# **PMDI** FILLING TECHNOLOGY

COSMAR has acquired the competences for the pMDI production thanks to the team of experts who have carried out important projects for customers in Europe and overseas.

The implementation of the project is strengthened by the active collaboration with a prestigious Italian University.

The quality of the equipment developed by COSMAR meets the highest technological level in the pharmaceutical process.

COSMAR can provide single stage and double stage filling equipment.

> MICRO DOSING HEAD FOR FILLING SUSPENSIONS AND SOLUTIONS

**>** VACUUM CRIMPER







#### **PROCESS**

PRIMARY PACKAGING

**SECONDARY** PACKAGING

**EMPTYING** FILLING WEIGHING FEEDING

CANS

FILLED

CANS

FEEDING

FILLED **PROCESS &** CANS

WEIGHING & CHECKS

FEEDING

CANS PACKING 1 Loading empty cans

2| Filling machine

3 Accumulating table (1<sup>ST</sup> step)

4 Checkweigher

5| Secondary packaging area

6 Unloading table



#### PROCESS SINGLE STAGE FILLING

- The metering cylinder is composed of 2 sides. The one in contact with the product and the air control completely separated.
- > The dosing volume can be adjusted by electronic servo motor during the filling
- The ceramic piston ensures the resistance with suspension product and the Titanium chamber is the best solution for non-contamination
- The filling head is equipped with a membrane for cleanability process
- ${f v}$  The product recirculates back to the tank
- Pumping system is provided to recharge the cylinder and recirculation circuit.

### **FILLING SYSTEM**

- The filling head is equipped with a membrane for cleaning process
- > The head is double, operated with pneumatic control and adjusting bush for filling accuracy
- ν Clamp connections for delivery and recycling
- All the materials in contact with the product are made of AISI 316 and FDA approved gaskets are used
- The dosing system is made of ceramic piston and Titanium and FDA Hygienic gaskets.

## VALVES PLACING

- Vibrating system for feeding valve with S/S 316 in contact with the component
- Valve placing system servo controlled and designed to guarantee performance and reliability
- ν Peek clippers for pick&place operating system.



### **CRIMPING CHECKING**

COSMAR is able to supply a crimping checking system. This system is provided for in line checking.

Laboratory equipment can be provided to measure the crimping dimensions with repeatability and accuracy.



