NOZZLES

SDS F SDS FP SDS FB SHEL F HOT STD SD3 HSO HFD 1F MBR



SDS F Nozzles

The SDS F series includes the most successful cutting nozzles of the AMT group. They impress with their high reliability and low media consumption in daily use in steel works. The high nozzle distance above the slab guarantees low wear and subsequently longer life span.



CUTTING THICKNESS RANGE



Nozzle distance range	120 mm – 165 mm
Oxygen pressure range	8 – 15 bar
Gas pressure range	0.6 – 2 bar



	SDS 26 F	SDS 36 F	SDS 40 F	SDS 51 F	SDS 61 F
ITEM NO.	(*************************************	((2000) (200) (2000)	(00000) (00000) (00000) (00000) (00000) (000) (000) (000) (0000) (0000) (000) (000) (000) (000) (000) (000) (000) (000) (944 1111951
CUTTING THICKNESS RANGE (mm)	50-400	50-500	50-500	350 - 650	350-800
NOZZLE DISTANCE (mm)	120-165	120-165	120-165	120-165	120-165
CONSUMPTION (Nm ³ /h)					
Heating oxygen flow by natural gas	19	19	19	12	24
Gas flow by natural gas	21	21	21	25	36
Heating oxygen flow by propan gas	19	19	19	12	24
Gas flow by propan gas	9	9	9	10	14
Heating oxygen flow by coke oven gas	22	22	22	17	31
Gas flow by coke oven gas	31	31	31	30	42
Cutting oxygen flow	52	58	64	84	124
PRESSURE CUTTING (bar)					
Heating oxygen pressure by natural gas	2.5	2.5	2.5	1.7	2.2
Gas pressure by natural gas	1.5	1.5	1.5	1.4	1.3
Heating oxygen pressure by propan gas	2.5	2.5	2.5	1.7	2.2
Gas pressure by propan gas	0.8	0.8	0.8	0.7	0.6
Heating oxygen pressure by coke oven gas	3	3	3	1.9	2.8
Gas pressure by coke oven gas	2	2	2	1.5	1.8
Cutting oxygen pressure	15	10	9	8	9
APPLICABLE CUTTING TORCHES					
SBK 500 F	+	+	+	+	
SB 500 F	+	+	+	+	
SB 800 F					+
SHBA-M F	+	+	+	+	
SHBS-M F	+	+	+	+	
SHBS-MS F	+	+	+	+	
SHBA-MS F	+	+	+	+	
SPANNER WIDTH	SW 32	SW 32	SW 32	SW 32	SW 41

SDS FP NOZZLES

In the autogenous cutting process, conventional cutting technology reaches its limit with certain alloy compositions. This is where the AMT Gega SDS FP nozzle series comes into play.

Combined with an AMT Gega powder system, this generation of nozzles succeeds in significantly expanding the limits of what is possible in alloy cutting. By adjusting the heating performance, an optimum powder flow is achieved.



mm SDS 26 FP SDS 36 FP SDS 40 FP 0 100 200 300 400 500 600 700 800

CUTTING THICKNESS RANGE

Nozzle distance range	80 mm – 120 mm
Oxygen pressure range	9 – 15 bar
Gas pressure range	0.5 – 1.4 bar



	SDS 26 FP	SDS 36 FP	SDS 40 FP
	SW 32	SW 32	5W 32
IIEM NO.	108189	108191	106556
CUTTING THICKNESS RANGE (mm)	50 - 400	50-500	50 - 500
NOZZLE DISTANCE (mm)	80 – 120	80 – 120	80 – 120
Heating oxygen flow by natural gas	14	14	14
Gas flow by natural gas	20	20	20
Heating oxygen flow by propan gas	14	14	14
Gas flow by propan gas	8	8	8
Heating oxygen flow by coke oven gas	17	17	17
Gas flow by coke oven gas	25	25	25
Cutting oxygen flow	52	58	64
PRESSURE CUTTING (bar)			
Heating oxygen pressure by natural gas	1.8	1.8	1.8
Gas pressure by natural gas	1.1	1.1	1.1
Heating oxygen pressure by propan gas	1.8	1.8	1.8
Gas pressure by propan gas	0.5	0.5	0.5
Heating oxygen pressure by coke oven gas	2.3	2.3	2.3
Gas pressure by coke oven gas	1.4	1.4	1.4
Cutting oxygen pressure	15	10	9
APPLICABLE CUTTING TORCHES			
SBK 500 F	+	+	+
SB 500 F	+	+	+
	+	+	+
SHBS-MF	+	+	+
	+	+	+
2HR4-M2 F	+	+	+
SPANNER WIDTH	SW 32	SW 32	SW 32

SDS FB NOZZLES

The SDS FB series is a special application for plate cutting within the SDS family. Cut material thicknesses of 10 to 220 millimetres optimally with this distinct cutting nozzle. By adjusting the pre-heating, edge melting on the cutting surface is reduced.



CUTTING THICKNESS RANGE



Nozzle distance range	10mm – 15mm
Oxygen pressure range	4 – 11 bar
Gas pressure range	0.1 – 0.6 bar



	SDS 18 FB	SDS 23 FB	SDS 30 FB
	SM 32	W 32	SW 32
ITEM NO.	110476	109421	110477
CUTTING THICKNESS RANGE (mm)	10 - 40	40 – 150	140 – 220
NOZZLE DISTANCE (mm)	10 – 15	10 – 15	10 – 15
CONSUMPTION (Nm ³ /h)			
Heating oxygen flow by natural gas	3.9	3.9 – 7	3.4 – 5.1
Gas flow by natural gas	3.4	3.4 – 10	4.1 – 9.3
Cutting oxygen flow	6.8 - 8	14.6 - 25 24.4 - 3	
PRESSURE CUTTING (bar)			
Heating oxygen pressure by natural gas	0.3	0.3 - 0.8	0.3 - 0.7
Gas pressure by natural gas	0.1	0.1 – 0.6	0.1 – 0.5
Cutting oxygen pressure	4 – 7	6 – 11	6 – 10
APPLICABLE CUTTING TORCHES			
SBK 500 F	+	+	+
SB 500 F	+	+	+
SPANNER WIDTH	SW 32	SW 32	SW 32

SHEL F Nozzles

The latest evolutionary stage in the AMT Gega nozzle series. Patented with quick cutting processes in the concast section in mind, for when the material is still hot. Significantly increased cutting speeds allow shorter cut zones with reduced fuel gas consumption and narrower cutting kerfs.

Engineered to meet increasingly stringent safety regulations in steel works, this nozzle series guarantees a high model-related safety standard due to its application of post mix technology. The shrouded design offers the additional the advantage of lower noise emissions and an extended lifespan.



mm SHEL 32 F SHEL 35 F 0 Image: Contract of the second sec

CUTTING THICKNESS RANGE



Nozzle distance range	120 mm – 165 mm
Oxygen pressure range	10 – 12 bar
Gas pressure range	0.8 – 2 bar



	SHEL 32 F	SHEL 35 F
		0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0
ITEM NO.	111893	111892
CUTTING THICKNESS RANGE (mm)	50 – 250	50 – 350
NOZZLE DISTANCE (mm)	120 – 165	120 – 165
CONSUMPTION (Nm ³ /h)		
Heating oxygen flow by natural gas	22	22
Gas flow by natural gas	17	17
Heating oxygen flow by propan gas	22	22
Gas flow by propan gas	7.5	7.5
Heating oxygen flow by coke oven gas	25	25
Gas flow by coke oven gas	23	23
Cutting oxygen flow	53	53
PRESSURE CUTTING (bar)		
Heating oxygen pressure by natural gas	2.5	2.5
Gas pressure by natural gas	1.5	1.5
Heating oxygen pressure by propan gas	2.5	2.5
Gas pressure by propan gas	0.8	0.8
Heating oxygen pressure by coke oven gas	3	3
Gas pressure by coke oven gas	2	2
Cutting oxygen pressure	12	10
APPLICABLE CUTTING TORCHES		
SBK 500 F	+	+
SB 500 F	+	+
SHBA-M F	+	+
SHBS-M F	+	+
SHBS-MS F	+	+
SHBA-MS F	+	+
SPANNER WIDTH	SW 36	SW 36

HOT NOZZLES

This unique high-pressure oxygen series was specially developed for quick separation of the steel products from the strand and for high productivity during secondary slitting and sub-dividing operations. With regards to the crucial factor of cutting speed, the patented AMT Gega HOT nozzle assumes a leading role in global comparison, enabling siginificantly shortened work cycles.



CUTTING THICKNESS RANGE



Nozzle distance range	120 mm – 165 mm
Oxygen pressure range	27 – 30.5 bar
Gas pressure range	0.8 – 2 bar



	HOT 26 1S	HOT 30 1S
		\wedge
	- SW 32	SW 32
ITEM NO.	108172	108173
CUTTING THICKNESS RANGE (mm)	100 – 300	100 – 300
NOZZLE DISTANCE (mm)	120 – 165	120 – 165
CONSUMPTION (Nm ³ /h)		
Heating oxygen flow by natural gas	19	19
Gas flow by natural gas	21	21
Heating oxygen flow by propan gas	19	19
Gas flow by propan gas	9	9
Heating oxygen flow by coke oven gas	22	22
Gas flow by coke oven gas	31	31
Cutting oxygen flow	58	74
PRESSURE CUTTING (bar)		
Heating oxygen pressure by natural gas	2.5	2.5
Gas pressure by natural gas	1.5	1.5
Heating oxygen pressure by propan gas	2.5	2.5
Gas pressure by propan gas	0.8	0.8
Heating oxygen pressure by coke oven gas	3	3
Gas pressure by coke oven gas	2	2
Cutting oxygen pressure	27	30.5
APPLICABLE CUTTING TORCHES		
HOBS 1S	+	+
SPANNER WIDTH	SW 32	SW 32



This conically sealing thick cutting nozzle is constructed for cutting thicknesses up to two metres. Due to its long, slim geometry, media turbulence is reduced, enabling precise cutting of high strength material.



CUTTING THICKNESS RANGE STD 4 STD 5 STD 1 STD 2 STD 3 mm 0 100 200 300 400 500 1000 1500 2000

Nozzle distance range	50 mm – 180 mm
Oxygen pressure range	5 – 10 bar
Gas pressure range	0.1 – 2 bar



	STD 1	STD 2	STD 3	STD 4	STD 5
	60 99 94	90 90 914	92 92 94	92 92 44	SW 50
ITEM NO.	108284	108285	108286	108287	114181
CUTTING THICKNESS RANGE (mm)	50 - 450	450 - 750	750 – 1200	1000 – 1200	1500 – 2000
NOZZLE DISTANCE (mm)	50 – 125	50 – 125	50 – 125	50 – 125	120 – 180
CONSUMPTION (Nm ³ /h)					
Heating oxygen flow by natural gas	27 – 33	27 – 33	27 – 33	36 - 52	84
Gas flow by natural gas	21 – 26	21 – 26	21 – 26	32 - 48	180 – 220
Heating oxygen flow by propan gas	27 – 33	27 – 33	27 – 33	36 – 52	84
Gas flow by propan gas	11	15	15	15	90 - 110
Cutting oxygen flow	58 – 93	71 – 114	86 – 135	211 – 378	280 - 400
PRESSURE CUTTING (bar)					
Heating oxygen pressure by natural gas	2 – 2.5	2 – 2.5	2 – 2.5	1.5 – 2.5	0.05
Gas pressure by natural gas	0.2 – 0.3	0.2 – 0.3	0.2 – 0.3	1 – 2	0.15 – 0.2
Heating oxygen pressure by propan gas	2 – 2.5	2 – 2.5	2 – 2.5	1.5 – 2.5	0.05
Gas pressure by propan gas	0.1	0.2	0.2	0.6	0.1 – 0.15
Cutting oxygen pressure	6 - 10	6 - 10	6 - 10	5-9	5 - 7
APPLICABLE CUTTING TORCHES					
SB 1200	+	+	+	+	
SB 2000					+
SPANNER WIDTH	SW 46	SW 46	SW 46	SW 46	SW 50



Optimised for manual operation. Allows for uneven movements or changes to the nozzle distance during the cutting process. The rugged construction also makes this nozzle ideal for scrap cutting applications.



CUTTING THICKNESS RANGE



Spanner width range	SW 36
Gas pressure range	0.5 – 1.2 bar



SD3 HSO



	 #	
ITEM NO.	107884	
CUTTING THICKNESS RANGE (mm)	50 – 500	
CONSUMPTION (Nm ³ /h)		
Heating oxygen flow by natural gas	17 – 20	
Gas flow by natural gas	15 – 18	
Heating oxygen flow by propan gas	20 - 24	
Gas flow by propan gas	10 - 14	
Cutting oxygen flow	95	
PRESSURE CUTTING (bar)		
Heating oxygen pressure by natural gas	1.8 – 2.2	
Gas pressure by natural gas	0.8 – 1.2	
Heating oxygen pressure by propan gas	2.0 – 2.5	
Gas pressure by propan gas	0.5 – 0.8	
Cutting oxygen pressure	8	
APPLICABLE CUTTING TORCHES		
SHBA	+	
SHBS	+	
SPANNER WIDTH	SW 36	

HFD 1F NOZZLES

Especially designed for the hand scarfing process. Well protected against abrasive movements with reinforced wearing ring, allowing for a long lifespan.

With its nozzle seat well anchored in the nozzle holder, the HFD 1F introduces an improved safety standard in the hand scarfing process.



Spanner width	SW 36
Scarfing oxygen pressure	10bar
Gas pressure range	0.3 – 0.5 bar



HFD 1F



ITEM NO.	107648	
CONSUMPTION (Nm ³ /h)		
Heating oxygen flow by natural gas	19	
Gas flow by natural gas	24	
Scarfing oxygen flow	147	
PRESSURE CUTTING (bar)		
Heating oxygen pressure by natural gas	1.4 – 1.7	
Gas pressure by natural gas	0.3 – 0.5	
Scarfing oxygen pressure	10	
APPLICABLE SCARFING TORCHES		
MST 1500	+	
MST 1200 CGA	+	
SPANNER WIDTH	SW 36	

MBR NOZZLES

Designed for the AMT Gega Scarfing Manipulator. The MBR 36 allows for a very fractional application, offering unrivalled operational efficiency. It was being specifically designed for very low gas consumption in scarfing processes.

Within its duty cycle, three separate assembly levels for scarfing are available. Switching between scarfing levels controls the scarfing range on the slab.



MAIN CHARACTERISTICS

Fractional scarfing possible Very low gas consumption



MBR 36



ITEM NO.	109912	
CONSUMPTION (Nm ³ /h)		
Heating oxygen flow by natural gas	190	
Gas flow by natural gas	148	
Scarfing oxygen flow step I	587	
Scarfing oxygen flow step II	326	
Scarfing oxygen flow step III	1235	
PRESSURE SCARFING (bar)		
Scarfing oxygen flow step I	4.5	
Scarfing oxygen flow step II	0.4	
Scarfing oxygen flow step III	1.1	
APPLICABLE ITEMS	Manipulator	