

# SPLINE ROLLING MACHINE with Racks



A new machine for cold-forming of splines, serrations, oil grooves, and precision threads.



# FINTAT

## THE MACHINE

- *The cold-forming method requires an extremely rigid and strong machine.*
- *The new Fimat rolling machine has been designed and built in order to meet any demand of strength and solidity needed to obtain high-quality results.*
- *Special attention has been paid to the machine versatility and flexibility, thanks to Fimat wide experience in this sector.*



## INSTALLATIONS

- *Our rolling machine features a self-contained hydraulic installation with an adequate rating for the control of the slides. The tool feeding speed in the lead-in stage is adjustable, in order to allow the work piece rotation as well as a good initial deformation – a premise for the realization of high-precision splines.*
- *The machine is also equipped with automated lubrication and coolant installations, on which we can provide cutting or emulsifying oil, along with Accu-Lube system.*
- *The machine control is carried out by Siemens S7 300 PLC, housed in a cabinet secured to the machine. The control panel mounted on a swiveling support features an operator push-button panel for a simple and user-friendly man/machine interaction.*



## NC-CONTROLLED AXES

- *The external and the internal tailstock can both be carried out with controlled axes operated by recirculating balls screws and run by a Brushless motor.*
- *Such machine version is particularly suitable for frequent changes of processing where a quick machine set-up is needed.*





## QUICK RACK LOCKING

- *Special attention has been paid to rapidity in the change of processing and quick machine set-up.*
- *On request the machine can be equipped with automatic hydro-driven quick lock rack holders.*
- *The quick rack change operation with the patented Fimat system does not require any wrench and is carried out in 10 minutes, thus allowing an outstanding productive efficiency.*

## SPECIAL SOLUTIONS

- *Our base machine is designed to allow the use of several special solutions, in compliance with the various production requirements of the customer.*
- *The external tailstock support can be assembled both on the upper and on the lower part of the machine, in accordance with the work piece loading/unloading specifications.*
- *Special working cycles can be planned and customized, according to the particular demands of our clients.*
- *Depending on machine features, it is possible to perform multiple rolling operations with just one work piece load by contemplating:*
  - *Side by side racks.*
  - *Intermediate stop of the working stroke.*
  - *Work piece rotation and opposite side processing.*
  - *Axial shifting of the work piece.*



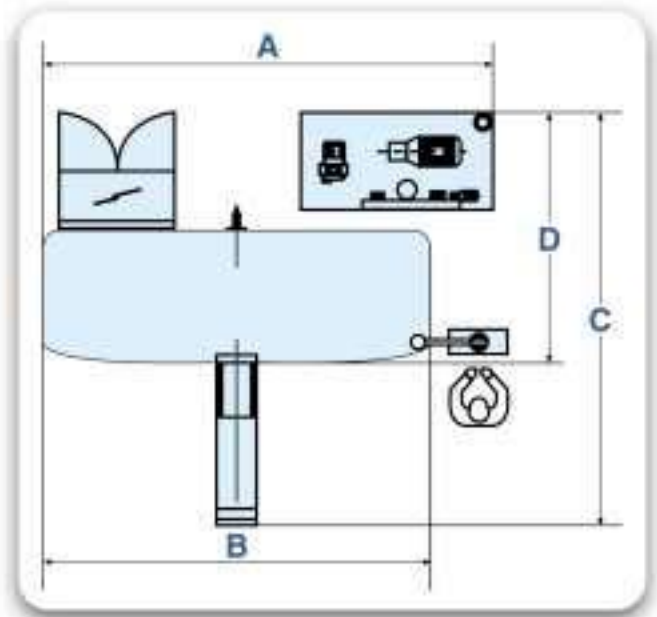
## AUTOMATION

- *Our rolling machine is extremely quick and in order to secure a high productivity rate it is advisable to equip the machine with automated feeding units.*
- *The automation possibilities are manifold and they vary according to the features of the part to be processed.*
- *Among the possible solutions there is also an anthropoid robot integrated with the machine.*



# FIMAT ROLLING MACHINES

FIMAT ROLLING MACHINES			
FEATURES		RL 1350	RL 2100
Total Length	A	3.860 mm.	4.700 mm.
Machine Length	B	3.160 mm.	4.660 mm.
Width w/ Tailstock	C	4.085 mm.	4.200 mm.
Width w/out Tailstock	D	2.685 mm.	2.685 mm.
Height		2.050 mm.	2.050 mm.
Weight (w/out Automation)		14.000 kg.	19.800 kg.
Total Power		30 Kw	45 Kw
Machine Opening		6" / 8"	6" / 8"
Max. Side Stroke		1.350 mm.	2.100 mm.
Max. Rack Length		1.220 mm.	1.500 mm. + 330 mm.
Max. Work Piece Diameter		60 mm.	60 mm.
Max. Profile Length		125 mm.	125 mm.
Standard Module Range		0,3÷ 1,50 mm.	0,3÷ 1,50 mm.



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