



F-120

F-120 TUBE-FILLER FOR CYLINDRICAL TABLETS

General Description

The GORDIC F-120 is a compact and flexible machine. It is equipped with a SIEMENS S7 PLC which is operated from a control panel where operating instructions, error messages and tube speed, etc. are displayed. The machine is fully automated and protected against personal injuries according to the valid CE-norm.

The PLC in combination with pneumatics and replaceable format parts reduces set-up time for the GORDIC F-120 to an absolute minimum and provides flexibility in terms of possible product formats. The ROTAFILL® -system, a unique technology for gentle counting and filling of cylindrical tablets in tubes, is especially suitable for fragile products like effervescent tablets.

The F-120 can be equipped with format parts for different tablets, tubes and caps. Change from one format to another is normally done within 60 minutes. Simple format changes, like changing from one tube length to another, are done much faster.

Tablet feeding

The tablets are fed either directly from the tablet press outlet, eventually via a conveyor, over a chute to a tablet table with a distributor.

The distributor provides an even distribution of tablets into a cassette with twelve channels. From this cassette a controlled number of tablets are then filling 12 tubes, with the ROTAFILL® -system in about 2 second.

As an option our efficient tablet feeder can feed the filling machine with tablets from bulk and our unique AIRSLIDE® that provides gentle distribution, dedusting and online buffering of tablets, can be integrated.

Tube feeding

On the basic F120 are empty tubes fed automatically into filling position from the tube magazine. The foldable magazine is equipped with a handle for manual lifting and a positive locking device.

As an option the machines internal tube magazine can be replaced with an external tube supply. Three different types of tube supply units are available:

- TUBE FEEDER for tubes, delivered in bulk. This feeder has a capacity of 3000-5000 tubes, depending of the tube
- FOLDABLE EXTERNAL TUBE MAGAZINE similar as the internal tube magazine with the same capacity.
- EXTERNAL TUBE MAGAZINE this type is special made for only one size of tubes.

On the tube feeding options above are the tubes transported to the filling machine on a FlexLink® conveyor equipped with cleated chain.

Technical Data

FORMAT RANGE		MACHINE DATA	
Tube length:	55-180 mm	Capacity:	Nominal up to 120 tubes a minute or 120000 tablets an hour, depending on the number of tablets per tube.
Tube Diameter:	19-35 mm	Voltage:	3 x 400 V AC, zero and earth, 50 Hz
Tube material:	Plastic or Aluminium	Power:	Approx. 3 kW
Tablet diameter:	16-30 mm	Compressed air:	7-8 bar, approx. 500 L/minute
Tablet thickness:	3-10 mm	Weight:	Approx. 500 kg

Please observe that the above-mentioned format range can be handled only with more than one set of format parts. Ideal production conditions are temperatures of 18-20° C and a relative humidity of 20-25%. Materials used are stainless steel (2333), aluminium (4212), Delrin (POM ACETAL), CB-PET, Teflon or Makrolon.

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Cap feeding

Caps are fed from a cap feeder, via a channel, to the capping station where the tubes are capped with pneumatic cylinders. The cap feeder's container can be loaded with up to 2000 caps, depending on cap size.

As an option the F-120 can be equipped with an additional pre-feeder including a conveying system.

Filled tubes

After capping, the tubes are discharged and can be taken care of manually or as an option transported away on a conveying unit. Wrong filled tubes and significant badly capped tubes are rejected. Ink jet printing is preferably made during transport on the conveying unit.





Gordic AB
Tommabodavägen 3 · SE-28070 Lönsboda · Sweden
Tel. +46 451 234 06 · Fax +46 451 234 30
sd@gordic.se · www.gordic.se