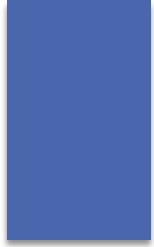




SHAPING IDEAS SINCE 1994



CMI Industries

YOUR NEEDS, OUR SOLUTION



YOUR NEEDS, OUR SOLUTION

Experience, expertise, reliability and versatility
known worldwide

We believe
in
innovation



30 years of
**technology
research**, designing
and implementing
innovative solutions.



mission: to achieve
new goals
everyday and to
anticipate the
market trends



R&D Department

a highly qualified team to develop new technologies able to anticipate needs and trends of the different markets and fields.



CMI Industries holds several
patented systems



Products



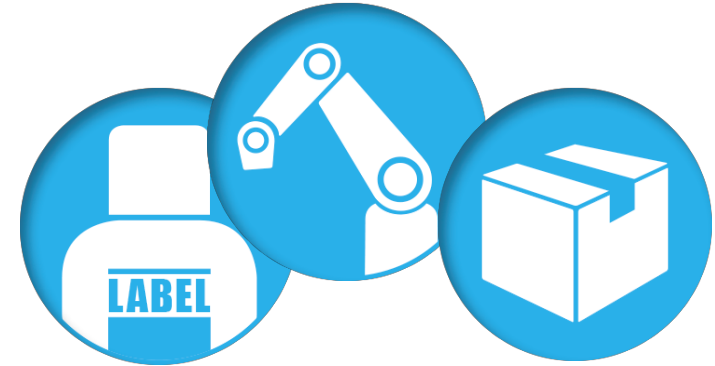
Filling systems

Fully automatic filling machines for several types of liquids



Closing systems

Fully automatic capping machines suitable for any type of bottle/ containers

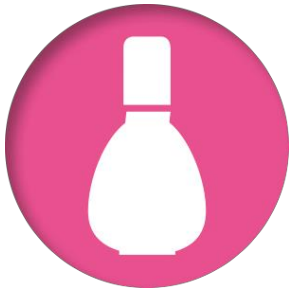


Labelling/ Robot/ Case packing systems

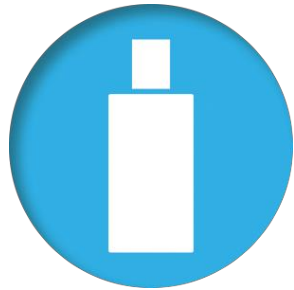
Free standing units, integrated solutions (monoblocks, three-blocks), complete lines



Applications



COSMETIC &
PHARMACEUTICAL



PERSONAL &
HOME CARE



FOOD &
BEVERAGE



CHEMICAL &
PETROCHEMICAL





Logyka

The multipurpose filling machine

MANY PURPOSES, ONE SOLUTION



Why LOGYKA ?



TECHNOLOGY & ACCURACY

Use of magnetic or mass flow meters with a dosing accuracy up to 0,2%, independently from the quantity dosed



FLEXIBILITY & VERSATILITY

Suitable for every type of cosmetic, edible and chemical liquids, also foams and dense products .



NICE & EASY

Changeover is easy and fast: in few steps you can switch from one size/ shape to another



Why LOGYKA ?

Flowmeters technology to achieve the **maximum dosing accuracy**: up to 0,2%, independently from the quantity dosed. LOGYKA is available both in **magnetic** flowmeters version and **mass** flowmeters version.

MASS flowmeters version

Basing on Coriolis' principle of the controlled generation of forces, the product passes through two tubes, which oscillate at their resonance frequency. Two electro-dynamic sensors, located in the inlet and outlet of the two tubes, allow the detection and the displacements due to Coriolis' effect. With the Coriolis' principle, the mass capacity can be detected independently from conductivity, density, viscosity and temperature of the liquids to be dosed.

MAG flowmeters version

Basing on Faraday's law of induction, each flowmeter consists of a tube where the product to be dosed flows through. Around this tube a magnetic field is created. The section of the tube, the electrical conductivity of the product (min. 5 $\mu\text{S}/\text{cm}^3$) and its speed are the parameters used for measuring. The inductive flowmeters are the ideal measuring system for any kind of liquid, including those which are thick or abrasive.



Why LOGYKA ?

ULTRA CLEANING ELECTRONIC SYSTEM® is **the most effective cleaning system**, also for the most stringent standards: **the best solution when hygiene is an absolute priority**, even in “extreme” cases like the filling of paints and solvents.

The system reduces the consumptions related to the washing by 75% and the reduction of the washing time of 85%.

CMI Filling systems can be equipped with CIP/ SIP washing and sanitizing systems.

CMI offers a solution dedicated to the production fields where specific hygiene and cleaning needs are required:

Advantages

- Optimised cleaning times (85% less time)
- Minimize dwell time
- High cleaning efficiency (75% less washing liquids consumption)
- Reduction of costs thanks to the controlled use of the cleaning products
- Conformity to the cleaning parameters required and their monitoring
- Electronic management of the washing CIP and sterilization SIP



Features & advantages

SUITABLE FOR

any type of liquid, with a max viscosity up to 50.000 cps

DOSING RANGE

from 5 ml to 2000 lt or g (filling accuracy of $\pm 0,2\%$)

MATERIAL

- ✓ S/S AISI 304/316 for the INOX version
- ✓ Plastic material for the ATEX version

ON REQUEST

Valves adjustment by means of manual hand wheel

Bottom-up liquid delivery nozzles

Electric adjustment of the liquid delivery nozzles height

Automatic volume adjustment of the liquid to be filled

ULTRA CLEANING® Electronic System (patented)

ATEX version, GMP version, BRUSHLESS version

MODELS

LINEAR

Equipped with 1 to 12 flowmeters
Up to 24 delivery valves

ROTARY

Equipped with 6 to 60 flowmeters

OMEGA

With double filling valves



LOGYKA LINEAR

Automatic filling machine

ATEX version
for chemical detergents



GMP version
for personal care products



BRUSHLESS version



LOGYKA ROTARY

Automatic filling machine

INOX version
for pharmaceutical products



ATEX version
for dairy products

BRUSHLESS version
for oils and derivatives



LOGYKA OMEGA

Automatic filling machine with double filling valves

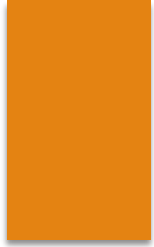


OMEGA models are different for infeed of the containers in the machine with double feeding conveyor with containers position by means of a divider electronically managed and double valves filling nozzles group separately managed.

Advantages

- ✓ cancel the dead times during working
- ✓ minimum overall dimensions of the machine
- ✓ quick size changeover.





CMI Industries

YOUR NEEDS, OUR SOLUTION



YOUR NEEDS, OUR SOLUTION

Experience, expertise, reliability and versatility
known worldwide

We believe
in
innovation



30 years of
**technology
research**, designing
and implementing
innovative solutions.



mission: to achieve
new goals
everyday and to
anticipate the
market trends



R&D Department

a highly qualified team to develop new technologies able to anticipate needs and trends of the different markets and fields.



CMI Industries holds several
patented systems



Products



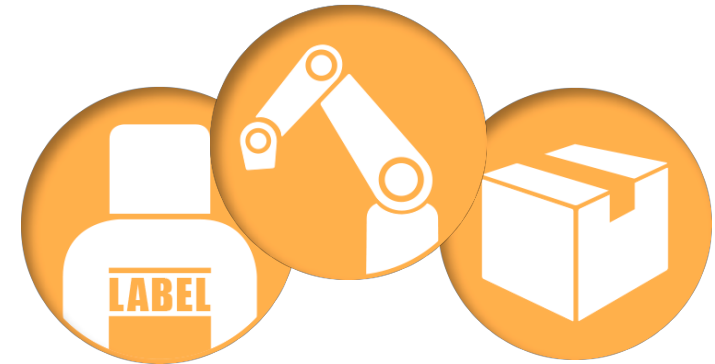
Filling systems

Fully automatic filling machines for several types of liquids



Closing systems

Fully automatic capping machines suitable for any type of bottle/ containers

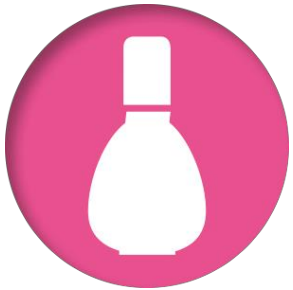


Labelling/ Robot/ Case packing systems

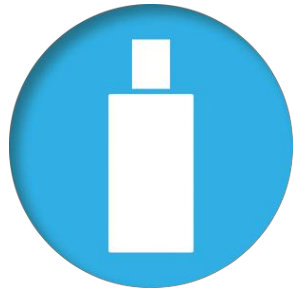
Free standing units, integrated solutions (monoblocks, three-blocks), complete lines



Applications



COSMETIC &
PHARMACEUTICAL



PERSONAL &
HOME CARE



FOOD &
BEVERAGE



CHEMICAL &
PETROCHEMICAL





Miray[®]

The Capping System

FUTURE STARTS NOW



Why MIRAY ?



INNOVATION & TECHNOLOGY

Fully automated running and setting to save time, improve efficiency and simplify operations



FLEXIBILITY & VERSATILITY

Suitable for many sizes and shapes of caps and containers



NICE & EASY

Changeover are easier and error-free: in few steps and few minutes you can switch from one type to another



Why MIRAY ?

- ✓ **MIRAY® means future**

Future is a word that we like, as we believe in innovation and this is our goal every day



- ✓ **MIRAY® gives more value to your work**

The first capping system for trigger and dispenser, with extreme operational flexibility and ultra rapid changeover: from 3 minutes.

- ✓ **MIRAY® revolutionizes all capping criteria known until now**

Being fully automatic and technologically advanced, it allows easy and error free changeovers

- ✓ **MIRAY® can be inserted into existing packaging lines and it's available in INOX, ATEX, ACID-PROOF and GMP version**

- ✓ **MIRAY® is now available in the new rotary multi-head version**



Feature & advantages

- Fully automatic operations
- Automatic Pick&Place system
- Linear transport for triggers/dispensers/caps
- Straw automatic pre-straighten
- Electronic cam managed by brushless motor
- Capping heads managed by brushless motors
- **SCREWMASTER®** patented screwing algorithm to check the cap tightening moment and its correct orientation over the bottle
- Scheduled lubrication system
- Self-diagnosis system for axis temperatures managed by the touch screen operating panel

MIRAY® easy and fast size changeover procedure:

- Replacing star and external guide without tools
- Replacing the intake system cap and driving without tools
- Detection height of the bottle through sensor
- Inserting hourly production (pcs / h)



MIRAY R



MIRAY 3

70-90 pcs/ min

MIRAY 4

90-120 pcs/ min

MIRAY 6

120 – 180 pcs/ min

MIRAY 8

170-240 pcs/min

Automatic machine with multiple capping heads
Available in INOX, ATEX, ACID-PROOF and GMP version



MIRAY 1



MIRAY 1
30-37 pcs/ min



Automatic machine with single capping head
Available in INOX, ATEX, ACID-PROOF and GMP version



MIRAY 1 – GMP version



MIRAY 1
30-37 pcs/ min



Automatic machine with multiple capping heads
Available in INOX, ATEX, ACID-PROOF and GMP version





Miray®

Future of capping starts now



Miray®

Gestione **automatizzata**:
riduce i tempi e
migliora l'efficienza.

Miray è un tappatore rotativo completamente automatico, disponibile in versione **monotesta e multitesta**, che può essere inserito in linee di confezionamento già esistenti, su richiesta anche rispondenti alle normative vigenti.

La macchina, tramite il controllore multi asse, sincronizza i movimenti dei motori brushless per ottenere elevate cadenze produttive:

- nell'ordine dei 2.000 pezzi/ora* per la versione monotesta
- da 4.000 a 15.000 per la versione multitesta.

La gestione della macchina da parte dell'operatore è semplificata, poichè riduce i dati inseriti nel pannello solo all'altezza della bottiglia ed alla cadenza produttiva oraria.



Automated running:
time-saving and efficiency-improving.

Miray is a fully automatic and autonomous rotary capping machine, which can be inserted into existing packaging lines, in compliance with regulations upon request.
Miray is available both in **single-head and multi-head** versions.

By means of multi-axis controller, the machine synchronizes brushless motors movements to achieve higher output rates:

- Single-head version: Up to more than 2.000 pcs/h*
- Multi-head version: From 4.000 to 15.000 pcs/h.

Machine running by the operator is simplified, as it cuts to bottle height and hourly output rate data to be entered in control panel.

* Cadenze produttive diverse previa verifica vostra campionatura.
Various output rates upon checking your sample.



Miray è adatto alla tappatura di bottiglie con tappo:
Miray is suitable for capping bottles with following types of cap:

A collo inclinato

A vite

Dispenser

Trigger

Erogatore

A pressione



Inclined neck



Screw



Dispenser



Trigger



Dispenser



Press-on



Il cambio formato **ultra rapido***:
più valore al vostro lavoro.

La tecnologia costruttiva di **Miray** rivoluziona tutti i criteri di tappatura che avete conosciuto fino ad ora.

Grazie alla gestione **completamente automatica**, **Miray** consente di effettuare un **cambio formato facile e senza errori**.

L'estrema flessibilità operativa di **Miray** garantisce il **passaggio da una tipologia di tappo e/o bottiglia alla successiva in circa tre minuti**.

The **quickest** size changeover:
more value to your work.

Miray's construction technology revolutionizes all capping criteria you have ever known.

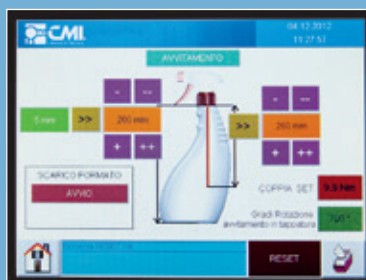
Thanks to **total automatic running**, **Miray** allows **easier and error-free changeover**.

Miray's huge operational flexibility guarantees only three minutes' switch from one type of cap and/or bottle to another.



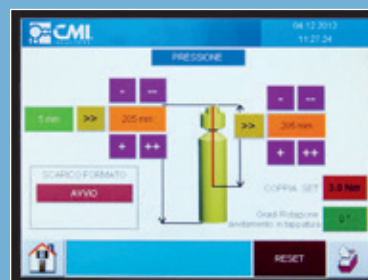
Procedura di cambio formato

Sostituzione di stella e guida esterna senza utensili
Sostituzione del sistema di presa tappo e guida senza utensili
Rilevamento altezza della bottiglia tramite sensore
Inserimento produzione oraria (pz/h)



Size changeover procedure

Starwheel and side rail tool-free replacement
Cap-picking system and rail tool-free replacement
Bottle height detection with sensor
Hourly output typing (pcs/h)

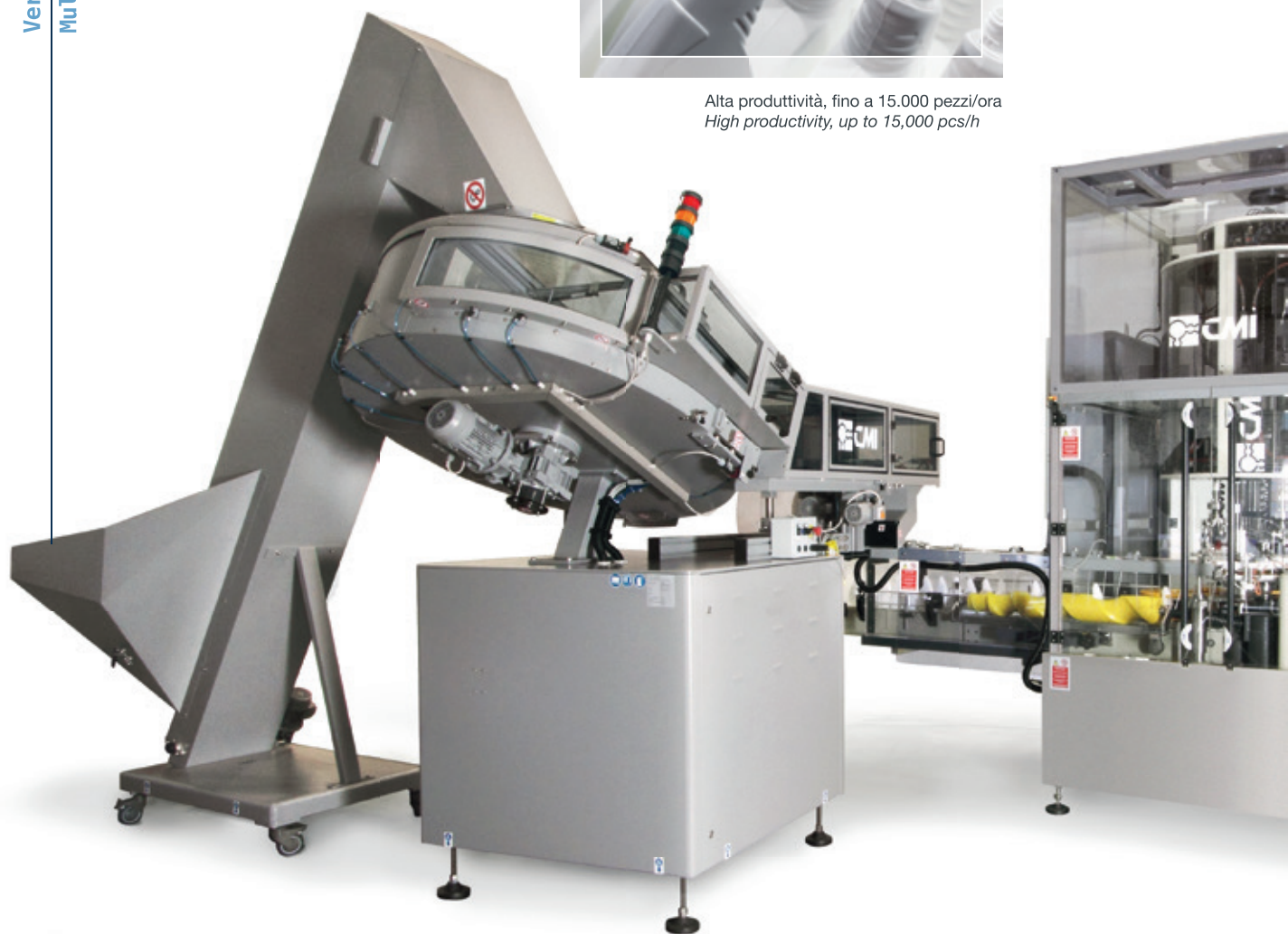


* Cambio formato in 3 min. per la versione monotesta, a partire da 10 min. per la versione multitesta (a seconda del numero di teste) // Size changeover in 3 min. for the single-head model and starting from 10 min. for the multi-head model (depending on number of the heads)

Versione multitestata
Multi-head version



Alta produttività, fino a 15.000 pezzi/ora
High productivity, up to 15,000 pcs/h



1



2





Innovativo sistema di tappatura per tappo con collo inclinato
Innovative capping system for cap with inclined neck



Versione monotesta Inox
 Single-head stainless steel version



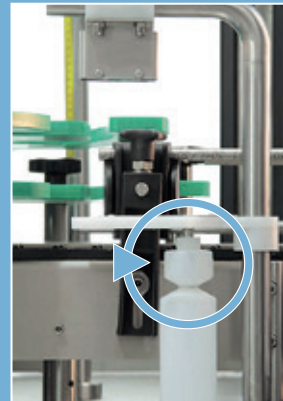
3



4



5



Versione monotesta Inox
Single-head stainless steel version



Caratteristiche tecniche

- > **Sistema automatico Pick&Place**
- > **Pre-stiro automatico della cannuccia**
- > **Algoritmo di avvitatura SCREWMASTER®**
controlla la coppia di serraggio del tappo ed il corretto orientamento rispetto alla bottiglia
- > **Sensore elettronico di rilevamento altezza bottiglia**
- > **Sistema di lubrificazione programmata**
segnala all'operatore quando necessaria
- > **Sistema di autodiagnosi delle temperature degli assi**
gestita da pannello operativo
- > **Manuale d'istruzione consultabile on line dall'operatore**
anche con la macchina in funzione

Specifications

- > **Automatic Pick&Place system**
- > **Straw automatic pre-straighten**
- > **SCREWMASTER® screwing algorithm**
checking cap tightening moments and its correct orientation over the bottle
- > **Electronic sensor for bottle height detection**
- > **Scheduled lubrication system**
alerting operator when needed
- > **Self-diagnosis system for axis temperatures**
managed by operating panel
- > **User's manual available online for the operator**
even when the machine is in operation



Processo

- 1 Trasporto tappi
- 2 Sistema automatico di presa del tappo
- 3 Pre-stiro e verifica altezza cannula automatici
- 4 Sistema esclusivo di avvitatura
- 5 Sensore di rilevamento altezza bottiglia
- 6 Testa di avvitamento tappo trigger con sistema brevettato SCREWMASTER®

Process

- 1 Caps handling
- 2 Cap-picking automatic system
- 3 Automatic pre-straighten and straw height check
- 4 Unique screwing system
- 5 Bottle height detection sensor
- 6 Screwing heads for triggers with SCREWMASTER® patented system

**CMI opera con un sistema di gestione
certificato secondo la norma ISO 9001**

CMI works with a certified management
system according to ISO 9001 norm



Via Mezzomerico, 47
28040 Marano Ticino (NO) ITALY
Ph. +39 0321 91144
Fax +39 0321 992693
info@cmiindustries.it

www.cmiindustries.it

CMI S.p.A. si riserva il diritto di effettuare modifiche tecniche atte al miglioramento dei propri macchinari senza alcun preavviso. MIRAY® e SCREWMASTER® sono marchi registrati di proprietà di CMI S.p.A. // CMI reserves the right to carry out, without any notice, technical modifications to improve its machines. MIRAY and SCREWMASTER are registered trademark of CMI S.p.A. property.



www.laco.com.au

L1, 237-239 Nicholson Street, Carlton VIC 3053

Sales

Gabriel Nuti

sales@laco.com.au

+61 401 460 108

Service

Nico Tocchini

service@laco.com.au

+61 405 787 408

YOU MAKE IT, WE SHAPE IT

Local service in Melbourne, Sydney, Adelaide