



THE WATERJET CUTTING EXPERIENCE

**Data sheet
ConSus 1500**

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The ConSus system is an Abrasive Mixing Unit (AMU) in which abrasive is added continuously to the pressurized water flow with the worldwide patented lock method.

ConSus can be integrated into any existing water jet cutting system. Only pump and control have to be adjusted. Recently the system operates with working pressures between 500 and 1.500 bar. The development up to 2.500 bar is in full progress.

Please scan the QR code with your smartphone or visit the ANT website for further information.



See how ConSus works!



GENERAL INFORMATION

Working pressure	500 - 1.500 bar
Pressure vessel	2,4 l / 2,5 kg abrasive
High pressure valves	pneumatic and servo electric
Weight	715 kg empty
Hopper	integrated
Size (L x W x H)	1.030 mm x 950 mm x 2.320 mm

CONNECTIONS

High pressure water inlet	M20 x 1.5, 3/8"-24UNF LH
Suspension outlet	M20 x 1.5, 3/8"-24 UNF LH
Abrasive supply	Antistatic low pressure hose Ø 15 mm inner dia.
Clear water / Waste water	Low pressure hose Ø 11 mm innen dia.
Comm. with pump & table	Network cabel, 3 x M12 5 pole socket
Air	6 bar oilfree
Electric power	400 V / 16 A CEE socket

OPERATION PARAMETER

Nozzle size	0.55 - 0.65 mm
Pressure	1.500 bar
Water flow	5 - 10 l/min
Hydraulic power at nozzle	21 kW
Abrasive	Garnet mesh 80
Abrasive concentration	abrasive rate is exactly adjustable (300 - 1.000 g/min)

Cutting performance in air for a	simple quality cut Q1	medium quality cut Q3
	10 mm steel - 740 mm/min	10 mm steel - 480 mm/min
50 mm steel - 105 mm/min	50 mm steel - 70 mm/min	
100 mm steel - 41 mm/min	100 mm steel - 27 mm/min	
150 mm steel - 22 mm/min	150 mm steel - 15 mm/min	
200 mm steel - 13 mm/min	200 mm steel - 10 mm/min	
250 mm steel - 8 mm/min	250 mm steel - 6 mm/min	

COMPARISON SUSPENSION & INJECTION WITH A STEEL CUT BY 20MM

	Suspension NEW	Injection
Working pressure	1.500 bar	3.600 bar
Abrasive concentration	840 g/min	420 g/min
Nozzle size	0,6 mm	0,35 mm/1 mm
Hydraulic power at nozzle	21 kw	25 kw
Cutting performance		
(Q1) Separation cut	330 mm/min 2x faster!	162 mm/min
(Q3) Clean cut	214 mm/min 3x faster!	76 mm/min
(Q5) Excellent cut	140 mm/min 3,4x faster!	41 mm/min

COMPARISON OF CUTTING PERFORMANCE FOR A CLEAN CUT (Q3)

