

NEW

In-Die Tapping Unit / Automatic

Electronically controlled (with air support) screw thread forming unit.



Code: AR M..M..

Direct Drive DTAP



It may be applied in your available dies or can be used in other manual-automatic conveyor systems, tools and machines in addition to designing feature within the die.

New & Compact: Product without protruding parts it can be mounted **vertically / horizontally** with its small dimensions. It operates **32 rpm** automatically and precision by synchronizing with press machines thanks to high speed. Returning cycle is faster than workpiece optimizing the production time.

It operates in tapping independent of die operation stroke distance. Thread forming distance is positioned up to 27 mm with machine and model selection (diameter / height and threading material) with various processes and offered in three different dimensions:

- 1) M2 - M2.5 - M3 - M3.5 - M4
- 2) M4.5 - M5 - M6 - M7
- 3) M8 - M9 - M10

It is possible to form thread and to follow thread forming process with direct drive dtap and a simple sensor signal with a digital LCD panel if it is correctly / successfully processed. It can also form thread in blind holes.

It is serial and economical in multiple thread forming operations.

A new system should be installed for each thread forming process.

Tapping Machine: It can be operated automatically or via manual system.

It approaches to the tapping hole automatically with an electronic sensor signal and process torque settings within the specified time.

Automatic thread forming operations for workpieces are used in all kinds of machines or especially on dies.



In-Die Practices



Horizontal - Vertical / Multiple Practices



High Speed In-Die Practices

New Technology screw thread is formed with cyclic force transmission of head drive motor shaft "direct drive dtap" with servo driver. After process, tapping tool leaves the material automatically. The repetition settings take automatic command position. There is an electronic (optional) resettable counter for following process and daily production numbers. In case of a fault (e.g. sensor fault), it is prevented the machine and die to get damaged with the automatic operating system emergency stop command. The manual system is started again and the process is continued with the time-controlled selection. Active and passive positions of electronic, digital LCD panel and tapping tool can be followed or adjusted for tap change, the clamp screws of the unit are loosen and the machine is pulled. The piston arm is pushed forward over the panel thanks to the system with sliding connection.

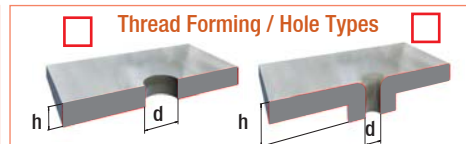
Tap Tool: It is easy and simple to replace a tap with holder / nut (see manual). It is also possible to adjust torque values and time control settings manually with the manager button except automatic system with the new small and compact (no protruding part) design, the settings are made with new electronic LCD panel. The power cord of the unit is 5 meters. The electric cable is connected to a socket near Direct Drive Dtap in order to avoid potential damage positions. All this system is presented in a portable stand and compact structure, as an integrated control unit.

For Mounting: Independent electrical installation and air connection system of the unit. The values declared in the markings on the device or other printed documents given with the products are the values obtained in a workshop environment according to the related standards. The usage type of the product may be different according to the environmental conditions.

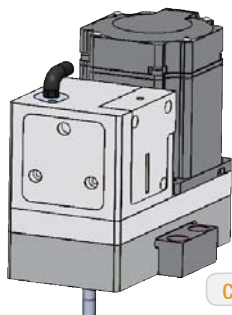
After sales service, assembly service and trainings are given by our company.

Order Request Form →

Tap Types	Rolled Tap <input type="checkbox"/>	Machine Tap <input type="checkbox"/>
Tapping / Thread Forming:		d :..mm / h :..mm
Tapping / Thread Forming Material:		Stroke / Minute:
Tensile Strength:		Thread Forming Time:

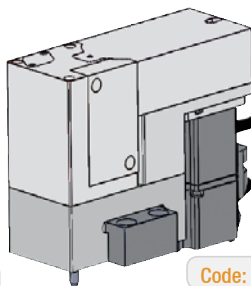


In-Die Tapping Unit / Automatic Direct Drive DTAP



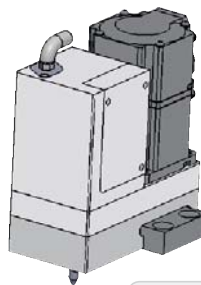
M.8 - M.10

Code: AR 810



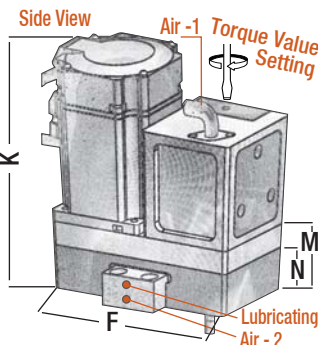
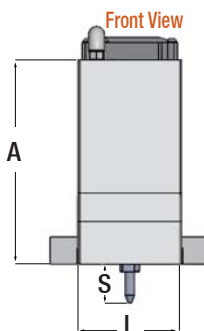
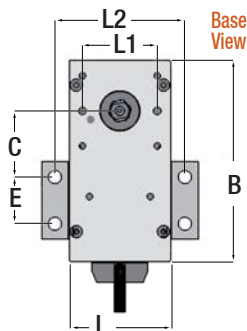
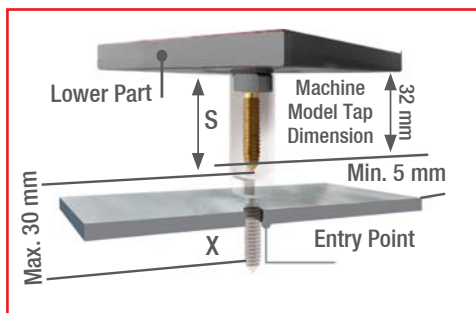
M.5 - M.6

Code: AR 560



M.3 - M.4

Code: AR 340

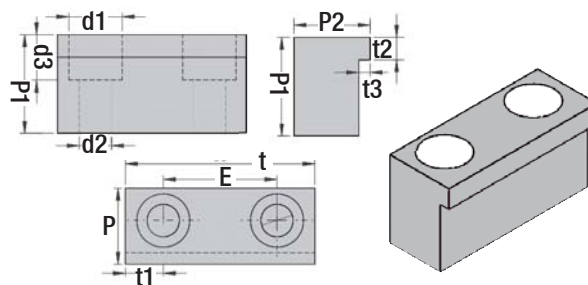


Electronically Controlled (with Air Support) Screw Thread Forming Unit

Order	Unit (Servo Motor) Dimensions mm												Motor Power	Max. Motor speed	Tapping Speed rpm	Tap dia. M.	Drill Dia. mm	
	A	B	C	E	F	K	L	L1	L2	M	N	S						X
AR 340	130	130	42.5	30	130	144	65	48	83.4	51.6	45	25	13 17	400 W	5.500 rpm	3000	M3	2.80
AR 560	130	175	12.5	30	175	144	65	48	83	45	45	25	18 20	400 W		1460	M5	4.65
AR 810	132	165	27.5	30	165	165	80	65	98	61	53	32	22 25	750 W	2500	M8	7.40	
																	M10	9.30

Lug Clamping: It is performed by mounting side lugs of the tapping unit to the clamping plate to be determined in the die clamping.

Lower screws of the lugs (spring plunger) are loosen and a slide system is created with the clamping plate. This way, the unit can move forward and backward. The air to cool down the tapping tool is clamped with a separate hose. As per request, a grease clamping point is created for lubricating system. Please contact our company for optional lubricating systems. Cutting grease is used for tapping.



Direct Drive DTAP / Clamping Lugs (2 pcs) Dimensions are in mm.

Model	t	t1	t2	t3	E	P	P1	P2	d1	d2	d3
AR 340	50	10	7	3	30	20	17	20	14	8.5	12
AR 560	50	10	6	3	30	20	26	20	14	8.5	12
AR 810	50	10	6	3	30	20	26	20	14	8.5	12

Electronic Tapping Unit: It is a unit which can easily perform thread forming / tapping processes in dies or specials settings automatically and independent from die operating distance (stroke). It operates with a direct drive DTAP which follows / controls each thread forming step. It regulates thread forming depth and speed. It is also possible to control it.

In-Die Tapping: Rolled tap should be used. This prevents wastes / burrs in dies.

Rolled Tap: It guarantees high performance than traditional tap tools; It prevents wastes / burrs in dies. They can operate faster. Thread forming surfaces are stronger and smoother. Clamping angle is suitable for our machine.

Thread Forming by Adjusting: as the material feeding angle is smaller, the thread forming time is long (more stroke / minute).

