MACHINE FRAME: manufactured entirely in thickness electric welded sheet metal, well ribbed, with thermic treatment to ease the internal stress.

HEAD AND RAM: made in G30 cast iron. The head sliding surfaces are ground and hand scraped for ram accommodation to them. The alternating motion is actuated by an asynchronous auto-braking motor with gearing down and crank connecting rod system.
Ram stroke adjustment is made by manual shifting of the cam on flywheel. Tilting head 20 deg. L/R for the accurate positioning on tapered slots.

RECTANGULAR TABLE for models 1AC/2AC: in molten cast iron made. Sliding guides are ground and scraped.
A wide central hole is provided for the pass throughout of long shafts.

ROTARY TABLE for models 1ACT/2ACT/2ACTM/3AC/4AC: in molten cast iron made, with wide central hole for slotting long shafts. Both rotary table and its supporting plate are ground and scraped. Rotation actuated by an endless screw and plate wheel (screw in 18NCM5 carbonized and ground, wheel in B14 bronze) with micrometrical backlash recovery. Automatic, maintenance free lubrication of the plate guide. Pneumatic locking of rotation during the work, by machine CN.

LONGITUDINAL and CROSS AXES: the worktables movement on models with relevant CN axes is sliding on re-circulating ball screws ground and protected.

LUBRICATION: forced lubrication on the sliding surfaces by means of automatic pump with timer. In shortage of oil level the cycle-stop is automatically actuated with signalling.

COOLING SYSTEM: electro-pump drive and closed circuit: The chiptray tank is housed under the worktable, easily removable.

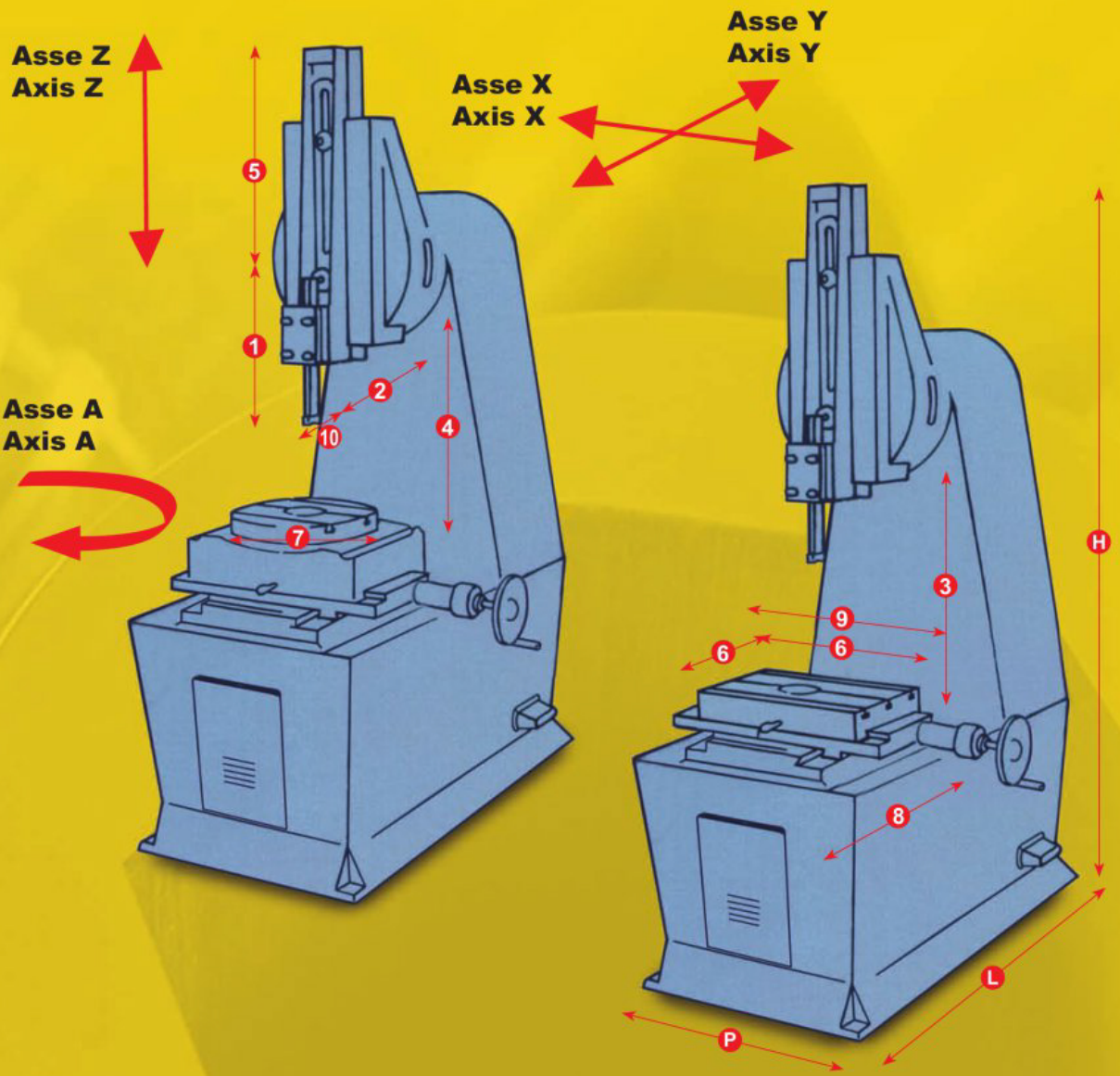
SAFETY GUARD: highly efficacious with perimetrical carter in steel plate and Plexiglas made, opening front to allow the passage of the timber cart. Safety microswitch locking the door during work, in accordance with the current Safety Prescriptions.

ELECTRIC INSTALLATION: each electronic axis is driven by Brushless motor with relevant driver controlled by CN, which allows the operator the easy programming of the most complicated jobs. Electrics are made following the current Standards.

P-L-H
Misure di massimo ingombro
Overall dimensions

Gamma modelli */Range of models*

150	**1AC**
200	**1AC-1ACT-2AC-2ACT-2ACTM-3AC-4AC**
250	**1AC-1ACT-2AC-2ACT-2ACTM-3AC-4AC**
300	**1AC-1ACT-2AC-2ACT-2ACTM-3AC-4AC**
300M	**1AC-1ACT-2AC-2ACT-2ACTM-3AC-4AC**



Legend:

1AC	*Electronic Auto Table feed (axis Y, working direction)*
1ACT	*Electronic Auto Table feed (axis Y) + Manual Rotary Table (axis A)*
2AC	*Electronic Auto Table feed on Y and X axes (working + lateral direction)*
2ACT	*Electronic Auto Table feed on Y axis + Electronic Rotary Table (axis A)*
2ACTM	*Electronic Auto Table feed on Y and X axes + Manual Rotary Table (axis A)*
3AC	*CNC System on the 3 Table Axis (Y, X , A axes)*
4AC	*CNC System on the 4 Table Axis (Y and X axes + table axis A + ram axis Z)*

Dati tecnici / Technical data

				300M	300	250	200	150
1	*Tool stroke adjustable from zero to*		*mm*	400	300	250	200	150
2	*Distance between pillar and toolholder*		*mm*	500	500	425	350	250
3	*Opening between table and head*	1AC/2AC	*mm*	720	570	520	460	380
4	*Opening between swivel table and head*	1ACT/ 2ACT/ 2ACTM/ 3AC/4AC	*mm*	640	490	430	360	-
5	*Vertical movement of ram*		*mm*	650	500	430	370	280
6	*Table dimensions*	1AC/2AC	*mm*	400x650	400x650	340x560	280x500	220x440
7	*Swivel table*	1ACT/ 2ACT/ 2ACTM/ 3AC/4AC	*mm*	ø 450	ø 450	ø 450	ø 320	-
8	*Table lengthwise advance*	1AC	*mm*	340	340	300	230	200
		2AC	*mm*	340	340	300	230	-
		1ACT/2ACT	*mm*	340	340	250	225	-
		2ACTM/ 3AC/4AC	*mm*	340	340	250	225	-
9	*Traverse stroke*	1AC	*mm*	370	370	320	250	200
		2AC	*mm*	350	350	320	200	-
		1ACT/2ACT	*mm*	340	340	300	250	-
		2ACTM/ 3AC/4AC	*mm*	340	340	220	250	-
10	*Distance between hole centre and tool supporting surface (with Y axis on zero position)*	1AC/2AC	*mm*	190	190	175	170	-
		1ACT/ 2ACT/ 2ACTM/ 3AC/4AC	*mm*	190	190	145	170	-
	Through hole in table centre	1AC/2AC	*mm*	120	120	100	80	-
		1ACT/ 2ACT/ 2ACTM/ 3AC/4AC	*mm*	135	135	135	100	-
	Number of blows per min. variable from	1AC/2AC/ 1ACT/2ACT/ 2ACTM/3AC	*N°/min.*	16a/to64	16a/to64	22a/to90	30a/to120	35a/to140
		4AC		0a/to80	0a/to80	0a/to100	0a/to150	-
	Potenza motore Brushless *Motor power Brushless*	1AC/2AC 1ACT/2ACT/ 2ACTM/3AC	*Kw*	4	4	3	2,2	1,5
		4AC		8	8	5,5	4	-
	Overall dimensions			300M	300	250	200	150
		1AC/1ACT 2ACT	*mm*	L 1700 P 1400 *h.* 3050	L 1700 P 1400 *h.* 2900	L 1450 P 1300 *h.* 2620	L 1220 P 1200 *h.* 2300	L 1020 P 1090 *h.* 2040
				300M	300	250	200	150
		2AC/2ACTM 3AC/4AC	*mm*	L 1700 P 1750 *h.* 3050	L 1700 P 1750 *h.* 2900	L 1450 P 1560 *h.* 2620	L 1220 P 1250 *h.* 2300	L - P - *h.* -
	Approximate weight	1AC/1ACT	*kg*	2450	2100	1600	1150	850
		2AC	*kg*	2500	2250	1650	1200	-
		2ACT/2ACTM	*kg*	2500	2300	1700	1250	-
		3AC/4AC	*kg*	2600	2350	1800	1300	-

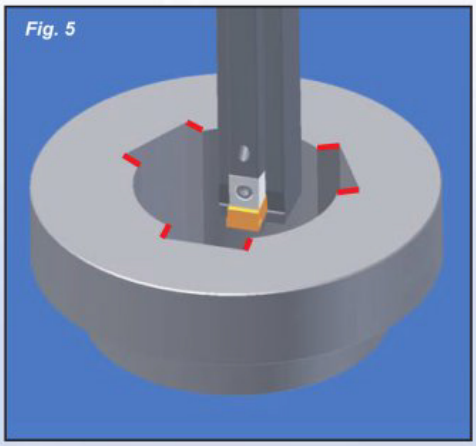


Fig. 5

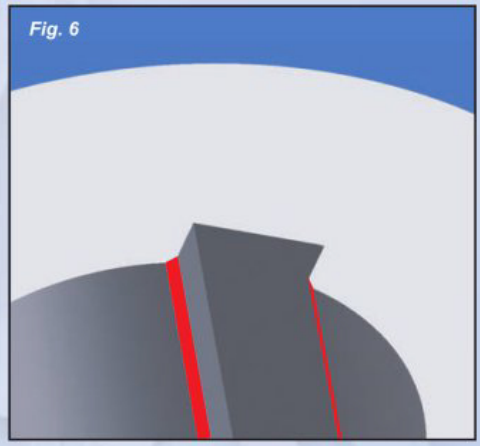


Fig. 6

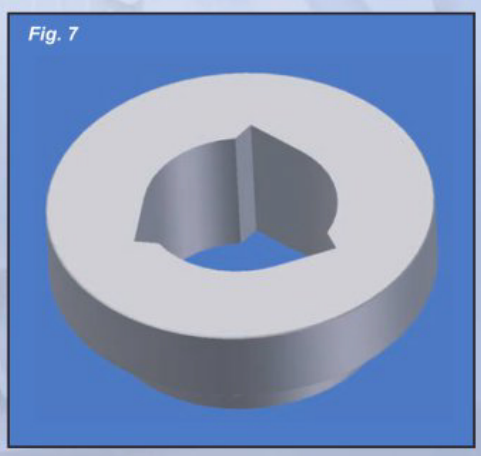


Fig. 7

The new model of slotting machine "type 4AC" is the outcome of our long years as leading manufacturers of Slotting Machines, which has allowed us to widen the range of the already known machines with 1, 2, 3 electronic axes.
The 4 axes slotting machine has been conceived and carried out in order to reduce considerably tooling times, to execute special machining and to increase the power and the quality of slot cutting.
The new 4AC version together with our tools production (see tools catalogue) will optimize slot execution and will make the slotting machine an essential and much appreciated machine tool in every workshop.

PROGRAMMING ON MODEL 4AC:
NC control system on 4 axes (axes Y, X, A, Z): automatic table feed on the longitudinal and cross axes and electronic indexing of the built-in rotary table, programmable and reversible for any depth and width of slot. The auto tool lift is actuated by an alternating motion of the table. After reached the pre-selected slot depth, automatic execution of some finishing strokes; ram stop high and rapid table return to the work starting point.
Built-in electronic rotary table with central bore and automatic indexing up to 1500 symmetric and 99 asymmetric divisions. Special slots can be executed, as trapezoidal (see fig. 1), circular (see fig. 2) and linear (see fig. 3).
The interaction between operator and machine is allowed by the NC system, introducing the working data, visualized on the coloured display touch screen 10". The new touch-screen CN system makes machine programming more complete, versatile and easy to understand.
Intuitive programming system with direct specification of the controls to be executed; up to 100 made up programs with the relevant Zero point can be stored.
The new model of slotting machine combines the traditional rod system ram drive speed with CN ram control, which allowed transforming ram axis into a real CN axis for the execution of special machining such as front conic slots and automatic execution of two or more sequential programs, with different cutting speeds.

Standard possibilities of the software on mod. 4AC:
- Groove second operation: it can be made without re-starting from beginning.
- Incremental Tool Lift: during the return ram stroke, the tool goes out from the slot and re-starts from the initial point.
- Sectors adjustable feed: it's possible to execute flexible machining programs with feed and speed adjustable in 3 degrees.
- Decreasing feed: right for slotting with tip shaped tools. In fact, at beginning the cutting surface is small and feed is consequently big: gradually reducing feed in relation to the enlargement of the cutting surface. Operation is made just programming the starting and final feed sizes.
- Motor brushless for ram movement: the cutting motion by brushless motor and NC grants a continuous ram motion with constant torque from beginning to end of the stroke, with little tool consumption and better cutting quality.
* Software can be predisposed for the execution of conical cutting and slots without tilting the head for minimum inclinations and widths.

Special appliances of the software, on request:
- Slot-end second operation: in case of widening slot, the second operation can be made in order to polish the end (see fig. 4).
- Slot-sides second operation: it is possible to enter a widening value in order to restart sides machining (see fig. 5).
- Air blower: right for removing chips from blind holes. At each ram stroke the opening of an electro-valve controls the blowing.
- Edge chamfering: this is fit to automatically chamfering -up to 45 deg.- the two entering edges (see fig. 6).
- Tangential slots: automatic execution of two or more tangential slots UNI 7575-76 of any width (see fig. 7).

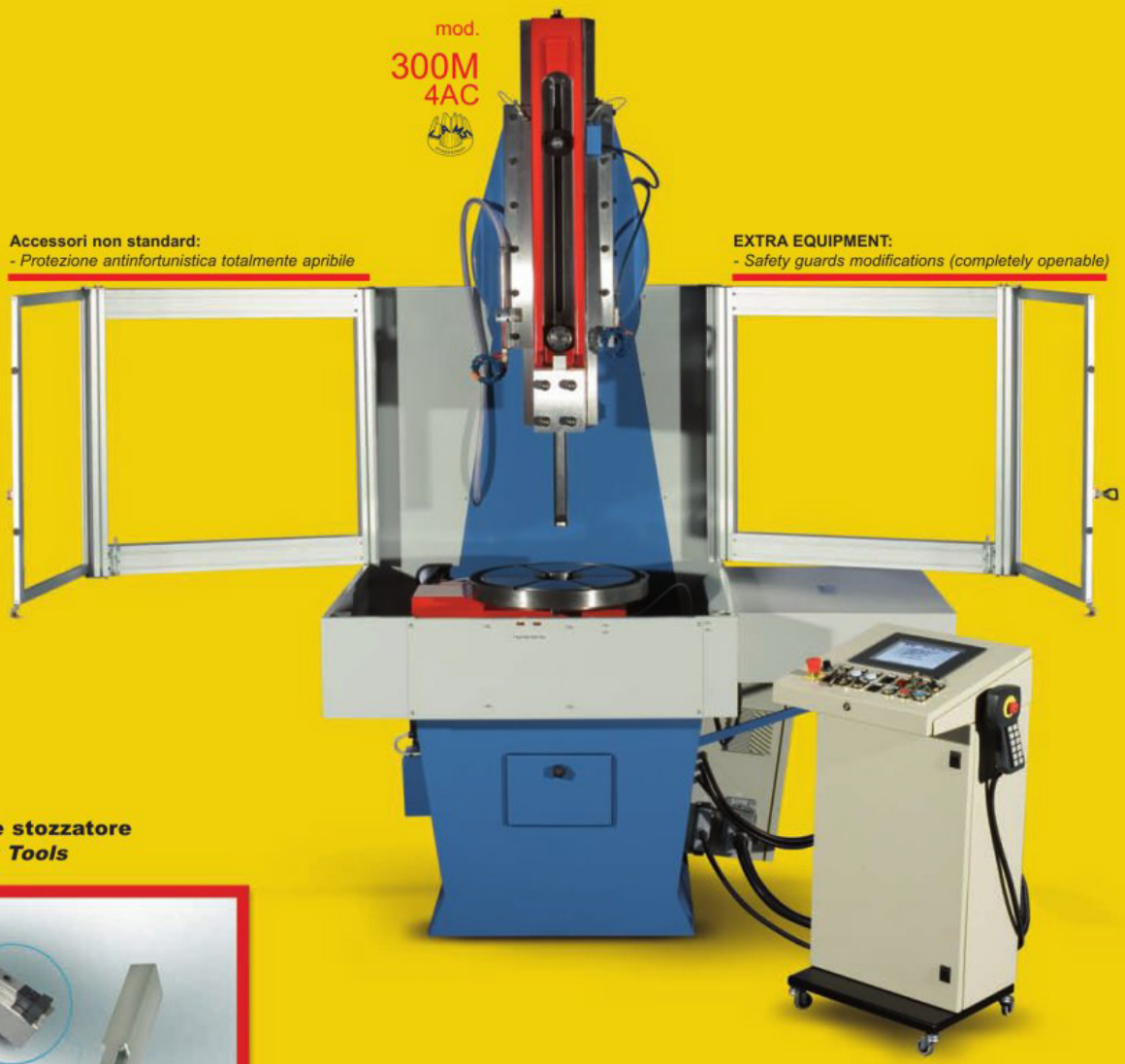
(*) Special machining which can be executed in particular conditions only (please contact our technical dept.)

STOZZATRICI

mod.
300M
4AC

Accessori non standard:
- Protezione antinfortunistica totalmente apribile

EXTRA EQUIPMENT:
- Safety guards modifications (completely openable)



Utensile stozzatore
Slotting Tools

mod.
200
3AC

C.A.M.S., the Slotting Specialist, has created and patented this new range of Slotting Tools to meet the needs of the most exacting Customers. The system is applicable on every brand of model of Slotting machines. The here above picture proves the bright solution of the system.