# • VIRGO LEAK TESTING

## ELECTRONIC INDEXING ROTARY MACHINE FOR CHECKING LEAKAGE DURING PRODUCTION



VIRGO is an electronic and programmable indexing machine available in both safe and ATEX execution configurations. The machine has been conceived to detect leakages in aerosol filling production lines due to defective valves.

Developed according to European Aerosol Federation (FEA) guidelines1, the system represents a viable alternative to the traditional hot water bath test. From a theoretical point of view, leakage is the combination of a pressure differential value, a volume in which the measurement and a time interval test are performed. These parameters are inter-related as described by the following equation:  $\Delta plimitexVtest/\Delta t2$ ,1=2x10-3mbarxLxs-1

Being the reference leakage rate imposed by FEA guidelines, the equation is implemented to set the right combination of parameters - test volume, test interval time - suitable to perform the measurement. When a satisfactory combination is achieved, the pressure differential reference value can be read.



#### **FEATURES**

- ν Nickel plated steel frame
- Protection guards with transparent panels and interlocked switches: the operator can open the machine doors only if the machine is stopped and in safe conditions and can start the machine only if the doors are closed
- Height adjustable support of operating stations: height of support can be manually adjusted according to the height of cans
- и 12 or 18-positions star-wheel
- ש Brushless motor to move central star-wheel
- ATEX execution is possible according to customer's needs
- י ON BOARD Electro-pneumatic system
- ν ON BOARD Electrical cabinet containing PLC
- $\boldsymbol{\nu}$  HMI touch screen for managing.

#### **ADDITIONAL CONFIGURATION**

The VIRGO machine can be equipped with all the traditional stations in order to perform the aerosol process (i.e. product filling, valve insertion and crimping, gassing).

### **OPTIONAL**

- ν Automatic rejecting conveyor
- ν ATEX Z1 execution
- ν Statistical package and data logger.



