# **CS LINEAR**

AUTOMATIC TUBEFILLER



## CS LINEAR AUTOMATIC TUBEFILLER

THE "NEW" SINGLE-NOZZLE COMADIS CS LINEAR TUBEFILLER IS THE FINAL RESULT OF MANY YEARS EXPERIENCE WITHIN THE GLOBAL TUBE FILLING INDUSTRY.



Positive advantages gained from other models within the COMADIS range greatly assisted to develop and produce the **CS Linear**.

Designed from the view point of the Operator, it grants simple "tool free" quick change-overs and easy access for cleaning and maintenance.

Available with different tube loading technologies (including the fully robotized tube feeder CR1), the **CS Linear** provides a highly reliable and cost-effective solution to your tube filling requirements.







FOR PHARMACEUTICAL, COSMETICS, CHEMICAL AND FOOD PRODUCTS.

### CS LINEAR AUTOMATIC TUBEFILLER

BASED ON THE LINEAR TRACK DESIGN, THE "CS LINEAR" HAS SIMPLE MECHANICAL CONTROLS, REDUCED FOOTPRINT AND SERVO-DRIVEN FILLING NOZZLE.



#### THE OUTPUT

• Up to 100 metal, polythene, laminate and polyfoil tubes/minute.

### **DOSING SYSTEM**

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

### DESCRIPTION

- AISI 304 stainless steel machine base frame, safety guards frame and electrical cabinet.
- 18-position linear track by reinforced belt, driven by Ferguson indexing motor drive.
- Direct drive of main shaft by directly connected gearmotor without "chains"
- Centralized lubrication system.
- Safety devices for tube feeding, filling, closing and ejection/machine overloads.
- Simplified and easy change of size parts, without tools.

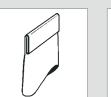
- Easy access from all four machine sides of the machine for maintenance and cleaning.
- Over-dimensioned sealing, folding and coding stations based on linear guides driven by cams located away from the filling area.
- Electrical control cabinet fully integrated within machine footprint, hinged and completely insulated from the mechanical drive.
- Machine functions by control and management of the PLC.
- Machine speed adjustment from operator panel (HMI) by means of inverter.
- Programmable "touch screen" colour panel (HMI), acting as an intuitive interface with PLC for machine functions management.

Suitable to perform the adjustment of working parameters :

- machine speed
- machine phases
- size part memory.

#### FOLDS

Closing folds for metal tubes



Normal



Double







Also showing:

- machine alarms
- self diagnostic for ease of fault finding
- timers and product counters.
- Tube loading by :
- 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.
- Automatic print registration by step-motor, available in both top and bottom drive.
- Bar-code reading device (pharmacode).
- Nitrogen flushing before and after filling.
- Simple and easy to disassemble and reassemble product dosing pump.
- All parts in contact with product made in stainless steel AISI 316L, 280 grains polished.

- Dosing accuracy ±0,5%.
- Adjustment of filling volume from inside or outside machine base/automatic from operator panel (HMI) with possibility to integrate with a checkweigher for feedback function (optional).
- Heated hopper with forced water circulation in closed circuit.
- Stainless steel product scraper/stirrer with direct drive from machine base.
- Adjustment of air blow off for nozzle cleaning from control panel.
- Additional dosing unit for sodium bisulphite anti-oxidant drop dispensing.
- Hopper for product feeding by pressure.
- Metal tube closing unit for normal, double and saddle fold.
- Thermosealing of different types of polythene (PE), laminate (ABL-PBL) and polyfoil tubes with following technologies:
  Hot air,
  - Hot jaws,
  - High frequency

- Easy and simple change of closing/sealing heads for aluminium, polythene and laminate tubes, without jaws replacement.
- Designer seal options available.
- IQ-OQ Validation documentation.

#### SPECIAL EXECUTIONS

- Handling of tubes with different body shapes such as unidoses, canulas and vet syringes.
- Configuration suitable for sterile areas with laminar flow unit.
- Laser engraving unit, with possible vision system to control the correct marking.
- Explosion-proof execution according to atex standards.

### SALES AND SERVICES



IMA UNDERSTANDS THE NEED FOR EXCELLENT SERVICE AROUND THE WORLD

#### **SPARE PARTS**

The use of original spare parts is essential to guaranteeing perfect machine working order and providing full production efficiency.

Spare parts can be ordered from IMA directly or via the MyIMA e-commerce system and shipped to you within 24-36 hours.

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

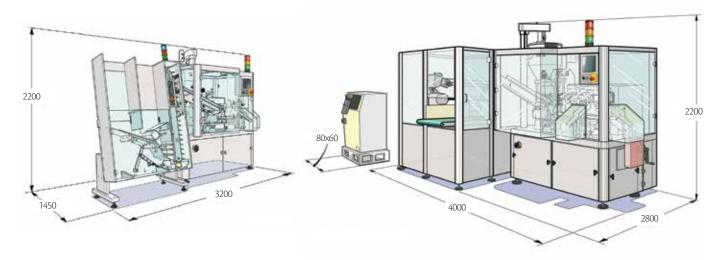
IMA SAFE provides prompt and effective **technical assistance** which covers the entire life cycle of its equipment. This assistance is provided by a dedicated team of experts able to meet our client's needs on a day to day basis. A customer oriented after sales service staff is what distinguishes IMA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



# CS LINEAR TECHNICAL DATA

CS LINEAR WITH INDEPENDENT ERGONOMIC TUBE LOADER

CS LINEAR WITH FULLY ROBOTIZED TUBE FEEDER CR1



Maximum speed	100/min
Filling volume (ml)	2-250 (on request up to 350)
Tube diameter (mm)	10-50
Tube length (mm)	60-250

#### POWER CONSUMPTION

Main motor (kW)	1.8
Diving nozzle (kW)	0.9
Linear track height adjustment	0.4
Scraper stirrer (kW)	0.3
Heated hopper (kW)	1.5
Print registration (kW)	0.1
Vacuum cleaning (kW)	1.1
Hot jaws (kW)	1.8
Hot air (kW)	3.0
High frequency (kW)	2.5
Compressed air (NL/min)	6 bar - 80 ÷250
Cooling water (lt/min)	5
Noise level (dB A)	below 79

#### **EXPORT PACKING**

Approx. dimensions (cm)	270 x 170 x h220
Approx. weight (kg)	1.800

ima.it



**CO.MA.DI.S. S.P.A.** Via Piemonte 32/34/3620030 Senago (Milano) - Italy Tel +39 02 99010284 - Fax +39 02 99010803 sales@comadis.ima.it

