





A.D.U (Advanced Drilling Units)



Desoutter Industrial

More Than Productivity

ADU - Setitec Line Advanced Drilling Units

This product range is dedicated to drilling, reaming, spot facing and countersinking operations with high requirements of quality, accuracy and repetability. Designed for the aerospace industry, performance is as well appreciated in the general industry for high-end applications. Its cutting edge technology and advanced technical capabilities makes one-shot drilling, reaming and countersinking operations possible and achieving perfect holes with the same motor and cutting tools, cutting down time and cycle time.

With 2100 Watt (2,8hp) of power, and with an unmatched power to weight ratio in a very compact tool, they can be used on a wide variety of locking mechanism (drill jigs, locking on prehole...) with a wide variety of equipemnts (Concentric collets, 1/4" Turn / Bayonet, Template Feet, C-clamp...). This modular system offers you a great flexibility for holes up to 25mm (2") diameter, with tolerances as tight as 0,02mm (0.0001") in diameter

User Benefits

→ Modular, accurate and innovative tool

Based on a Modular architecture, they've been designed to offer advanced performances (automatic cycle, on-board lubrication...) as well as tight tolerances (0,02mm (0.0001") tolerances).

→ Easy retrofit

They can easily be retrofitted should you modify your production station or decide to reaffect your tool to a different workstation.

→ Great ergonomy

Light and compact, they are easily positionned on the drill jigs. They are the right answer to your applications with limited accessibility.

→ Low consumption and noise level

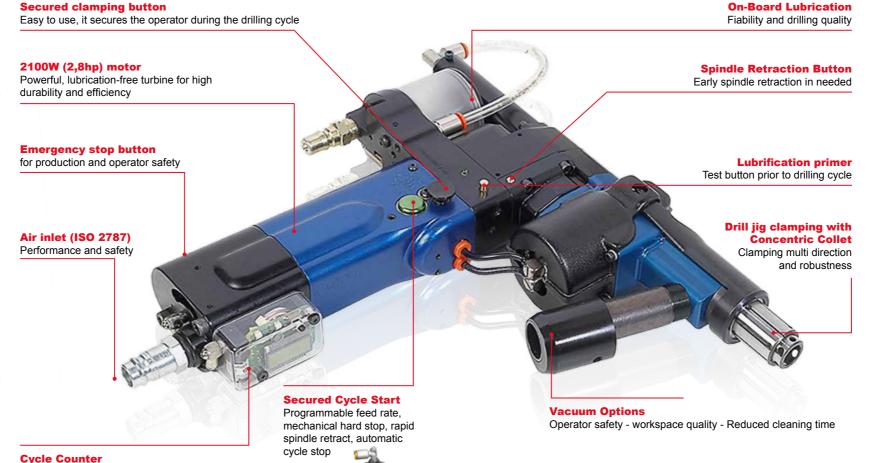
Powered by a highly performance pneumatic turbine, with highly reduced noise and consumption level.

→ Best power to weight ration on the market

2100 Watts (2,8hp) for a weight of 1.5kg to 3.5kg (3.3lb to 7.7lb) (without equipment).

→ Customized solution

Clamping options, angle or straight version, programmable cycle counter, on-board or external lubrication driven through the cutter, integrated micropeck.



Predefinition tool

Drilling, reaming, countersinking diameter. Material Stack

Existing cutting tool? Type of attachment, existing drawing?

Definition of clamping mechanism, accessibility, formalize various technical requirements

Dedicated project management, with specific definition tooling (Contact your Desoutter representative for assistance)

Positionning types

	Drill jigs	100 mm 10	Section 1 Sectio	100 COO	•
		Thick drill jigs	Thick jig with rail or screws	Thin jigs	Template jigs or No jig (pre-hole)
	Concentric collet	✓			
	1/4 turn Bayonet		✓		
	Croco Clamp			✓	✓
	Jack Clamp			✓	✓
	Crowfoot		✓		
	Template Foot			✓	✓

Clamping types



Programmable. Management of the tool

maintenance and cutting tool lifetime

Concept

Range

Following the clamping on the drill jig or tool positionning, simply press the start button to launch your drilling cycle (rotational speed, feed rate, vibration mode, stroke, lubrication). Once the cycle is over, the cutting tool retracts at fast speed back to its original position, and the tool stops automatically. You can mechanically set-up the extreme positions of the cutting tool. The tools are equipped with a button to stop the cycle, a secured button to lock on the drill jig and a button to retract the spindle before the end of the defined stroke.

 $\label{lem:options} \mbox{OPTIONS: programmable cycle counter, micropeck system, onboard or external lubrication}$

Rotation speed and feed rate

rtotation opeour and rood rate					
		ST 1200			
	Droite	Angle		Mm/tr	
	14054	11835	Feed rate	0,01	
	9713	8179		0,021	
	7770	6543		0,038	
	5550	4674		0,058	
	3514	2959		0,077	
	2811	2367		0,095	
	2428	2045		0,115	
	2008	1691		0,154	
<u> </u>	1943	1636	Precision of drilling and countersinking 0,02 mm Power 2100 Watts Weight (without equipment) 1,85 Kg		
l d	1554	1309			
) g	1388	1168			
Spindle rotation speed (rpm)	1110	935			
	878	740			
	793	668			
	703	592			
<u> </u>	562	473			
Pu	502	423			
Spi	402	338			
	287	242			
	1388	1168	Stroke:		
	1110	935	Unlimited		
	878	740			
	793	668			
	703	592			
	562	473			

423

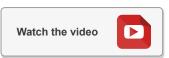
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242

		ST 2200			
	Droite	Angle		Mm/tr	
	2919	2195	Feed rate	0,047	
	2560	1925		0,059	
	2017	1517		0,095	
	1770	1331		0,12	
=	1614	1214		0,146	
ď	1416	1065		0,182	
- p	1216	915		0,2	
Spindle rotation speed (rpm)	1187	892	Precision of drilling and countersinking 0,02 mm		
ls u	949	714			
ţį	841	632			
ota	730	549			
<u> </u>	672	506	Power 2100 Watts with high torque		
ind Pi	640	481			
Sp	584	439			
	512	385	riigir torquo		
	429	323	Weight (without equipment) 3,2 Kg Stroke:		
	343	258			
	304	229			
	243	183			
	174	131			
			Unlimite	d	

Recommandations depending on diameters and material

Drilling/reaming diameters	Aluminium or Composit	Titanium	Aluminium or Composit	Titanium
mm/inches	Drilling		Drilling - Countersinking	
Up to 4,8 mm - 3/16"	ST 1200 ST 2200	ST 1200	ST 1200	ST 1200
Up to 12,7 mm - 1/2"				ST 2200
Up to 14,3 mm - 9/16"		ST 2200	ST 2200	
Up to 15,9 mm - 5/8"				
Up to 19,05 mm - 3/4"				
Up to 25,4 mm - 1"				



502

402

287



Contact your **Desoutter** representative for assistance in specifying your ADU.













