

## AUTOMATIC AMPOULE MAKING MACHINE FA-36S



A continuous rotary motion machine with vertical spindles for the production of ampoules from glass tube with diameter from 7 mm to 24 mm (from 7 mm to 35 mm as an option with a twin chuck application). The machines are composed of:

### Main base

The lower wall of the base houses the main motor and the chuck motor, the oil pump, the cam transmission movement.

The upper part of the base is designed as an oil tank with a filter.

### Main body

The machine has a planetary type movement actuated by two independent pinions, in a carburized, hardened, ground steel alloy, against the rotor wheel gear and the chuck wheel gear, in a steel alloy.

The main central shafts rotate on pre-load tapered bearings.

All the gears and the bearings are automatically lubricated by the oil pump.

### Chuck Sections

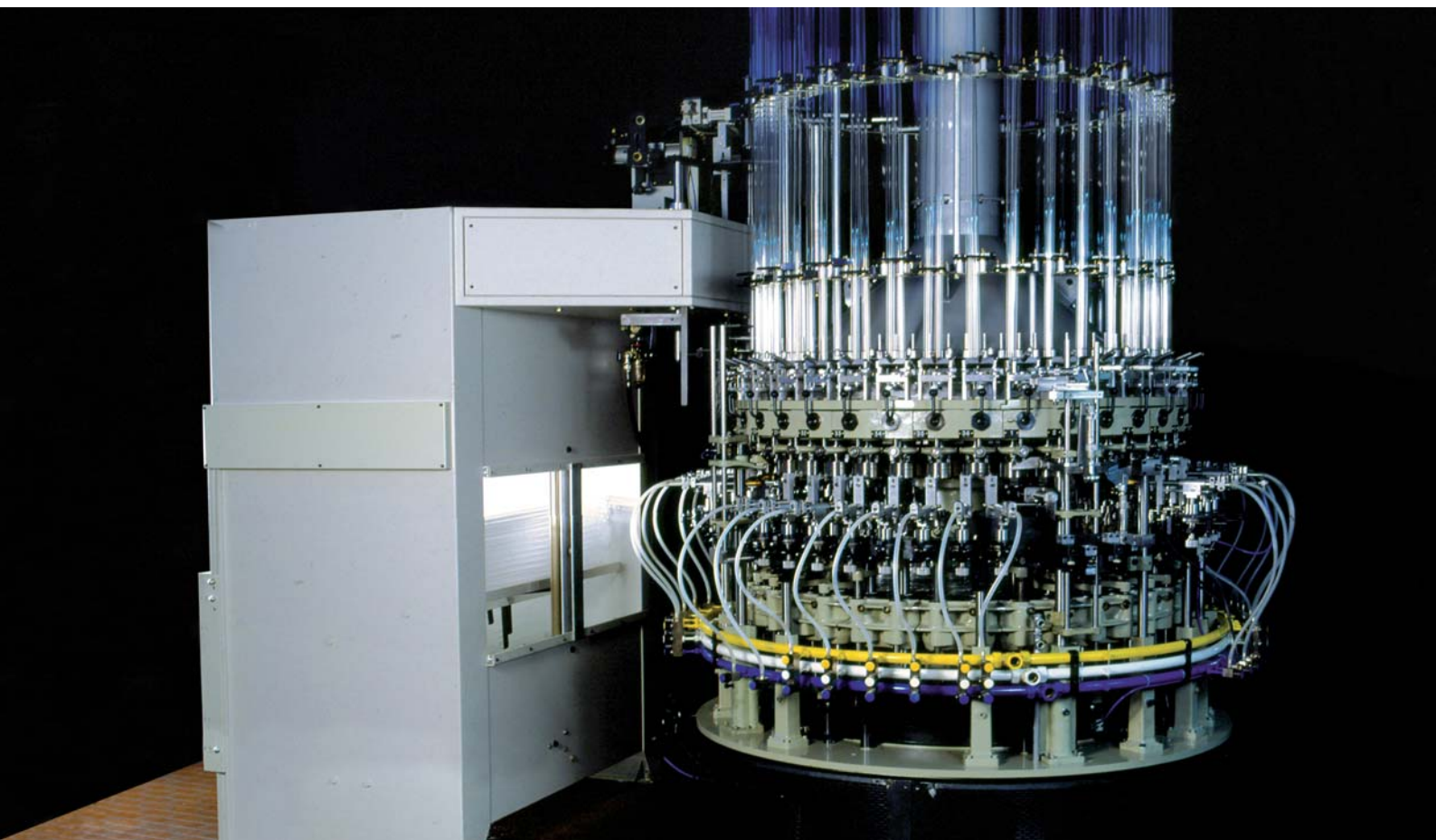
The machine is equipped with the chuck sections in cast iron. Each sections hold the spindles with the related gears and bearings and the lower sections are in an oil bath.

The chucks run on ball bearings and the, in a carburized steel alloy, slide on pre-loaded ball bushes. The chuck sections are independent of each other and can be easily realigned or replaced in case of accident.

### Burner sections

The machine has four separated and independent burner sections that can be separately adjusted in height. The burners are equipped with different nozzles, depending on their function and are actuated by the upper chuck, with a spring and shock-absorber for the back movement.

The burners have radial, polar and height regulation independent from the adjustment of the burner section. The necking tools is normally composed of a blade with a cooling system but, on the customer request, a roller tooling may be supplied.



### Automatic first bottom production

The machines could be equipped with an automatic section for the production of the first bottom of each new glass tube, so as to reduce to a minimum the glass tube waste and to increase the machine efficiency.

The section is managed by a programmable logic computer which is able to control the following functions:

1. First bottom production in each new glass tube with separate ejection of the first piece of glass.
2. Temporary stop-cycle in process with automatic positioning of the tube inside the upper chuck and automatic start-cycle.
3. Ejection of the last piece of glass tube in a separate position.

### Tube feeding equipment

For the glass tube feeding operation, the machines can be alternatively equipped with:

- A glass tube automatic loader, turret type, with eight position each, actuated by microswitches with preloading capacity.
- A "Roboglass" continuous feeding device with automatic glass tube transfer to the machines, for more efficient operation.

The standard version machines have the following features: Centralized electrical panel possessing all the functions for machine set-up; electronically activated a.c. motors for rotor and chuck rotation; oil-forced lubrication with pump for the body bearings and the gears; combustion gas exhaust hood with centrifugal fan for the cooling of the machine.

#### MACHINE TECHNICAL CHARACTERISTICS

Overall $\varnothing$	1.900 mm
Height (without hood)	1.750 mm
Weight	3.000 kg
Gross production	6.000 pcs/h

#### AMPOULE CHARACTERISTICS

Glass tube $\varnothing$	8 - 22,50 mm
Max ampoule length	180 mm

#### AVERAGE CONSUMPTIONS

	Consumptions
Gas	6 m <sup>3</sup> /h
Oxygen	6 m <sup>3</sup> /h
Combustion air	10 m <sup>3</sup> /h
Compressed air	10 m <sup>3</sup> /h
Installed power	11 kW



#### OCMI-OTG S.P.A.

Via Venezia Giulia, 7  
20157 Milano (Italy)  
Phone +39.02.39.09.18.1  
Fax +39.02.35.70.944  
e-mail: [info@ocmigroup.com](mailto:info@ocmigroup.com)  
<http://www.ocmigroup.com>