4	1,7
350			30	8,0	1,1	14	71,8	2,3
400	300-500	731.17315	30	9,0	1,1	17	83,3	2,9
450			30	10,5	1,1	19	95,0	3,6
500			30	12,0	1,1	21	107,2	4,4
500			50	9,5	1,6	21	113,0	4,4
550			50	10,5	1,6	23	126,5	4,9
600	500-700	731.17317	50	12,0	1,6	25	141,0	5,4
650			50	13,5	1,6	27	154,7	6,3
700			50	15,0	1,6	28	168,7	7,4

CUTTING NOZZLES DBH-PM								
Cutting thickness [mm]	Cutting nozzle	Art. No.	Nozzle clearance [mm]	Oxygen pressure [bar]	Methane pressure [bar]	Cutting kerf width [mm]	Oxygen consumption [m ³ /h]	Methane consumption [m ³ /h]
Fuel gas methane (natural gas)								
100			30	2,5	0,8	6	16,5	0,9
150			30	5,0	0,8	7	25,6	1,9
200	100-300	731.17353	30	7,0	0,8	8	34,3	2,7
250			30	8,5	0,8	9	43,0	3,4
300			30	10,5	0,8	10	52,2	4,5
300			30	6,5	1,4	13	61,0	4,5
350			30	8,0	1,4	14	72,5	5,9
400	300-500	731.17315	30	9,0	1,4	17	84,1	7,6
450			30	10,5	1,4	19	96,0	9,4
500			30	12,0	1,4	21	108,3	11,4
500			50	9,5	2,0	21	114,1	11,4
550	500-700	731.17317	50	10,5	2,0	23	127,8	12,7
600			50	12,0	2,0	25	142,4	14,0
650			50	13,5	2,0	27	156,2	16,4
700			50	15,0	2,0	28	170,4	19,0

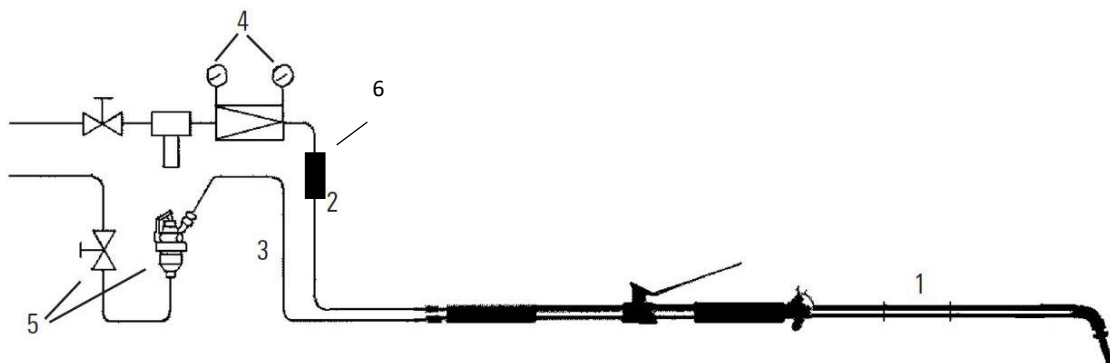
SMB 663 / SMB 663E

CUTTING DATA

Cutting values for SMB 663 / SMB 663E with Fe powder

Oxygen purity:	min. 99,5%
Test material:	Stainless steel CrNi 18/8 N
Fuel gas:	Propane
Torch adjustment:	according to operating data for DBH-PMY (page 5)
Used powder:	GRISINT® (Part. No.: 0462004)
Cutting speed tolerance:	approx.. 20%
Cut quality:	Oxyfuel hand cuts with Fe-powder depend heavily upon the skill of the operator. Without mechanical guidance only scrap quality can be achieved.
Note:	All data and especially the low wear with powder nozzles and valves can only be achieved when using the iron powder GRISINT® in combination with powder distributor P75, as well as original MCS-parts.

SMB 663 / SMB 663E			Cutting values
Material thickness [mm]	Used nozzle	Cutting speed [mm/min]	Powder consumption [kg/h]
50	731.17353	400	6 - 7
100	731.17353	350	7 - 8
150	731.17353	300	8 - 10
200	731.17353	280	10 - 12
250	731.17353	210	10 - 12
300	731.17353	170	12 - 15
350 - 500	731.17315	120 - 60	20 - 25
500 - 700	731.17317	60 - 30	25 - 30



- 1 = Hand cutting torch SMB 663 2 = Oxygen hose 3 = Fuel gas hose
 4 = Oxygen regulator U13 5 = Tapping point +Flashback arrestor 6 = Safety device O2

SMB 663 / SMB 663E

CUTTING DATA

Recommended equipment for SMB 663 / SMB 663E for safe operation

Pressure regulator oxygen:	U13 with 20bar backpressure supplied by bundle or tank
Safety device oxygen:	SIMAX 3
Pressure regulator fuel gas:	ET65 (depening of gas) or TORNADO 300 (Propane)
Safety device fuel gas:	DG91N
Oxygen hose:	DN 11 G1/2"RH (optional metal braided)
Fuel gas hose:	DN 9 G3/8"LH (optional metal braided)

Optional equipment for operating SMB 663 / SMB 663E with powder

The SMB 663 / SMB 663E is already available with a powder device. Otherwise you have to order an additional powder attachment.

Powder pot:	P75
Powder:	GRISINT®
Pressure regulator compressed air:	CONSTANT with 10bar back pressure
Comp. air hose between tapping point and P75:	DN6 G1/4"RH
Powder hose between P75 and torch:	DN6 G1/4"RH

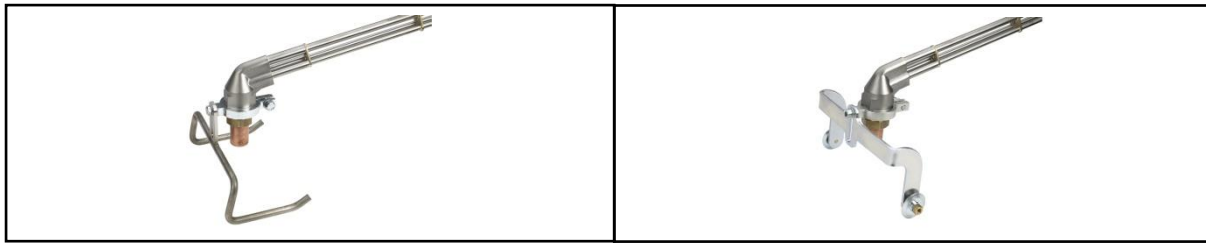
Recommended gas supply for safe operation (in combination with oxygen)

Gas supply acetylene		SMB 663
Cutting range	Short operation until 20 minutes.	Permanently operation > 20 minutes
Up to 100 mm	3 Cylinders	6 Cylinders
Up to 200 mm	4 Cylinders	Bundle
Up to 300 mm	4 Cylinders	Bundle
Up to 400 mm	5 Cylinders	Bundle
Up to 500 mm	6 Cylinders	Bundle

Gas supply Propane		SMB 663
Cutting range	Short operation until 20 minutes.	Permanently operation > 20 minutes
Up to 100 mm	1 Cylinder	1 Cylinder
Up to 200 mm	1 Cylinder	2 Cylinders
Up to 300 mm	2 Cylinders	3 Cylinders
Up to 400 mm	2 Cylinders	4 Cylinders
Up to 500 mm	3 Cylinders	6 Cylinders
Up to 600 mm	4 Cylinders	Tank
Up to 700 mm	5 Cylinders	Tank

SMB 663 / SMB 663E

ACCESSOIRES



Torch head with skids

Torch head with carriage

Accessories for SMB 663 / SMB 663E

SMB 663		Accessories	
Description	Art. No.	Cat. No.	
Torch carriage (for SMB 663 / SMB 663E)	716.50260	006	
Skid (for SMB 663 / SMB 663E)	716.50275	006	
Pressure screw M36X1,5 (for SMB 663 / SMB 663E)	552.10220	006	
Nozzle cleaners in case	052.29201	038	
Oxygen hose 11 mm (for SMB 663 / SMB 663E)	051.01200*	043	
Fuel gas hose 9 mm (for SMB 663 / SMB 663E)	051.00040	043	
Hand wheel valve insert (for SMB 663)	716.50307*	043	

* On Request

AC 42

POWDER HAND CUTTING MACHINE



Powder hand cutting torch AC 42

With spring lever valve for simultaneous control of oxygen and powder, for cutting of heat resistant stainless steel and high carbon steels up to 300mm, and for non-ferrous materials and cast irons up to 150mm material thickness.

Fuel gas: acetylene or propane, methane, coal gas, MAPP

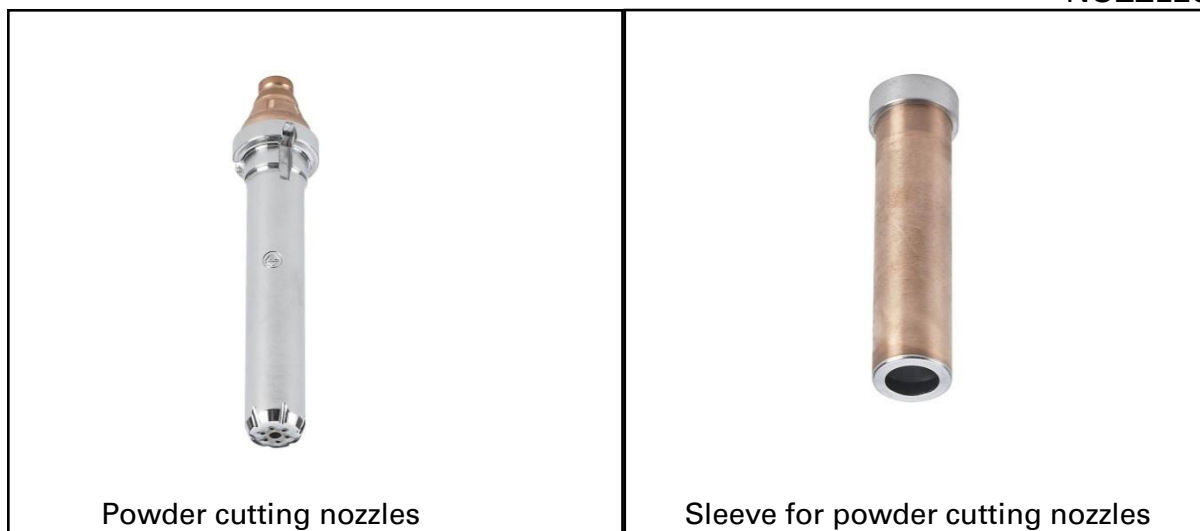
Hose connections: acc. DIN EN 560 G3/8"RH-9 for oxygen, G3/8"LH-9 for fuel gas, G1/4"RH-6 for powder.

For AC42 US hose connections: 9/16"UNF RH for oxygen, 9/16"UNF LH for fuel gas, 5/8"UNF RH for powder.

Powder hand cutting torch AC 42 without accessories			AC 42	
Description			Art. No.	Cat. No.
AC 42 A/PMY	torch length	750 mm	716.14350	006
	torch length	1050 mm	716.14360	006
AC 42 A/PMY US	torch length	750 mm	716.14365	006

Accessories			AC 42	
Description			Art. No.	Cat. No.
Radius bar complete			716.00699	038
Nozzle cleaners in case			052.29201	038
Rubber ring for sealing of powder cutting nozzle for AC 42			162.05430	006
Torch spanner			186.58074	038
Oxygen hose	DN9 / without connections / sold by the meter		051.01060	043
Fuel gas hose	DN9 / without connections / sold by the meter		051.00040	043
Compressed air hose	DN6 / with connections G1/4"RH / 10 m		770.20491	043
Powder hose	DN6 / with connections G1/4"RH / 10 m		770.20490	043
Powder distributor P75			731.29840	006
Inlet pressure 10 bar max., Container pressure 1.0 bar max., Powder charge 75 kg max.				

AC 42 NOZZLES



Nozzles for AC42

AC 42		Powder cutting nozzles	
Description	Cutting range	Art. No.	Cat. No.
Powder cutting nozzle for acetylene	25 - 40 mm	716.00382	006
	40 - 60 mm	716.00383	006
	60 - 100 mm	716.00384	006
	100 - 200 mm	716.00385	006
	200 - 300 mm	716.00386	006
Powder cutting nozzle for propane, methane (natural gas), Coal gas, MAPP	125 - 175 mm	552.01050	006
	175 - 225 mm	552.01060	006
	225 - 300 mm	552.01090	006
Sleeve for Powder cutting nozzle		703.04032	006

AC 42

NOZZLES

OPERATING DATA FOR POWDER CUTTING NOZZLES

POWDER HAND CUTTING TORCH AC 42									
Material thickness [mm]	Art. No. Cutting-nozzle	Nozzle clearance [mm]	Oxygen pressure [bar]	Fuel gas pressure [bar]	Cutting kef width [mm]	Oxygen consum. [m ³ /h]	Fuel gas consum [m ³ /h]	Cutting speed [mm/min]	Powder consum. [kg/h]
Fuel gas acetylene									
25 - 40	716.00382	30 - 40	4,0	0,5	6,0	9,7	0,8	320 - 230	6 - 8
40 - 60	716.00383	30 - 40	4,0	0,5	8,0	14,3	1,0	190 - 140	8 - 10
60 - 100	716.00384	30 - 40	4,0	0,5	9,0	21,6	1,2	120 - 100	8 - 10
100 - 200	716.00385	30 - 40	5,0	0,5	12,0	31,0	1,4	80 - 70	10 - 12
200 - 300	716.00386	30 - 40	6,0	0,5	17,0	42,0	1,8	60 - 40	12 - 15

POWDER HAND CUTTING TORCH AC 42									
Material thickness [mm]	Art. No. Cutting nozzle	Nozzle clearance [mm]	Oxygen pressure [bar]	Fuel gas pressure [bar]	Cutting kef width [mm]	Oxygen consump. [m ³ /h]	Fuel gas consum [m ³ /h]	Cutting speed [mm/min]	Powder consump. [kg/h]
Fuel gas propane									
125 - 175	552.01050	30 - 40	4,0	0,3	9,0	21,0	0,5	120 - 100	8 - 10
175 - 225	552.01060	30 - 40	5,5	0,3	12,0	31,0	0,6	80 - 70	10 - 12
225 - 300	552.01090	30 - 40	6,0	0,3	17,0	46,0	0,7	60 - 40	12 - 15

POWDER HAND CUTTING TORCH AC 42									
Material thickness [mm]	Art. No. Cutting nozzle	Nozzle clearance [mm]	Oxygen pressure [bar]	Fuel gas pressure [bar]	Cutting kef width [mm]	Oxygen consump. [m ³ /h]	Fuel gas consum [m ³ /h]	Cutting speed [mm/min]	Powder consump. [kg/h]
Fuel gas methane (natural gas)									
125 - 175	552.01050	30 - 40	4,0	0,3	9,0	21,0	1,5	120 - 100	8 - 10
175 - 225	552.01060	30 - 40	5,5	0,3	12,0	31,0	1,7	80 - 70	10 - 12
225 - 300	552.01090	30 - 40	6,0	0,3	17,0	46,0	2,0	60 - 40	12 - 15

The tables indicate standard values based on the use of plain steel with a carbon content of up to 0.3 % and oxygen with a minimum purity of 99.5 % and by use of GRISINT® Iron-powder. The allowable particle size in the oxygen is 30 µm maximum. The pressure stated are gauge pressure measured at the torch inlet.

!Only use clean and undamaged nozzles!

AC42 - Recommended equipment for safe operation

Pressure regulator oxygen:	U13 with 10 Bar backpressure supplied by bundle or tank
Safety-device oxygen:	Demax 5
Pressure regulator fuel gas:	Constant (depending on type of fuel gas) or ET65
Safety-device fuel gas:	DG 91 N
Oxygen-hose:	DN 9 G3/8" RH (optional metal braided)
Fuel gas-hose:	DN 9 G3/8" LH (optional metal braided)

Equipment for operating with powder

The AC 42 already contains a powder device as standard.

Powder device:	P75
Powder:	GRISINT®
Pressure regulator compressed air:	CONSTANT with 10 Bar backpressure
Comp. Air hose between tapping point and P75:	DN 6 G1/4"RH (optional metal braided)
Comp. Air hose between P75 and torch:	DN 6 G1/4"RH (optional metal braided)

Recommended gas supply for safe operation (in combination with oxygen)

AC 42		Gas supply acetylene
<i>Cutting range</i>	<i>Short operation until 20 minutes.</i>	<i>Permanently operation > 20 minutes</i>
Up to 40 mm	1 Cylinder	2 Cylinders
Up to 60 mm	2 Cylinders	2 Cylinders
Up to 100 mm	2 Cylinders	3 Cylinders
Up to 200 mm	2 Cylinders	3 Cylinders
Up to 300 mm	2 Cylinders	4 Cylinders
AC 42		Gas supply Propane
<i>Cutting range</i>	<i>Short operation until 20 minutes.</i>	<i>Permanently operation > 20 minutes</i>
Up to 175 mm	1 Cylinder	1 Cylinder
Up to 225 mm	1 Cylinder	1 Cylinder
Up to 300 mm	1 Cylinder	1 Cylinder

P75

POWDER DISTRIBUTOR

POWDER DISTRIBUTOR P75

Powder distributors serve to feed iron powder or iron/aluminum powder mixtures to the powder cutting/scarfing oxygen stream, allowing increased heat resistant steels, cast iron and a number of non-ferrous metal to be cut.

The powder distributor P75 with the Cyclone powder mixing system, pressure regulator, oil trap and air drying unit are used to supply SMB 663 / SMB 663E with powder attachments, the AC 42 powder hand cutting torches and the MSP 3320 powder machine cutting torches.

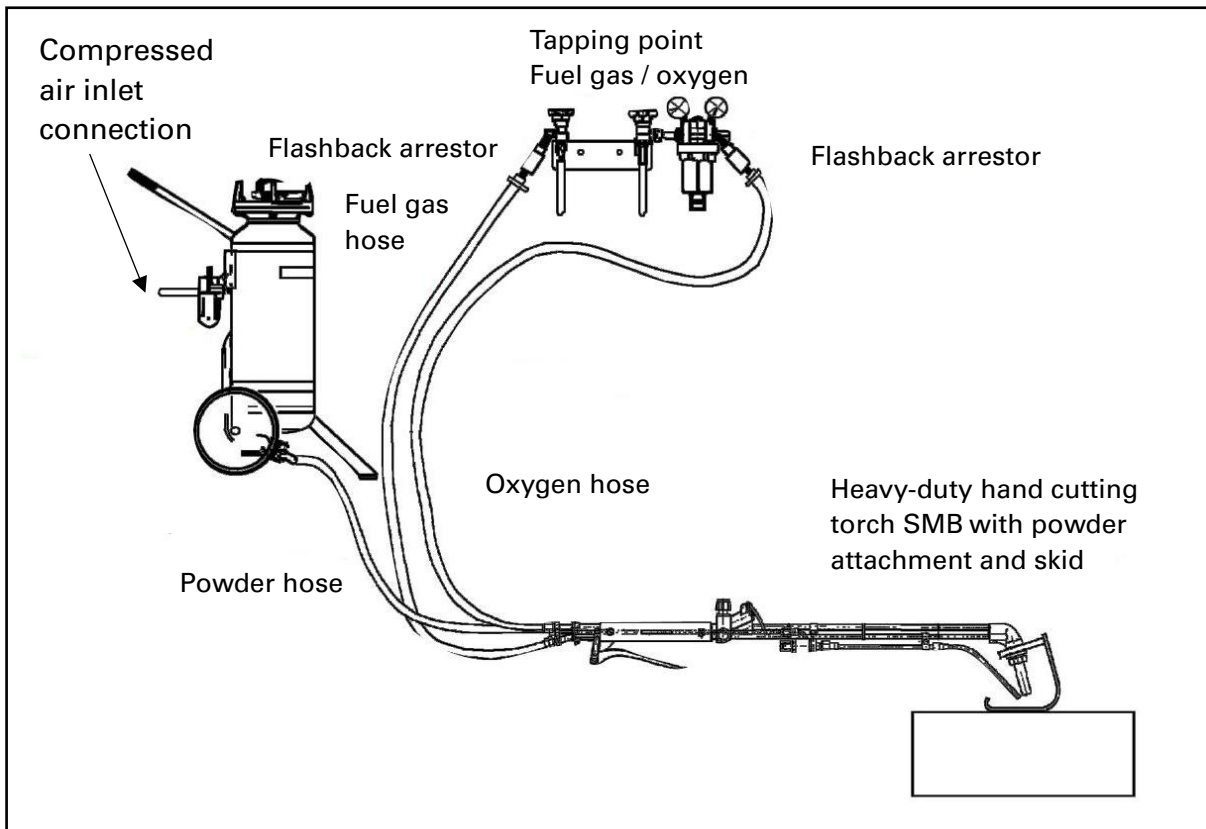
Connections:

Inlet: G1/4" RH-6 for compressed air

Outlet: G1/4" RH-6 for powder



Powder distributor and Cutting powder		P75	
Description	Art. No.	Cat. No.	
Powder distributor Inlet pressure 10 bar max., Container pressure 1.0 bar max., Powder charge 75 kg max.	731.29840	006	
Cutting powder GRISINT® for use with powder cutting equipment, 25 kg package	0.462.004	013	
Compressed air hose DN6 / with connections G1/4"RH / 10 m	770.20491	043	
Powder hose DN6 / with connections G1/4"RH / 10 m	770.20490	043	



MSP 3320

POWDER MACHINE CUTTING TORCH



Powder machine cutting torch MSP 3320

For cutting of stainless steel, high carbon steels and non-ferrous materials from 25 up to 300mm and of cast iron from 25 up to 150mm material thickness.

Characteristics:

Shaft diameter: 32mm

Shaft length: 190mm

Connections (DIN EN 560): G1/2" RH for heating oxygen; G3/4" LH for fuel gas; G3/4" RH for cutting oxygen; G1/4" RH for powder

Cutting range: 25 – 300mm

Powder machine cutting torch		MSP 3320	
Description		Art. No.	Cat. No.
MSP 3320/190	Shaft length 190 mm	716.51510	006

Accessories		MSP 3320	
Description	Connection	Art. No.	Cat. No.
Adjusting valve for heating oxygen	G 1/4" RH-6	718.00500	005
Adjusting valve for cutting oxygen	G 3/8"-6	718.00501	005
Adjusting valve for Fuel gas	G 3/8" LH-6	718.00502	005
Powder shut-off valve	G 1/4" RH-6	770.53962	004
Flashback arrestor Heating oxygen	G 1/4"	0.647.583	041
Flashback arrestor Cutting oxygen	G 3/8"	0.647.584	041
Flashback arrestor Fuel gas	G 3/8" LH	0.346.364	041

MSP 3320

NOZZLES



Powder cutting nozzle

Sleeve for powder cutting nozzle

Nozzles for MSP 3320

MSP 3320		Powder cutting nozzles	
Description	Cutting range	Art. No.	Cat. No.
Powder cutting nozzles for acetylene	25 - 40 mm	716.00382	006
	40 - 60 mm	716.00383	006
	60 - 100 mm	716.00384	006
	100 - 200 mm	716.00385	006
	200 - 300 mm	716.00386	006
Powder cutting nozzles for propane, methane (natural gas), Coal gas, MAPP	125 - 175 mm	552.01050	006
	175 - 225 mm	552.01060	006
	225 - 300 mm	552.01090	006
Sleeve for powder cutting nozzle		703.04032	006

POWDER MACHINE CUTTING TORCH MSP 3320										
Material-thickness [mm]	Art. No. cutting nozzle	Heating oxygen pressure [bar]	Cutting oxygen pressure [bar]	Fuel gas [bar]	Nozzle clearance [mm]	Cutting speed [mm/min]	Kerf width [mm]	Oxygen consum [m ³ /h]	Fuel gas consum [m ³ /h]	Powder consum [kg/h]
Fuel gas acetylene										
25 - 40	716.00382	0,5	4,0	0,5	30 - 40	320-230	6,0	10,7	1,0	6 - 8
40 - 60	716.00383	0,6	4,0	0,5	30 - 40	190-140	8,0	13,8	1,2	8 - 10
60 - 100	716.00384	0,7	4,8	0,5	30 - 40	120-100	9,0	20,1	1,4	8 - 10
100 - 200	716.00385	1,0	5,5	0,5	30 - 40	80-70	12,0	28,4	1,6	10 - 12
200 - 300	716.00386	1,3	6,0	0,5	30 - 40	60-40	17,0	41,2	1,8	10 - 12
Fuel gas propane										
125 - 175	552.01050	4,5	4,7	0,5	30 - 40	120-100	9,0	20,1	0,5	8 - 10
175 - 225	552.01060	5,5	5,5	0,5	30 - 40	80-70	12,0	28,4	0,6	10 - 12
225 - 300	552.01090	6,0	6,0	0,5	30 - 40	60-40	17,0	41,2	0,7	10 - 12
Fuel gas methane (natural gas)										
125 - 175	552.01050	5,0	4,7	0,5	30 - 40	120-100	9,0	21,5	1,5	8 - 10
175 - 225	552.01060	6,0	5,5	0,5	30 - 40	80-70	12,0	31,0	1,7	10 - 12
225 - 300	552.01090	6,5	6,0	0,5	30 - 40	60-40	17,0	44,0	2,0	10 - 12

The tables indicate standard values based on the use of plain steel with a carbon content of up to 0.3 % and oxygen with a minimum purity of 99.5 % and by use of GRISINT® Iron-powder. The allowable particle size in the oxygen is 30 µm maximum. The pressure stated are gauge pressure measured at the torch inlet. The consumption data indicated in m³/h apply to the standard condition as per DIN 1343.

PRESTOCUT F655

HEAVY DUTY MACHINE CUTTING TORCH



PRESTOCUT F655

Water-cooled Heavy-Duty Machine Cutting Torch, for cold cuts and hot cuts of non-alloyed material (with powder attachment) with workpiece thickness of 50 to 500 mm

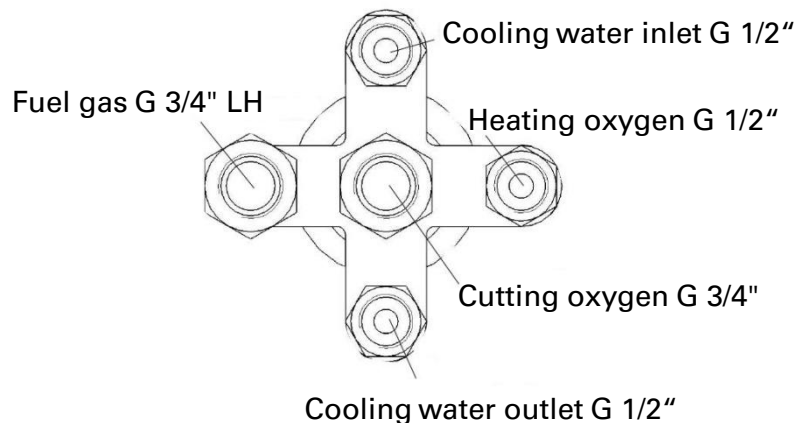
Models:

- F 655 with shaft length 500 mm

Characteristics:

- High cutting speed through special design
- Economical media consumption through low Oxygen metal factor
- Long life through large nozzle stand-off
- "Flying" start of cut thanks to high heat input
- Highly economical thanks to narrow cut width
- Long life through easy maintenance
- Flexible use, both on hot and cold materials
- Robust design appropriate for the steel industry
- Solid hose connection block and torch head made of brass
- Torch shaft made of brass or stainless steel
- Complete water cooled including torch head
- Torch length 500mm
- Shaft diameter 50 mm
- Cutting range 50 - 600 mm

Connections:



PRESTOCUT F655

HEAVY DUTY MACHINE CUTTING TORCH

PRESTOCUT® F655

Heavy duty machine cutting torches with brass shaft



<i>Description</i>	<i>Shaft length</i>	<i>Art.-No.</i>	<i>Cat.-No.</i>
PRESTOCUT® F 655	500 mm	716.51939	006

Shaft diameter: 50 mm / Cutting range up to 500 mm

Shaft out of brass

PRESTOCUT® F 655

Heavy duty machine cutting torches with stainless steel shaft



<i>Description</i>	<i>Shaft length</i>	<i>Art.-No.</i>	<i>Cat.-No.</i>
PRESTOCUT® F 655	500 mm	716.51937	006


Shaft diameter: 50 mm / Cutting range up to 500 mm

Shaft out of stainless steel

PRESTOCUT F655

HEAVY DUTY MACHINE CUTTING TORCH

Nozzles for PRESTOCUT F655

Heavy duty inner gas mixing nozzle				PRESTOCUT® DF-PM
Description	Cutting range	Art.-No.	Cat.-No.	
DF 18-PM	50 – 300 mm	716.14064	006	
DF 26-PM	50 – 400 mm	716.14065	006	
DF 33-PM	50 – 500 mm	716.14066	006	
DF 36-PM	50 – 500 mm	716.14061	006	

Heavy duty inner gas-mixing nozzle / flat sealing

PRESTOCUT® DF -PM									
Cutting nozzle	Material thickness [mm]	Heating oxygen [bar]	Cutting oxygen [bar]	Fuel gas [bar]	Nozzle clearance [mm]	Cutting speed [mm/min]	Cutting kerf [mm]	Oxygen consumption [m³/h]	Fuel gas consumption [m³/h]
Fuel gas Propane									
DF 18-PM	50	2,0 – 3,0	18	0,5 – 0,8	120	590	5 – 7	50	10
	– 300		– 20		– 150	– 160			
DF 26-PM	50	2,0 – 3,0	14	0,5 – 0,8	120	590	7 – 10	50	10
	– 400		– 16		– 150	– 80			
DF 33-PM	50	2,0 – 3,0	12	0,5 – 0,8	120	590	7 – 12	62	10
	– 500		– 14		– 150	– 40			
DF 36-PM	50	2,0 – 3,0	10	0,5 – 0,8	120	590	7 – 12	62	10
	– 500		– 11		– 150	– 40			
Fuel gas Methane (Town gas)									
DF 18-PM	50	2,0 – 3,0	18	1,4 – 2,2	120	590	5 – 7	50	27
	– 300		– 20		– 150	– 160			
DF 26-PM	50	2,0 – 3,0	14	1,4 – 2,2	120	590	7 – 10	50	29
	– 400		– 16		– 150	– 80			
DF 33-PM	50	2,0 – 3,0	12	1,4 – 2,2	120	590	7 – 12	62	29
	– 500		– 14		– 150	– 40			
DF 36-PM	50	2,0 – 3,0	10	1,4 – 2,2	120	590	7 – 12	62	29
	– 500		– 11		– 150	– 40			

The table indicate standard values based on the use of plain steel with a carbon content of up to 0,3% and oxygen with a minimum purity of 99,5%. The allowable particle size in the oxygen is 30 µm maximum. The pressures stated are gauge pressure measured at the torch inlet.

Satisfactory cuts on clean and crack-free work pieces can be achieved with undamaged nozzles and suitable flame cutting machines. The given cutting speeds are valid for old material and are to increase depending upon the work-piece temperature by hot cuts. The consumption data indicate in m³/h applies to the standard condition as per DIN 1343.

PRESTOCUT F655

NOZZLE

PRESTOCUT® DFP-PM

Heavy duty gas-mixing nozzle inner- / outer mixing / flat sealing



Description	Cutting range	Art.-No.	Cat.-No.
DFP 18-PM	50 – 300 mm	716.51940	006
DFP 26-PM	50 – 400 mm	716.51941	006
DFP 33-PM	50 – 500 mm	716.51942	006
DFP 36-PM	50 – 500 mm	716.51943	006

Heavy duty gas-mixing nozzle inner- / outer mixing / flat sealing

PRESTOCUT® DFP -PM

Cutting nozzle	Material thickness [mm]	Heating oxygen [bar]	Cutting oxygen [bar]	Fuel gas [bar]	Nozzle clearance [mm]	Cutting speed [mm/min]	Cutting kerf [mm]	Oxygen consumption [m³/h]	Fuel gas consumption [m³/h]																																																																																																						
Fuel gas Propane																																																																																																															
DFP 18-PM	50	1,5 – 1,8	18	0,5	120	590	5 – 7	40	2 – 4																																																																																																						
	300		20		150					160	DFP 26-PM	50	1,5 – 1,8	14	0,5	120	590	7 – 10	52	2 – 5	400	16	150	80	DFP 33-PM	50	1,5 – 1,8	12	0,5	120	590	7 – 12	52	2 – 6	500	14	150	40	DFP 36-PM	50	1,5 – 1,8	10	0,5	120	590	7 – 12	52	2 – 6	500	11	150	40	Fuel gas Methane (Town gas)										DFP 18-PM	50	1,5 – 1,8	18	1,1	120	590	5 – 7	40	6 – 10	300	20	150	160	DFP 26-PM	50	1,5 – 1,8	14	1,1	120	590	7 – 10	52	6 – 12	400	16	150	80	DFP 33-PM	50	1,5 – 1,8	12	1,1	120	590	7 – 12	52	6 – 16	500	14	150	40	DFP 36-PM	50	1,5 – 1,8	10	1,1	120	590
DFP 26-PM	50	1,5 – 1,8	14	0,5	120	590	7 – 10	52	2 – 5																																																																																																						
	400		16		150					80	DFP 33-PM	50	1,5 – 1,8	12	0,5	120	590	7 – 12	52	2 – 6	500	14	150	40	DFP 36-PM	50	1,5 – 1,8	10	0,5	120	590	7 – 12	52	2 – 6	500	11	150	40	Fuel gas Methane (Town gas)										DFP 18-PM	50	1,5 – 1,8	18	1,1	120	590	5 – 7	40	6 – 10	300	20	150	160	DFP 26-PM	50	1,5 – 1,8	14	1,1	120	590	7 – 10	52	6 – 12	400	16	150	80	DFP 33-PM	50	1,5 – 1,8	12	1,1	120	590	7 – 12	52	6 – 16	500	14	150	40	DFP 36-PM	50	1,5 – 1,8	10	1,1	120	590	7 – 12	52	6 – 16	500	11	150	40							
DFP 33-PM	50	1,5 – 1,8	12	0,5	120	590	7 – 12	52	2 – 6																																																																																																						
	500		14		150					40	DFP 36-PM	50	1,5 – 1,8	10	0,5	120	590	7 – 12	52	2 – 6	500	11	150	40	Fuel gas Methane (Town gas)										DFP 18-PM	50	1,5 – 1,8	18	1,1	120	590	5 – 7	40	6 – 10	300	20	150	160	DFP 26-PM	50	1,5 – 1,8	14	1,1	120	590	7 – 10	52	6 – 12	400	16	150	80	DFP 33-PM	50	1,5 – 1,8	12	1,1	120	590	7 – 12	52	6 – 16	500	14	150	40	DFP 36-PM	50	1,5 – 1,8	10	1,1	120	590	7 – 12	52	6 – 16	500	11	150	40																					
DFP 36-PM	50	1,5 – 1,8	10	0,5	120	590	7 – 12	52	2 – 6																																																																																																						
	500		11		150					40	Fuel gas Methane (Town gas)										DFP 18-PM	50	1,5 – 1,8	18	1,1	120	590	5 – 7	40	6 – 10	300	20	150	160	DFP 26-PM	50	1,5 – 1,8	14	1,1	120	590	7 – 10	52	6 – 12	400	16	150	80	DFP 33-PM	50	1,5 – 1,8	12	1,1	120	590	7 – 12	52	6 – 16	500	14	150	40	DFP 36-PM	50	1,5 – 1,8	10	1,1	120	590	7 – 12	52	6 – 16	500	11	150	40																																			
Fuel gas Methane (Town gas)																																																																																																															
DFP 18-PM	50	1,5 – 1,8	18	1,1	120	590	5 – 7	40	6 – 10																																																																																																						
	300		20		150					160	DFP 26-PM	50	1,5 – 1,8	14	1,1	120	590	7 – 10	52	6 – 12	400	16	150	80	DFP 33-PM	50	1,5 – 1,8	12	1,1	120	590	7 – 12	52	6 – 16	500	14	150	40	DFP 36-PM	50	1,5 – 1,8	10	1,1	120	590	7 – 12	52	6 – 16	500	11	150	40																																																											
DFP 26-PM	50	1,5 – 1,8	14	1,1	120	590	7 – 10	52	6 – 12																																																																																																						
	400		16		150					80	DFP 33-PM	50	1,5 – 1,8	12	1,1	120	590	7 – 12	52	6 – 16	500	14	150	40	DFP 36-PM	50	1,5 – 1,8	10	1,1	120	590	7 – 12	52	6 – 16	500	11	150	40																																																																									
DFP 33-PM	50	1,5 – 1,8	12	1,1	120	590	7 – 12	52	6 – 16																																																																																																						
	500		14		150					40	DFP 36-PM	50	1,5 – 1,8	10	1,1	120	590	7 – 12	52	6 – 16	500	11	150	40																																																																																							
DFP 36-PM	50	1,5 – 1,8	10	1,1	120	590	7 – 12	52	6 – 16																																																																																																						
	500		11		150					40																																																																																																					

The table indicate standard values based on the use of plain steel with a carbon content of up to 0,3% and oxygen with a minimum purity of 99,5%. The allowable particle size in the oxygen is 30 µm maximum. The pressures stated are gauge pressure measured at the torch inlet.

Satisfactory cuts on clean and crack-free work pieces can be achieved with undamaged nozzles and suitable flame cutting machines. The given cutting speeds are valid for old material and are to increase depending upon the work-piece temperature by hot cuts. The consumption data indicate in m³/h applies to the standard condition as per DIN 1343.

PRESTOCUT M651

HEAVY DUTY MACHINE CUTTING TORCH

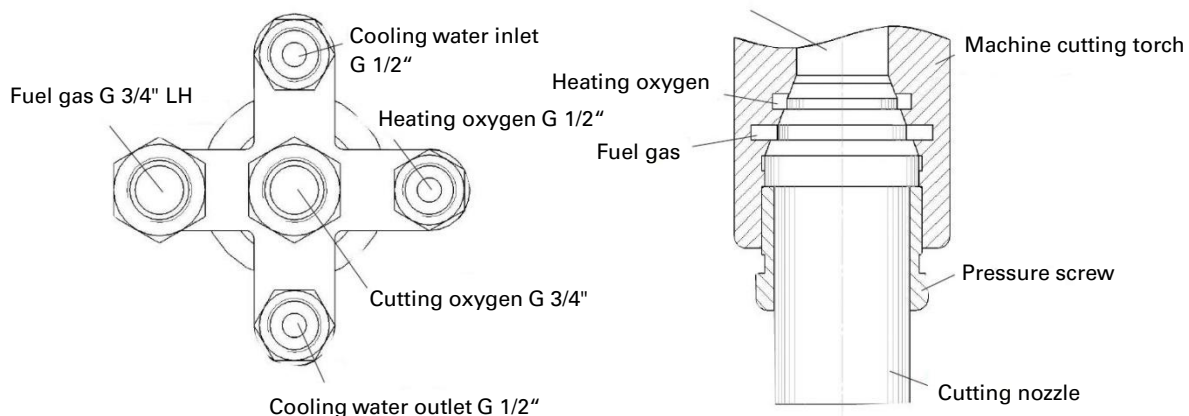


PRESTOCUT M651

Water-cooled Heavy-Duty Machine Cutting Torch, for cold cuts and hot cuts of non-alloyed material (with powder attachment) with workpiece thickness of 50 to 600 mm

Characteristics:

- High cutting speed through special design
- Economical media consumption through low Oxygen metal factor
- Long life through large nozzle stand-off
- "Flying" start of cut thanks to high heat input
- High work reliability due to conical seal
- Highly economical thanks to narrow cut width
- Long life through easy maintenance
- Flexible use, both on hot and cold materials
- Suitable for all fuel gases (beside acetylene)
- Smooth surface with low edge melting
- Universal design for both nozzle mixing and external mixing heavy-duty cutting nozzles
- Robust design appropriate for the steel industry
- Solid hose connection block and torch head made of brass
- Torch shaft made of brass or stainless steel
- Complete water cooled including torch head
- Torch length 1000 mm and different length on request
- Shaft diameter 50 mm
- Quality guarantee through 100 % testing of both the torch and the nozzles
- End faces of the nozzles can be reworked up to 3 mm
- Cutting range 50 - 600 mm



PRESTOCUT M651

HEAVY DUTY MACHINE CUTTING TORCH

PRESTOCUT® M 651

Heavy duty cutting torch



Type	Art.-No.	Kat.-No.
PRESTOCUT® M 651 Length 1000 mm	731.30530 *	006

Different length available on request

Nozzles for PRESTOCUT M651

PRESTOCUT® DB-PM 318 / 618, PB 318 / 618

Heavy duty cutting nozzles



Type	Schneidbereich	Art.-Nr.	Kat.-Nr.
DB 318-PM (internal mixing)	50 - 300 mm	731.26594	006
DB 618-PM (internal mixing)	300 - 600 mm	731.25507	006
PB 318-PM (external mixing)	50 - 300 mm	731.29417	006
PB 618-PM (external mixing)	300 - 600 mm	731.25508	006

HEAVY DUTY CUTTING NOZZLE (GAS-MIXING) PRESTOCUT® DB 318-PM

Material thickness [mm]	Cutting nozzle	Heating oxygen [bar]	Cutting oxygen [bar]	Fuel gas [bar]	Nozzle clearance [mm]	Cutting speed [mm/min]	Cutting kerf [mm]	Oxygen consumption [m³/h]	Fuel gas consumption [m³/h]
Fuel gas Propane									
50	731.26594	1,0	10	≤ 0,3	130	360	6 - 7	60	4,5
100	731.26594	1,0	10	≤ 0,3	130	320	6 - 7	60	4,5
200	731.26594	1,0	10	≤ 0,3	130	200	6 - 7	60	4,5
300	731.26594	1,0	10	≤ 0,3	130	150	6 - 7	60	4,5
Fuel gas Methane (town gas)									
50	731.26594	1,0	10	0,3 - 0,5	130	360	6 - 7	62,5	17,0
100	731.26594	1,0	10	0,3 - 0,5	130	320	6 - 7	62,5	17,0
200	731.26594	1,0	10	0,3 - 0,5	130	200	6 - 7	62,5	17,0
300	731.26594	1,0	10	0,3 - 0,5	130	150	6 - 7	62,5	17,0

HEAVY DUTY CUTTING NOZZLE (GAS-MIXING) PRESTOCUT® DB 618-PM

Material thickness [mm]	Cutting nozzle	Heating oxygen [bar]	Cutting oxygen [bar]	Fuel gas [bar]	Nozzle clearance [mm]	Cutting speed [mm/min]	Cutting kerf [mm]	Oxygen consumption [m³/h]	Fuel gas consumption [m³/h]
Fuel gas Propane									
300	731.25507	1,4	10	≤ 0,3	130	150	8 - 10	114	8,0
400	731.25507	1,4	10	≤ 0,3	130	110	8- 10	114	8,0
500	731.25507	1,4	10	≤ 0,3	130	90	8- 10	114	8,0
600	731.25507	1,4	10	≤ 0,3	130	60	8- 10	114	8,0
Fuel gas Methane (Town gas)									
300	731.25507	1,8	10	0,7	130	150	8 - 10	116	23,0
400	731.25507	1,8	10	0,7	130	110	8 - 10	116	23,0
500	731.25507	1,8	10	0,7	130	90	8 - 10	116	23,0
600	731.25507	1,8	10	0,7	130	60	8 - 10	116	23,0

PRESTOCUT M651

NOZZLES

HEAVY DUTY CUTTING NOZZLE (GAS-MIXING) PRESTOCUT® PB 318-PM									
Material thickness [mm]	Cutting nozzle	Heating oxygen [bar]	Cutting oxygen [bar]	Fuel gas [bar]	Nozzle clearance [mm]	Cutting speed [mm/min]	Cutting kerf [mm]	Oxygen consumption [m³/h]	Fuel gas consumption [m³/h]
Fuel gas Propane									
50	731.29417	0,2 - 0,5	10	0,08	130	360	6 - 7	55,0	3,8
100	731.29417	0,2 - 0,5	10	0,08	130	320	6 - 7	55,0	3,8
200	731.29417	0,2 - 0,5	10	0,08	130	200	6 - 7	55,0	3,8
300	731.29417	0,2 - 0,5	10	0,08	130	150	6 - 7	55,0	3,8
Fuel gas Methane (Town gas)									
50	731.29417	0,2	10	0,25	130	360	6 - 7	54,0	10,0
100	731.29417	0,2	10	0,25	130	320	6 - 7	54,0	10,0
200	731.29417	0,2	10	0,25	130	200	6 - 7	54,0	10,0
300	731.29417	0,2	10	0,25	130	150	6 - 7	54,0	10,0

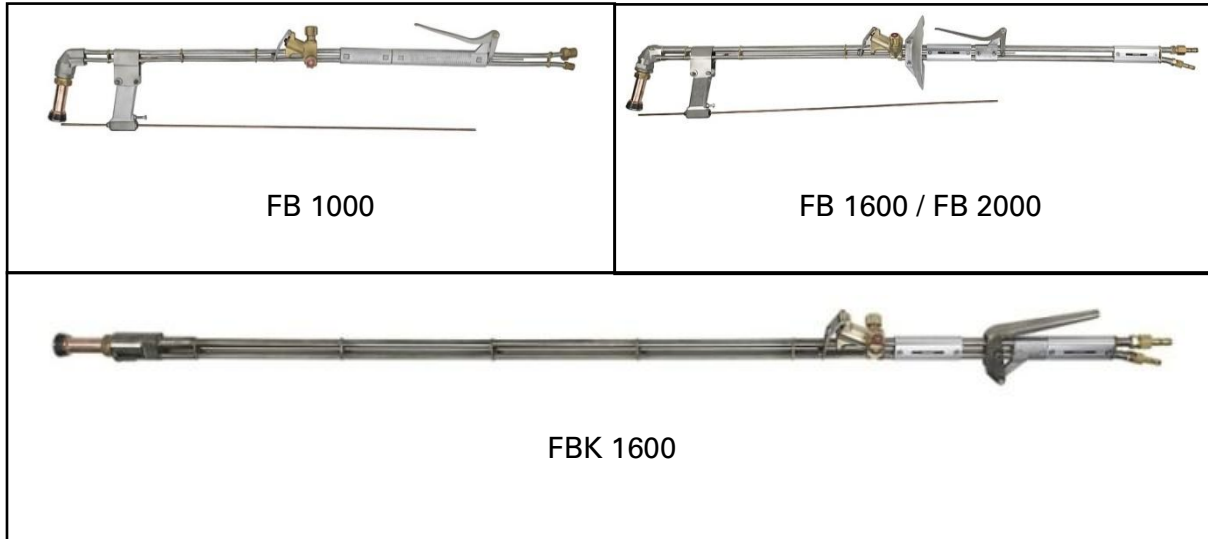
HEAVY DUTY CUTTING NOZZLE (GAS-MIXING) PRESTOCUT® PB 618-PM									
Material thickness [mm]	Cutting nozzle	Heating oxygen [bar]	Cutting oxygen [bar]	Fuel gas [bar]	Nozzle clearance [mm]	Cutting speed [mm/min]	Cutting kerf [mm]	Oxygen consumption [m³/h]	Fuel gas consumption [m³/h]
Fuel gas Propane									
300	731.25508	0,2 - 0,5	10	0,2	130	150	8 - 10	105	6,0
400	731.25508	0,2 - 0,5	10	0,2	130	110	8 - 10	105	6,0
500	731.25508	0,2 - 0,5	10	0,2	130	90	8 - 10	105	6,0
600	731.25508	0,2 - 0,5	10	0,2	130	60	8 - 10	105	6,0
Fuel gas Methane (Town gas)									
300	731.25508	0,2	10	0,5	130	150	8 - 10	104	15,0
400	731.25508	0,2	10	0,5	130	110	8 - 10	104	15,0
500	731.25508	0,2	10	0,5	130	90	8 - 10	104	15,0
600	731.25508	0,2	10	0,5	130	60	8 - 10	104	15,0

The table indicate standard values based on the use of plain steel with a carbon content of up to 0,3% and oxygen with a minimum purity of 99,5%. The allowable particle size in the oxygen is 30 µm maximum. The pressures stated are gauge pressure measured at the torch inlet.

Satisfactory cuts on clean and crack-free work pieces can be achieved with undamaged nozzles and suitable flame cutting machines. The given cutting speeds are valid for old material and are to increase depending upon the work-piece temperature by hot cuts. The consumption data indicate in m³/h applies to the standard condition as per DIN 1343.

FB / FBK

HAND SCARFING TORCHES



Scarfing torch FB 1000, FB 1600 and FB 2000, Ingot mould scarfing torch FBK 1600 with spring lever for control of scarfing oxygen, on the FB the ignition wire feed is triggered simultaneously. The area of application is the correction of cracks, slag inclusions and defects in blocks, ingots slabs and castings of unalloyed and alloyed steels. The modelling of swrought work and the partial scarfing as well as the scarfing out of burnt, cracked material from the inner surfaces of ingots.

Characteristics:

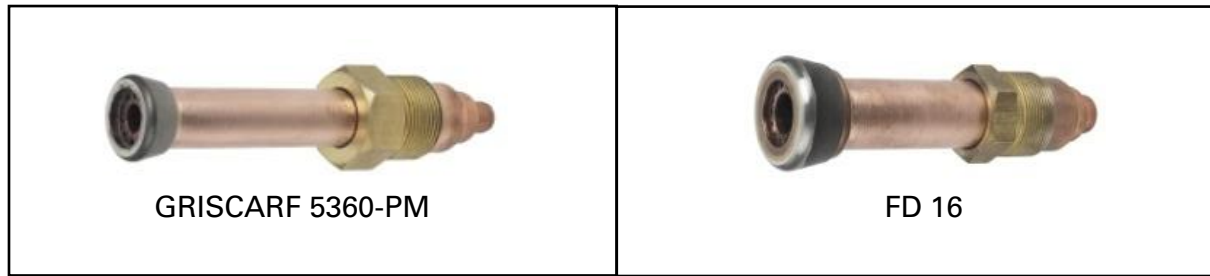
- Scarfing width FB 1000 = 40 mm, FB 1600 + FBK 1600 = 90 mm
- Connections to DIN EN 560 (G 1/2" RH-11 for oxygen, G 3/8" LH-9 for fuel gas)
- Fuel gases acetylene (A), propane (P), methane (M) and coal gas

FB / FBK		Hand scarfing torch/ Ingot scarfing torch	
Description		Art.-No.	Cat.-No.
FB 1000	torch length 1260 mm	716.50051	006
FB 1600	torch length 1500 mm	716.50191	006
FB 1600	torch length 1325 mm	716.50192	006
FB 1600	torch length 1175 mm	716.50180	006
FB 2000	torch length 1500 mm	716.50195	006
FB 2000	torch length 1390 mm	716.50193	006
FBK 1600	torch length 1800 mm	716.50212	006

FB 1000 / FB 1600 / FBK 1600		Accessories	
Description		Art.-No.	Cat.-No.
Heat protective shield		716.50181	006
Nozzle cleaners in case		052.29201	038
Oxygen hose 11 mm		051.01200 *	043
Oxygen hose 13 mm		051.02940 *	043
Fuel gas hose 9 mm		051.00040	043
Propane hose		051.02130	043

FB / FBK

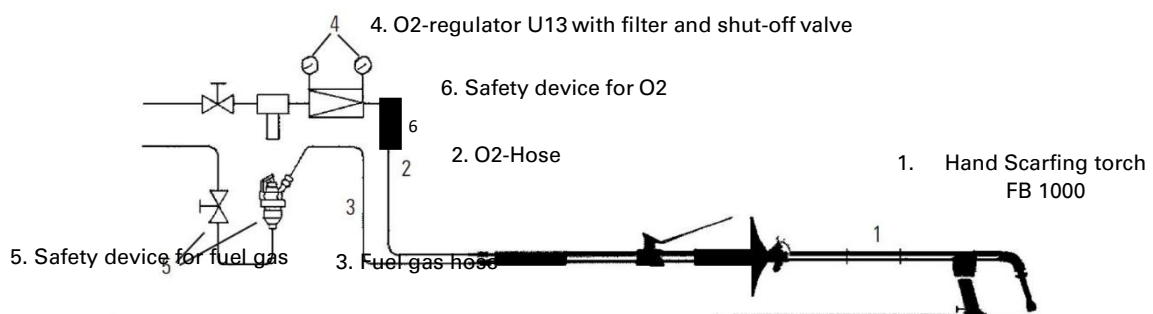
NOZZLES



Nozzles for FB / FBK

Scarfig nozzles		GRISCARF® 5310-A + 5360-PM / FD 16	
Description	Scarfig width	Art.-No.	Kat.-No.
Scarfig nozzle GRISCARF® 5310-A for FB 1000	40 mm	716.50089	012
Scarfig nozzle GRISCARF® 5360-PM for FB 1000	40 mm	716.50088	012
Scarfig nozzle FD 16 for FB 1600 and FBK 1600 with wear-resistant stellite ring	90 mm	716.50232	012
Scarfig nozzle FD 20 for FB 2000 with wear-resistant stellite ring	110 mm	716.50231	012

SCARFING NOZZLES GRISCARF® 5310 + 5360 / FD 16 / FD 20							
Description	Art. No.	Oxygen pressure [bar]	Fuel gas pressure [bar]	Scarfig oxygen consumption [m³/h]	Scarfig speed [mm/min]	Heating oxygen consumption [m³/h]	Fuel gas consumption [m³/h]
Fuel gas Acetylene							
GRISCARF® 5310-A	716.50089	4,0 - 5,0	0,5	70 - 80	8 - 10	3,0	2,3
Fuel gas Propane							
GRISCARF® 5360-PM	716.50088	4,0 - 5,0	0,5	70 - 80	8 - 10	5,0	1,3
FD 16	716.50232	2,5 - 3,5	0,3	150 - 190	8 - 10	6,0	1,7
FD 20	716.50231	4,0 - 5,0	0,5	250 - 320	8 - 10	8,0	2,3
Fuel gas Methane (Natural gas)							
GRISCARF® 5360-PM	716.50088	4,0 - 5,0	0,5	70 - 80	8 - 10	5,0	3,3
FD 16	716.50232	3,0	0,5	150 - 190	8 - 10	8,5	5,8
FD 20	716.50231	4,0 - 5,0	0,7	250 - 320	8 - 10	12,0	8,2
Fuel gas Coal gas							
GRISCARF® 5360-PM	716.50088	4,0 - 5,0	0,5	70 - 80	8 - 10	5,0	7,5
FD 16	716.50232	2,5 - 3,5	0,4 - 0,6	150 - 190	8 - 10	6,0	10,0
FD 20	716.50231	4,0 - 5,0	0,7 - 0,9	250 - 320	8 - 10	8,0	13,3



Recommended equipment for FB 1000 for safe operation

Pressure regulator oxygen:	U13 with 10 Bar backpressure supplied by bundle or tank
Safety-device oxygen:	Simax 3
Pressure regulator fuel gas:	Constant (depending on type of fuel gas) or.ET65
Safety-device fuel gas:	DG 91 N
Oxygen-hose:	DN 11 G1/2" RH (optional metal braided)
Fuel gas-hose:	DN 9 G3/8" LH (optional metal braided)

FB 1000		Gas supply acetylene
<i>Nozzle</i>	<i>Short operation until 20 minutes.</i>	<i>Permanently operation > 20 minutes</i>
Griscarf 5310-A	3 Cylinders	5 Cylinders

FB 1000		Gas supply propane
<i>Nozzle</i>	<i>Short operation until 20 minutes.</i>	<i>Permanently operation > 20 minutes</i>
Griscarf 5360-PM	1 Cylinder	2 Cylinders

Recommended equipment for FB 1600 and FBK 16000 for safe operation

Pressure regulator oxygen:	U13 with 10 Bar backpressure supplied by tank
Safety-device oxygen:	Simax 5
Pressure regulator fuel gas:	Constant (depending on type of fuel gas) or.ET65
Safety-device fuel gas:	DG 91 N
Oxygen-hose:	DN 13 G1/2" RH (optional metal braided)
Fuel gas-hose:	DN 9 G3/8" LH (optional metal braided)

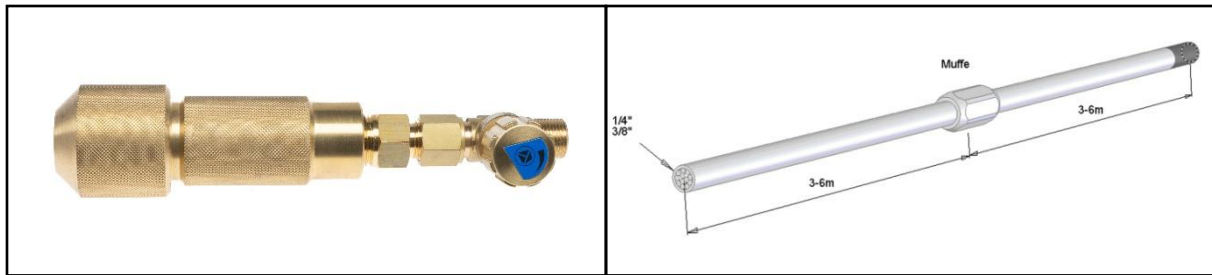
FB 1600 & FBK 1600		Gas supply propane
<i>Nozzle</i>	<i>Short operation until 20 minutes.</i>	<i>Permanently operation > 20 minutes</i>
FD 16	2 Cylinders	3 Cylinders

Recommended equipment for FB 1600 and FBK 16000 for safe operation

Pressure regulator oxygen:	U23 Form B with 10 Bar backpressure supplied by tank
Safety-device oxygen:	Simax 8
Pressure regulator fuel gas:	Constant (depending on type of fuel gas) or.ET65
Safety-device fuel gas:	DG 91 N
Oxygen-hose:	DN 13 G1/2" RH (optional metal braided)
Fuel gas-hose:	DN 9 G3/8" LH (optional metal braided)

FB 2000		Gas supply propane
<i>Nozzle</i>	<i>Short operation until 20 minutes.</i>	<i>Permanently operation > 20 minutes</i>
FD 20	2 Cylinders	3 Cylinders

OXYGEN LANCE



Oxygen lancing equipment

The oxygen lance is a thermal separation process that can be used for a wide variety of materials and applications. The oxygen lance consists of an oxygen lance holder and the oxygen lance tubes.

- Dividing large metal parts (including all alloys and for all material thicknesses)
- Demolition work (concrete and stone)
- Parting of bung plugs
- Piercing out bolts

Lance holder				BRH	
Description		Art. No.		Cat. No.	
BRH 1/4 with monoblock-valve		716.14116		006	
BRH 3/8 with monoblock-valve		716.14117		006	
BRH 1/2 with monoblock-valve		716.14236		006	
BRH 1/4 with ball valve		716.14260		006	
BRH 3/8 with ball valve		716.14261		006	
Lance holder with integrated slag backflow arrestor				BRH-S	
Description		Art. No.		Cat. No.	
BRH 1/4 with monoblock-valve and slag backflow arrestor		716.14264		006	
BRH 3/8 with monoblock-valve and slag backflow arrestor		716.14265		006	
BRH 1/4 with ball valve and slag backflow arrestor		716.14266		006	
BRH 3/8 with ball valve and slag backflow arrestor		716.14267		006	
Oxygen lance tubes				BRH	
Description	Length	Working pressure	Consumption	Art. No.	Cat. No.
Oxygen lance tube 1/4	3.0 m	6.0 – 7.0 bar	30 m ³ / h	0.463.0143	000
Oxygen lance tube 3/8	3.0 m	6.0 – 8.0 bar	80 m ³ / h	0.463.0383	000
Oxygen lance tube 3/8	4.0 m	6.0 – 8.0 bar	80 m ³ / h	0.463.0384	000
Oxygen lance tube 3/8	6.0 m	6.0 – 8.0 bar	80 m ³ / h	0.463.0386	000
Oxygen lance tube 1/2	3.0 m	10.0 – 12.0 bar	120 m ³ / h	0.463.0123	000

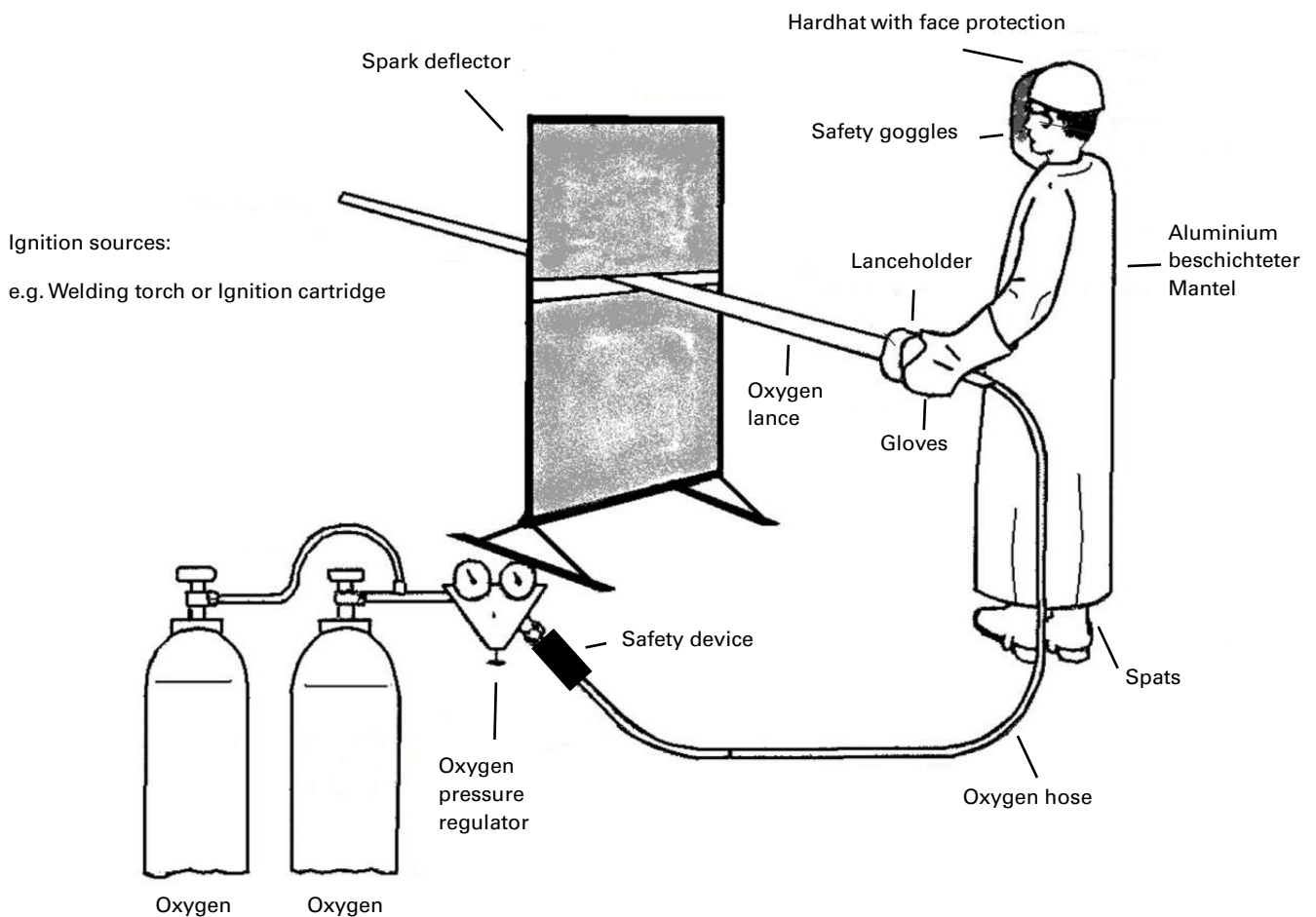
OXYGEN LANCE

BRH	Accessories	
Description	Art. No.	Cat. No.
Replacement clamp shaft ESPH 1/4	716.14118	006
Replacement clamp shaft ESPH 3/8	716.14119	006
Replacement clamp shaft ESPH 1/2	716.14237	006
Cylinder regulator U 13 F Inlet pressure 200 bar / Outlet pressure 10 bar	509.99850	004
Cylinder regulator U 13 F Inlet pressure 200 bar / Outlet pressure 20 bar	509.99900	004
Cylinder regulator U 13 F Inlet pressure 300 bar / Outlet pressure 10 bar	717.06901	004
Cylinder regulator U 13 F Inlet pressure 300 bar / Outlet pressure 20 bar	717.06902	004

Handling of oxygen lances

The minimum equipment required for handling Oxygen lances is:

- Lance holder (BRH)
- Oxygen hose, metallically armoured, with at least 9 mm internal diameter
- Oxygen cylinder regulator (U 13 F)
- Safety device (DEMAX 5)
- Strongly flame resistant personal protective clothing



U13

PRESSURE REGULATOR



Cylinder pressure regulator U13 F

U13 F

Characteristics:

- Constant working pressure through large membrane area, even with varying cylinder pressures, exact adjustments
- Safety: protected against burning out by special arrangement and quality of the seal and membrane materials
- Optimum flow characteristics and large housing surface hinder freezing
- Resistant to fluctuations through indirectly impinged membrane. Gas flow is not fed through the membrane chamber
- Resistance to burning out confirmed by BAM test
- Trade body certification 1 BG 65

Connections

- At the inlet a cylinder valve connection for the type of gas and at the outlet removable hose connections according to the applicable national standards

Safety valve

- Blows off upwards with connection for exhaust gas removal line

Characteristic

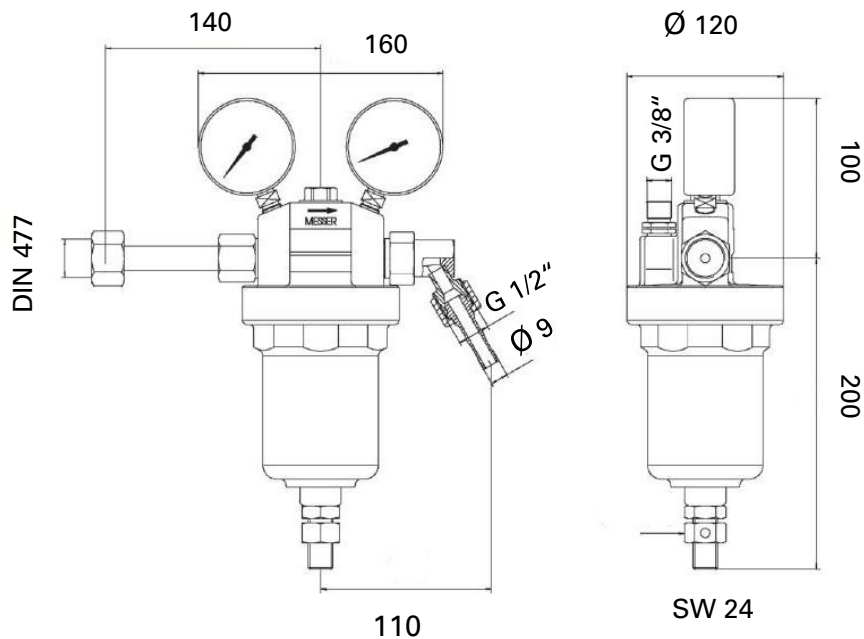
L10 = 6

U13

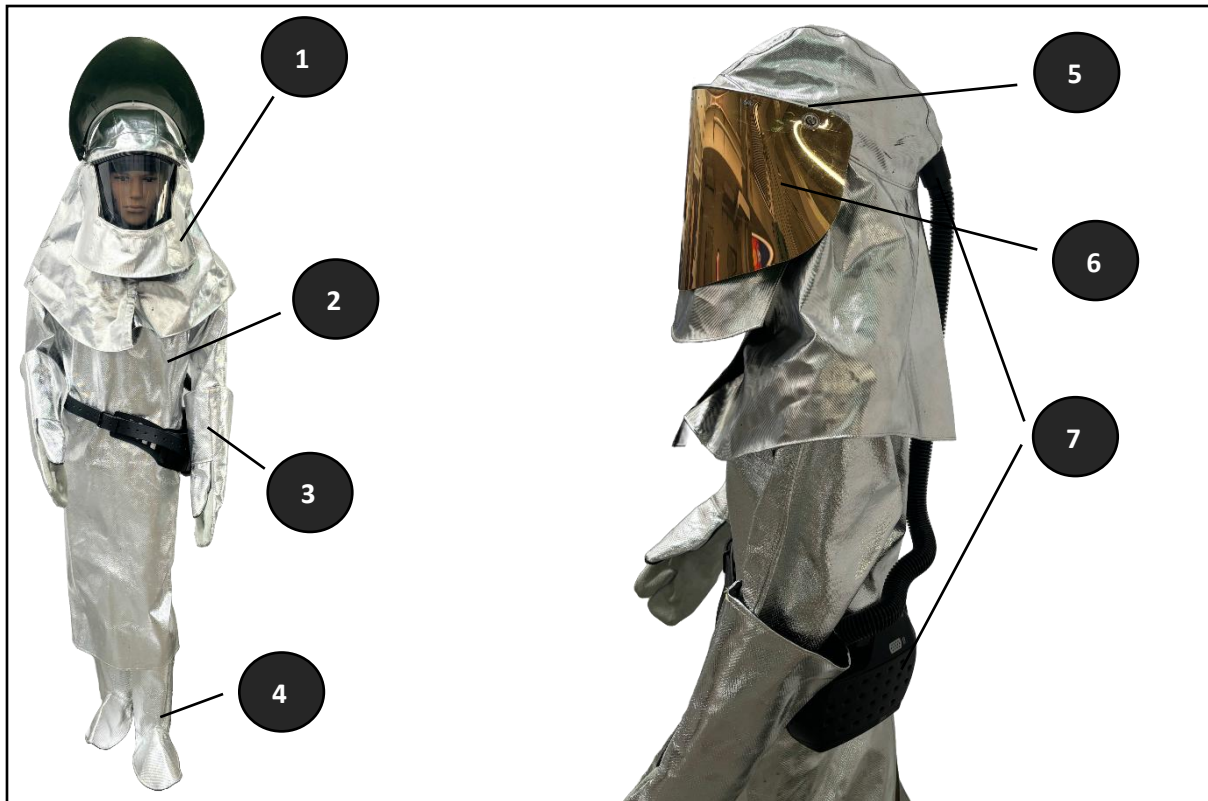
PRESSURE REGULATOR

U13 F		Gas flow rate			
Inlet pressure	Flow rate (m ³ /h) Oxygen ' With outlet pressure [bar]				
	5	10	15	20	
50	200	200	200	200	
30	150	150	150	150	
20	100	100	100	-	
15	80	80	-	-	

U13 F			
Description	Back-Pressure	Art. No.	Cat. No.
Cylinder pressure regulator U 13 F For oxygen inlet pressure 200 Bar	10 bar	509.99850	004
Cylinder pressure regulator U 13 F For oxygen inlet pressure 200 Bar	20 bar	509.99900	004
Cylinder pressure regulator U 13 F For oxygen inlet pressure 300 Bar	10 bar	717.06901	004
Cylinder pressure regulator U 13 F For oxygen inlet pressure 300 Bar	20 bar	717.06902	004
Cylinder pressure regulator TORNADO 300 For propane inlet pressure 25 bar	2,5	770.54119	



PERSONAL SAFETY EQUIPMENT



Personal Safety Equipment

			PPE
<i>Name</i>	<i>Picture</i>	<i>Art.-No</i>	<i>Cat.-No.</i>
Heat protection cover for safety helmet + respiratory protection	1	770.20500	000
Protective apron	2	716.14138	042
Gauntlet gloves	3	716.14139	042
Gaiters	4	770.21919	042
Visor frame for the gold protective visor	5	770.20501	000
Gold protective visor	6	770.20502	000
Safety helmet + respiratory protection	7	770.20503	000



TORCH HEAD REWORKTOOLS

ReworkTools



Rework Tools	
Type	Art.-No
7380 – for SMB 663 / SMB 663E / FB/FBK 1600	0909325
7082 – for FB1000	0909329
7285 – for AC42	0939008
7130 – Milling cutter for Connection cone G1/4"RH with 45°	0909326
7129 – Milling cutter for Connection cone G3/8"LH with 45°	0909328



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Messer Cutting Systems is a global supplier of cutting edge technology for the metalworking industry.

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With over 900 employees worldwide in over 50 countries, we maintain a constant dialogue with our customers to achieve sustainable user-oriented innovation.

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EXPERIENCE