



CNC Machining Units: Flange Clamp

CNC **machining units** manufactured by GIFAM are used as drilling units or drill heads, milling units or mill heads, tapping units, boring units, threading units.

CNC **machining units** manufactured by GIFAM represent a new and unique product on the international market; they are patented in many Countries; they have inside no creeping spline shafts, nor belts, that are all components subjected to wear; consequently their reliability is very high as proved in the most various applications; also their service life is very high and without any maintenance; they are extremely compact with rigid structure; all internal components have very high protection from the external environment (chips and refrigerating liquids); they are sealed and can be pressurized; they can be supplied with base clamp or with flange clamp; fixing structure must be rigid and with a precision made plane.

Quick change electromechanical tool holder system is standard on **CNC machining units** manufactured by GIFAM.

A brushless electrospindle, controlled by a resolver transducer, is installed inside the quill of **CNC machining units** manufactured by GIFAM; the electrospindle has high precision bearings, grease lubricated for life; a second brushless servomotor, controlled by a resolver transducer, drives directly a grinded ball screw for quill feed; both motors are liquid cooled; the refrigerating circuit is sealed with double seals; an independent external circuit with small heat exchanger can be used to cool motors.

The grinded ball screw of CNC machining units manufactured by GIFAM is quill coaxial and so avoids offset loadings.

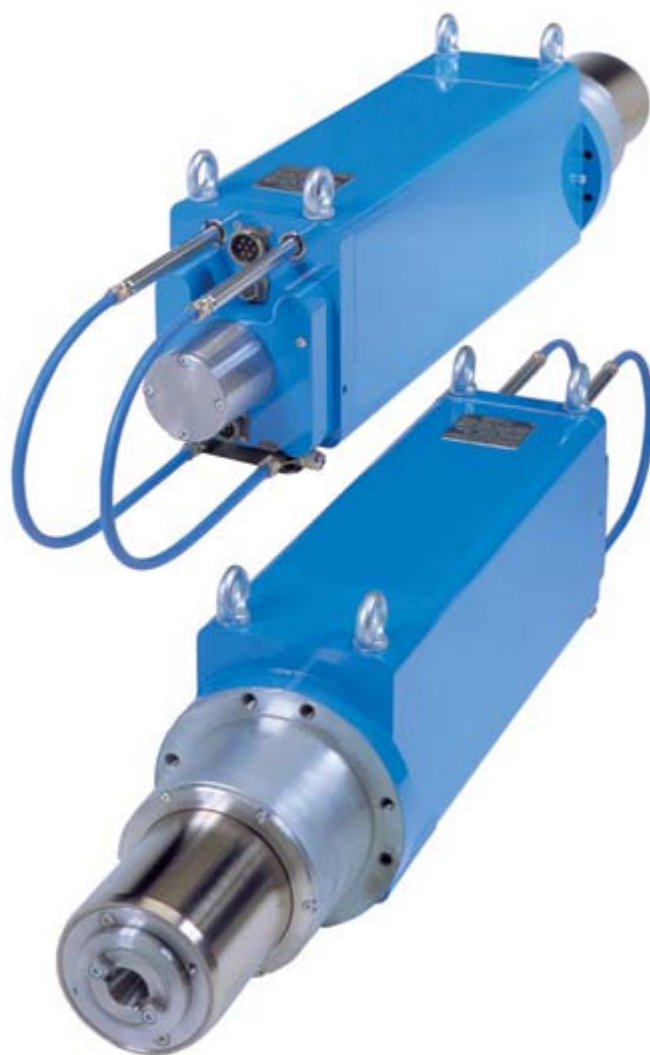
Quill useful stroke of CNC machining units manufactured by GIFAM is limited by electrical microswitch at both ends (zero position and extended position); in addition mechanical shock absorbers at both ends of extra stroke avoid damages in case of wrong motion; the quill has rigid axial and antirotational guide, no vibration rises during working and consequently hard metal tipped tools can be effectively used and multispindle and angled heads are suitable.

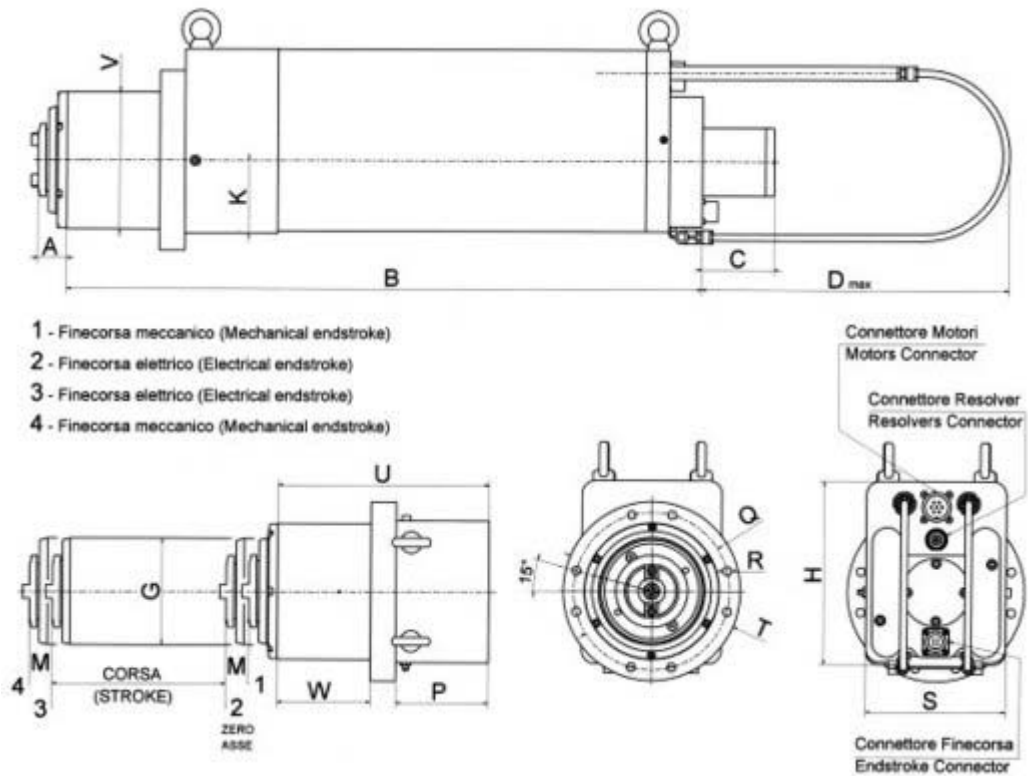
CNC machining units manufactured by GIFAM are ideal for drilling, milling, tapping, boring, threading.

Using CNC machining units manufactured by GIFAM a customer can build *CNC transfer machines or milling machines, drilling machines, tapping machines, boring machines, threading machines.*

CNC machining units manufactured by GIFAM can be connected to a wide range of Electronic Drives and Numerical Controllers available on the market.

	Machine type			
	S095	S125	S180	S240
Stroke (mm)	150	250	350	450
Max spindle speed (rpm)	8000	6000	5000	4000
Spindle power (kW)	1,2	5	12	25
Spindle torque, continuous duty (Nm)	3	15	50	150
Max feed rate (mm/min)	20000	20000	20000	20000
Max feed force (N)	1800	3500	10000	20000
Tool holder (ISO/BT)	25	30	40	50
Mass (Kg)	50	110	320	730





		Machine type			
		S095	S125	S180	S240
D I M E N S I O N S	A	35	45	50	55
	B	620	780	1'050	1400
	C	0	110	150	150
	D (max)	250	350	480	500
	E	-	-	-	-
	F	-	-	-	-
	G	95	125	180	240
	H	170	215	305	410
	K	70	85	120	160
	L	-	-	-	-
	M	10	10	15	15
	N	-	-	-	-
	P	90	110	150	200
	Q	150	185	270	350
	R	M10	M12	M16	M20
	S	132	166	240	316
	T	170	210	300	400
U	190	250	350	520	
V (h8)	125	160	230	300	
W	80	110	160	270	