



Industrial Tools



A.D.U
(Advanced Drilling Units)



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 repeatability. 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 equipments (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 reffect 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.

Secured clamping button

Easy to use, it secures the operator during the drilling cycle

2100W (2,8hp) motor

Powerful, lubrication-free turbine for high durability and efficiency

Emergency stop button

for production and operator safety

Air inlet (ISO 2787)

Performance and safety

Secured Cycle Start

Programmable feed rate, mechanical hard stop, rapid spindle retract, automatic cycle stop

Cycle Counter

Programmable. Management of the tool maintenance and cutting tool lifetime

On-Board Lubrication

Fiability and drilling quality

Spindle Retraction Button

Early spindle retraction in needed

Lubrication primer

Test button prior to drilling cycle

Drill jig clamping with Concentric Collet

Clamping multi direction and robustness

Vacuum Options

Operator safety - workspace quality - Reduced cleaning time

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)

Clamping types

Positioning system on jig						
Concentric collet	1/4 turn Bayonet	Croco Clamp	Jack Clamp	Crowfoot	Template foot	Clocker
						

Positioning types

Drill jigs				
	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			✓	✓

Concept

Range

Following the clamping on the drill jig or tool positioning, 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.


OPTIONS: programmable cycle counter, micropeck system, onboard or external lubrication

Rotation speed and feed rate

ST 1200					ST 2200				
Spindle rotation speed (rpm)	Droite	Angle	Feed rate	Mm/tr	Spindle rotation speed (rpm)	Droite	Angle	Feed rate	Mm/tr
	14054	11835		0,01		2919	2195		0,047
	9713	8179		0,021		2560	1925		0,059
	7770	6543		0,038		2017	1517		0,095
	5550	4674		0,058		1770	1331		0,12
	3514	2959		0,077		1614	1214		0,146
	2811	2367		0,095		1416	1065		0,182
	2428	2045		0,115		1216	915		0,2
	2008	1691		Precision of drilling and countersinking 0,02 mm		1187	892		Power 2100 Watts with high torque
	1943	1636				949	714		
	1554	1309				841	632		
	1388	1168				730	549		
	1110	935				672	506		
	878	740				640	481		
	793	668				584	439		
	703	592				512	385		
	562	473				429	323		
	502	423				343	258		
402	338	304	229						
287	242	243	183						
1388	1168	174	131						
1110	935	Weight (without equipment) 1,85 Kg	Precision of drilling and countersinking 0,02 mm						
878	740								
793	668								
703	592								
562	473								
502	423								
402	338	Power 2100 Watts	Precision of drilling and countersinking 0,02 mm						
287	242								
1388	1168								
1110	935								
878	740								
793	668								
703	592	Weight (without equipment) 3,2 Kg	Precision of drilling and countersinking 0,02 mm						
562	473								
502	423								
402	338								
287	242								
287	242								

Recommandations depending on diameters and material

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

Watch the video 

More on Setitec  

Contact your **Desoutter** representative for assistance in specifying your ADU or visit www.desouttertools.com