

# THE WATERJET CUTTING EXPERIENCE

Data sheet ConSus 1500

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he ConSus system is an Abrasive Mixing Unit (AMU) in which abrasive is added continously 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.









# GENERAL INFORMATION

500 - 1.500 bar Working pressure Pressure vessel 2,4 I / 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

### **OPERATION PARAMETER**

0.55 - 0.65 mm Nozzle size Pressure 1.500 bar 5 - 10 l/min Water flow Hydraulic power at nozzle 21 kW

Garnet mesh 80 Abrasive

Abrasive concentration abrasive rate is exactly adjustable

(300 - 1.000 g/min)



Air

## CONNECTIONS

M20 x 1.5, 3/8"-24UNF LH High pressure water inlet Suspension outlet M20 x 1.5, 3/8"-24 UNF LH

Abrasive supply Antistatic low pressure hose Ø 15 mm inner dia.

CONSUS

Low pressure hose Ø 11 mm innen dia. Clear water / Waste water Comm. with pump & table Network cabel, 3 x M12 5 pole socket

6 bar oilfree

400 V / 16 A CEE socket Electric power

**Cutting performance** 

10 mm steel - 740 mm/min in air for a 50 mm steel - 105 mm/min

100 mm steel - 41 mm/min 150 mm steel - 22 mm/min

simple quality cut Q1

200 mm steel - 13 mm/min 250 mm steel - 8 mm/min

### medium quality cut Q3

10 mm steel - 480 mm/min 50 mm steel - 70 mm/min 100 mm steel - 27 mm/min 150 mm steel - 15 mm/min 200 mm steel - 10 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) Seperation cut

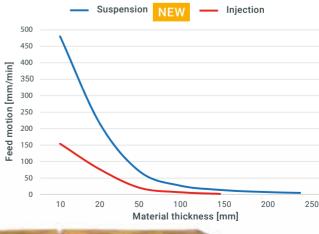
(Q3) Clean cut

(Q5) Excellent cut

330 mm/min 2x faster! 214 mm/min 3x faster!

140 mm/min 3,4x faster!

## **COMPARISON OF CUTTING PERFORMANCE FOR A CLEAN CUT (Q3)**



Q3 Q5

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162 mm/min

76 mm/min

41 mm/min