



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

Cycle Counter

Programmable. Management of the tool maintenance and cutting tool lifetime

Secured Cycle Start

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

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

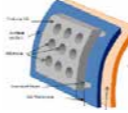
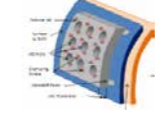
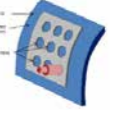
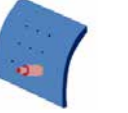
Dedicated project management, with specific definition tooling (Contact your Desoutter representative for assistance)

Clamping types

Positioning system on jig



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						
	Droite	Angle	Feed rate	Mm/tr		Droite	Angle	Feed rate	Mm/tr	
	Spindle rotation speed (rpm)	14054		11835			0,01			2919
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		0,154		1187	892			
1943		1636	Precision of drilling and countersinking 0,02 mm			949	714	Precision of drilling and countersinking 0,02 mm		
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	Power 2100 Watts			174	131	Power 2100 Watts with high torque		
1110	935									
878	740									
793	668									
703	592									
562	473									
502	423									
402	338									
287	242									
1388	1168									
1110	935	Weight (without equipment) 1,85 Kg					Weight (without equipment) 3,2 Kg			
878	740									
793	668									
703	592									
562	473									
502	423									
402	338									
287	242									
1388	1168									
1110	935		Stroke: Unlimited						Stroke: Unlimited	
878	740									
793	668									
703	592									
562	473									
502	423									
402	338									
287	242									
1388	1168									
1110	935									

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"				
Up to 14,3 mm - 9/16"				
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