

# C1290 - C12110

## AUTOMATIC TUBEFILLER

FOR PHARMACEUTICAL, COSMETIC AND CHEMICAL PRODUCTS



# C1290 - C12110 AUTOMATIC TUBEFILLER

A COURSE OF  
CONTINUOUS GROWTH



IT WAS IN 1970 THAT COMADIS LAUNCHED THE FIRST OF A SUCCESSFUL TUBEFILLERS SERIES. SINCE THEN, MORE THAN 3.000 MACHINES HAVE BEEN SUPPLIED ALL OVER THE WORLD, AS A RESULT OF CONTINUOUS TECHNICAL COMMITMENT COUPLED TO A REWARDING OPERATING MENTALITY - ALWAYS ORIENTED TO CUSTOMER FEEDBACK AND SATISFACTION.

SINCE THE BEGINNING, COMADIS TUBE FILLING MACHINES HAVE BEEN MARKED BY SIMPLICITY IN CHANGE-OVER SEQUENCES, QUICK DISMOUNTING OF CONTACT PARTS AND INTUITIVE OPERATOR INTERFACE: WE ARE PROUD TO OFFER CONTINUOUS IMPROVEMENTS AND ADVANCES IN TECHNOLOGY TO OUR MACHINES IN THE RANGE OF 1.500 TO 15.000 TUBES PER HOUR.

A COURSE OF CONTINUOUS GROWTH, THAT IN TIME BROUGHT COMADIS TO GAIN AN ENVIABLE EXPERIENCE IN THE FIELD, TESTIFIED BY THE MULTITUDE OF BOTH LARGE AND SMALL CUSTOMERS. A VALUABLE REPUTATION TO BE PROUD OF, TO BRING AS A HERITAGE IN ANY NEW PROJECT WE APPROACH.

A MAJOR UPDATE OF THE SUCCESSFUL “C1090”, THE BENCHMARK MODEL SOLD WORLDWIDE IN MANY DIFFERENT APPLICATIONS, WHICH HAS PROVED TO OFFER ENOUGH FLEXIBILITY TO BE USED IN VARIOUS CONFIGURATIONS.

IMPROVED IN A NUMBER OF DETAILS, IT IS NOW PERFORMING TUBE CLEANING BY DEDICATED STATION, BATCH DATA COLLECTION VIA USB PORT AND CONTINUOUS MONITORING – ON REQUEST – OF TUBE FOLDING AND TUBE CRIMPING AREAS.

AVAILABLE IN DIFFERENT LEVELS OF AUTOMATION ALONG WITH THE WIDEST RANGE OF ADDITIONAL DEVICES, IN ALL CASES IT GRANTS THE “STATE OF THE ART” OF SINGLE NOZZLE TECHNOLOGY: COMPLETE, FAST, EASY TO USE.



AUTOMATIC TUBEFILLER  
FOR PHARMACEUTICAL,  
COSMETIC, CHEMICAL AND  
FOODSTUFF PRODUCTS

# C1290 - C12110 AUTOMATIC TUBEFILLER

## THE OUTPUT

### C1290

- Up to 90 metal, polythene, laminate and polyfoil tubes/minute.

### C12110

- Up to 110 metal, polythene, laminate and polyfoil tubes/minute.

## DOSING SYSTEM

### C1290-C12110

- Adjustable stroke **diving nozzle**, servo-controlled by brushless motor, with positive shut-off valve and nozzle cleaning by air blow.

## DESCRIPTION

- Machine base frame, safety guards frame and electrical cabinet made of **stainless steel**.
- **12-position** turntable with indexing drive by Ferguson style intermitter.
- **Redesigned turntable adjustment device**, with "streamlined" design.
- **Direct drive** of main shaft without chains, by directly connected gearmotor.
- **Centralized lubrication** system.
- **Safety devices** for tube feeding, filling, closing and ejection, as well as for machine overloads.
- Simplified and easy change of size parts, **without tools**.
- **Easy access** from all the four machine sides for maintenance and cleaning.
- **Electrical cabinet** integrated within machine footprint, hinged and completely insulated from mechanical drive.
- Machine functions control and management by **PLC**.

- Machine **speed adjustment** from operator panel (HMI) by means of inverter.

- **12"** programmable **"touch screen" colour panel** (HMI), suitable to perform the digital adjustment of following working parameters:

- machine speed
- machine phases
- hopper temperature
- hot air temperature
- air blow pressure for nozzle cleaning
- hot air pressure

with capability to memorize set values according to tube sizes (by recipes).

Also showing:

- machine alarms
- troubleshooting of faults
- timers and counters.

- **Batch data collection** – by pen drive – **via USB port**, allowing the operator to carry out a daily collection of production data and register of alarms occurred.



- **Tube loading** by:
  - cassette feeder
  - independent ergonomic feeder
  - fully robotized feeder CR1

All they are positioned outside machine working area as per GMP norms.

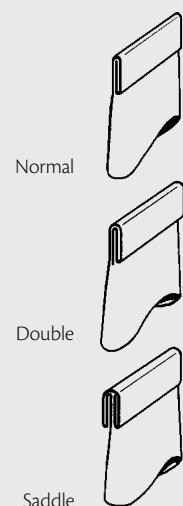
- **Conical tubes** feeding.

- **Tube cleaning** by adjustable airblow and dust aspiration device by vacuum. Placed in vertical position, on dedicated station.



## FOLDS

Closing folds for metal tubes



- Automatic **print registration** by step-motor, available in both above and bottom drive executions.
- **Pharmacode and 2D code** reading devices.
- **Nitrogen** flushing before and after filling.
- Easy-to-disassemble product **dosing pump**.
- All **parts in contact** with product made in stainless steel AISI 316, 280 grains polished.
- Dosing **accuracy**  $\pm 0,5\%$ .
- Adjustment of **filling volume** from inside or outside machine base or automatic from operator panel (HMI) with possibility to get «feed-back» function from checkweigher (checkweigher not included).
- **Heated hopper** with forced water circulation in closed circuit.
- Stainless steel product scraper **stirrer** with drive from inside machine base.
- Adjustment of **air blow** for nozzle cleaning from control panel.
- Additional dosing unit for **sodium bisulphite** anti-oxidant drop dispensing.
- Hopper for **product feeding by pressure**.
- **Double swivelling support** for quick change of parts in contact with product.
- **Metal tube closing** unit for normal, double and saddle fold.
- Thermosealing of different polythene (PE), laminate (ABL-PBL) and polyfoil tubes with following technologies:
  - **hot air, hot jaws, high frequency**
 Possibility to obtain customized «**designer seals**».
- Quick **interchangeability** of closing / sealing heads for aluminium, polythene and laminate tubes.

- **IQ-OQ** - Validation documentation.

## SPECIAL EXECUTIONS

### C1290T

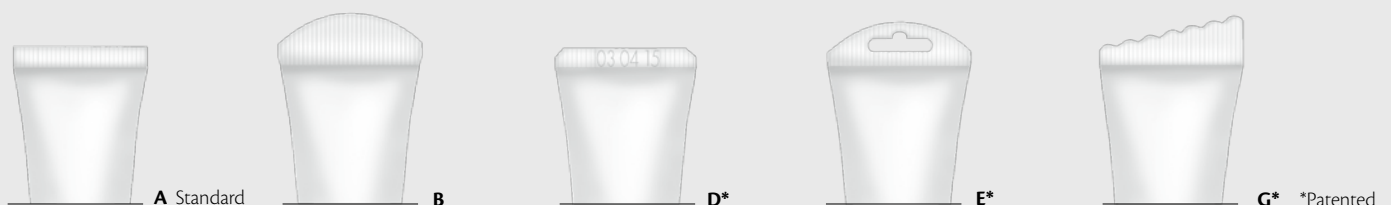
- Multicolour filling machine for 2-colour and 3-colour toothpaste. Equipped with twin or triple dosing pump, and special filling nozzle for consistent product co-extrusion, controlled by servomotor.

### C1270S

- Dedicated machine, suitable for filling of hi-viscosity products like **silicone**, with bottom-up filling by lifting the tube under the fixed nozzle, performed by tubeholder lifting device with enhanced stroke (servo-controlled by brushless motor).
- Handling of tubes with different body shapes such as **unidoses**, **canulas** and **vet syringes**.
- Configuration suitable for **sterile areas** with laminar flow unit.
- **Advanced inspection camera** for continuous monitoring of tube folding and tube crimping area.
- **Laser engraving** available unit for both metal and plastic tubes; completed by vision system to control the correct tube marking.
- **Explosion-proof** execution according to **Atex** standards.

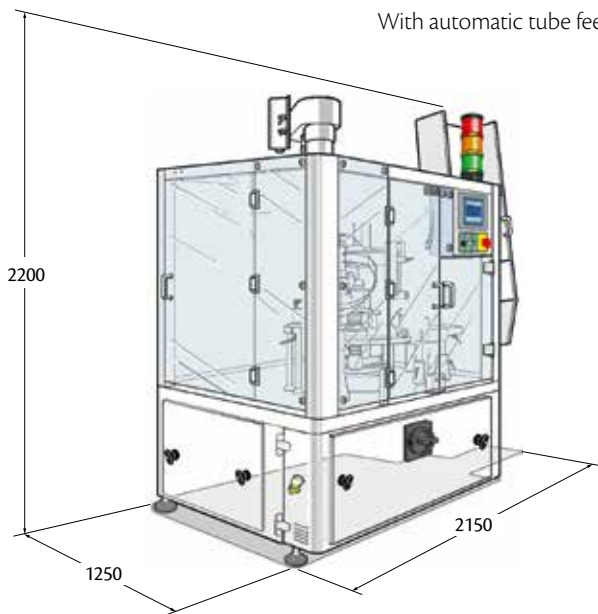
## SEALS

Some seal shapes for polythene or laminate tubes obtainable by hot jaws or hot air technologies

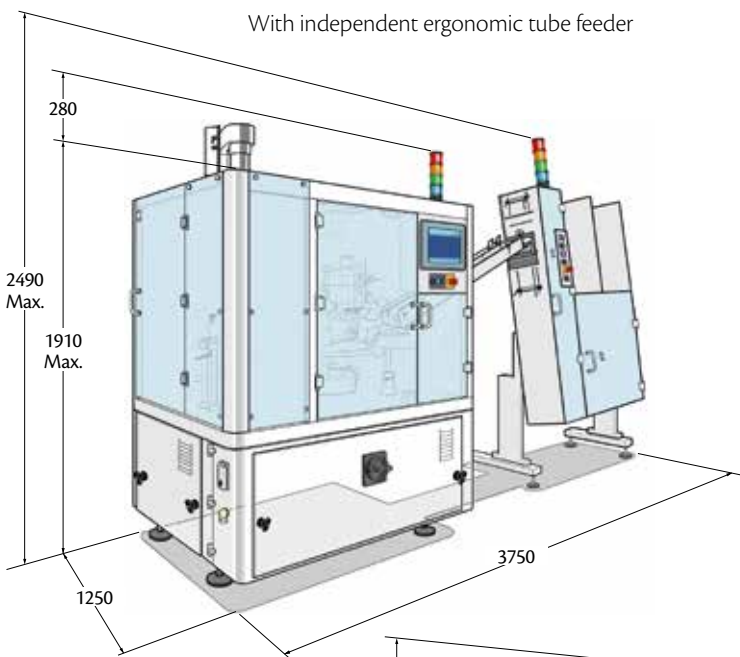


# C1290 - C12110 TECHNICAL DATA

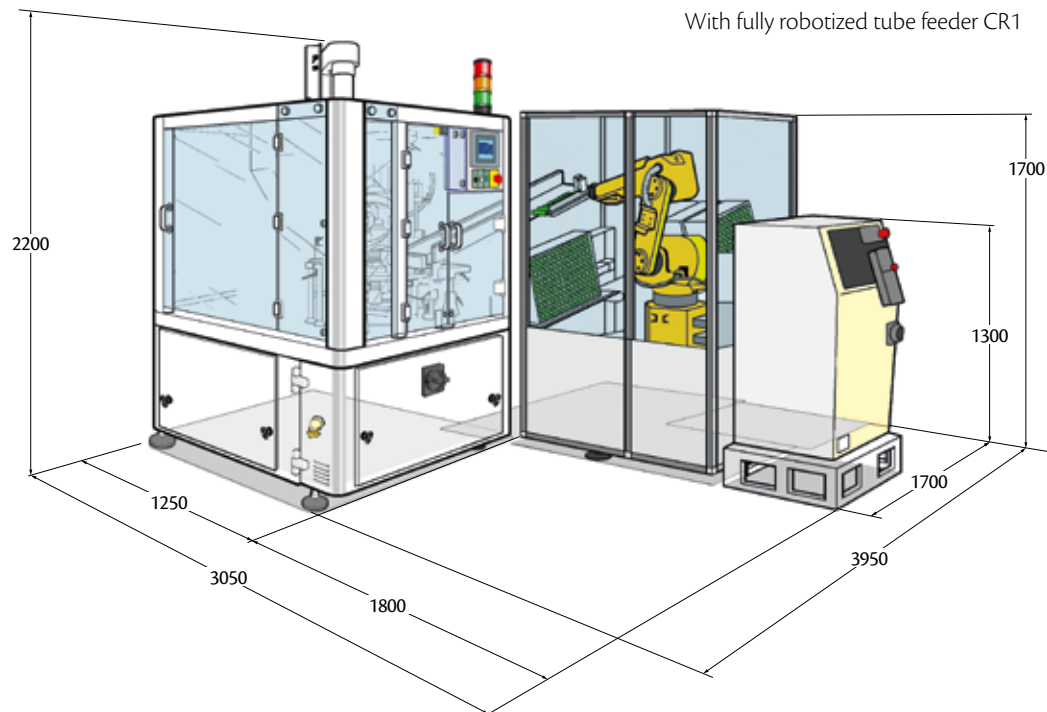
With automatic tube feeder



With independent ergonomic tube feeder



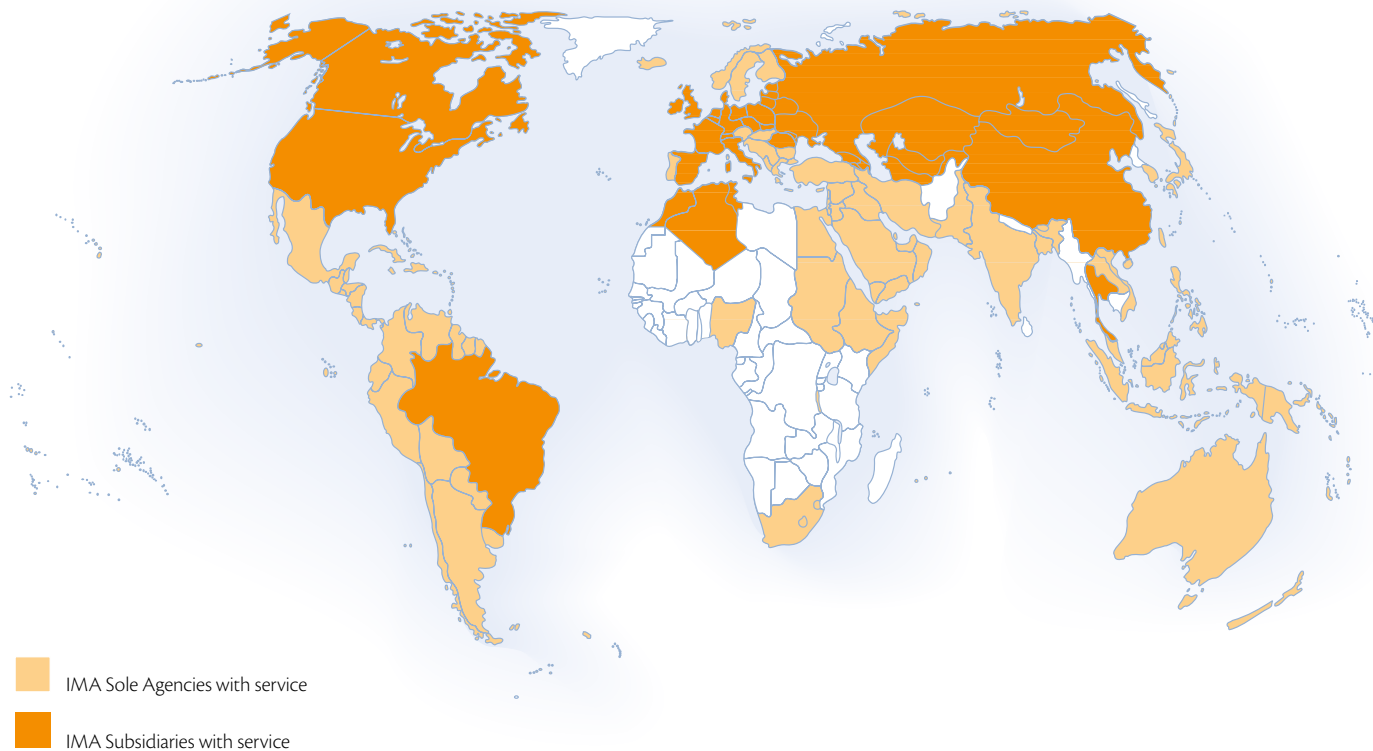
With fully robotized tube feeder CR1



<b>Maximum speed</b>	90/min. (C1290) 110/min. (C12110)
Filling volume (ml)	2-250 (on request up to 350)
Tube diameter (mm)	10-50
Tube length (mm)	60-250
<b>Power consumption</b>	
Main motor (kW)	1.8
Diving nozzle (kW)	0.9
Scraper stirrer (kW)	0.3
Heated hopper (kW)	1.5
Print registration (kW)	0.2
Vacuum cleaning (kW)	1.1
Hot Jaws (kW)	1.8
Hot Air (kW)	3.0
High Frequency (kW)	2.5
Compressed air	6 bar - 80 ÷ 250 NL/min
Cooling water (lt/min)	5
Noise level (dB A)	below 79
<b>Export packing</b>	
Approx. dimensions (cm)	270 x 170 x h 220
Approx. weight (kg)	1.500



# TECHNICAL ASSISTANCE



## IMA UNDERSTANDS THE NEED FOR EXCELLENT SERVICE AROUND THE WORLD

- PRESENT IN OVER 70 COUNTRIES
- 10 BRANCHES PROVIDING SALES AND SERVICE
- MORE THAN 50 REPRESENTING AGENCIES
- 90 TECHNICIANS FROM ITALY TO SUPPLY WORLDWIDE SERVICE
- 50 TECHNICIANS FROM LOCAL SUBSIDIARIES AND AGENCIES
- 11 AFTER SALES SUPERVISORS

IMA SAFE provides prompt and effective technical assistance which covers the entire life cycle of its equipment. This assistance is provided by a dedicated team of experts who are able to meet our client's needs on a day to day basis. A customer oriented after sales service staff is what distinguishes IMA from the rest of the world.

ORIGINAL SPARE PARTS ARE VITAL TO ASSURE THE CORRECT AND PROPER FUNCTIONALITY OF IMA SAFE EQUIPMENT. SPARE PARTS ARE ALWAYS AVAILABLE AND CAN ARRIVE AT THE CLIENT'S SITE WITHIN 24/36 HOURS.

## DOCUMENTATION AND VALIDATION

In the pharmaceutical industry, the validation of a production process implies the provision of documented evidence to demonstrate that the process is capable of producing a consistent product which conforms to predetermined specifications and quality criteria.

Upon request IMA Safe CO.MA.DI.S. will provide customers with a comprehensive package of documentation to support on-site validation procedures in the most simple and fast way. Different packages are available according to individual requirements.

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