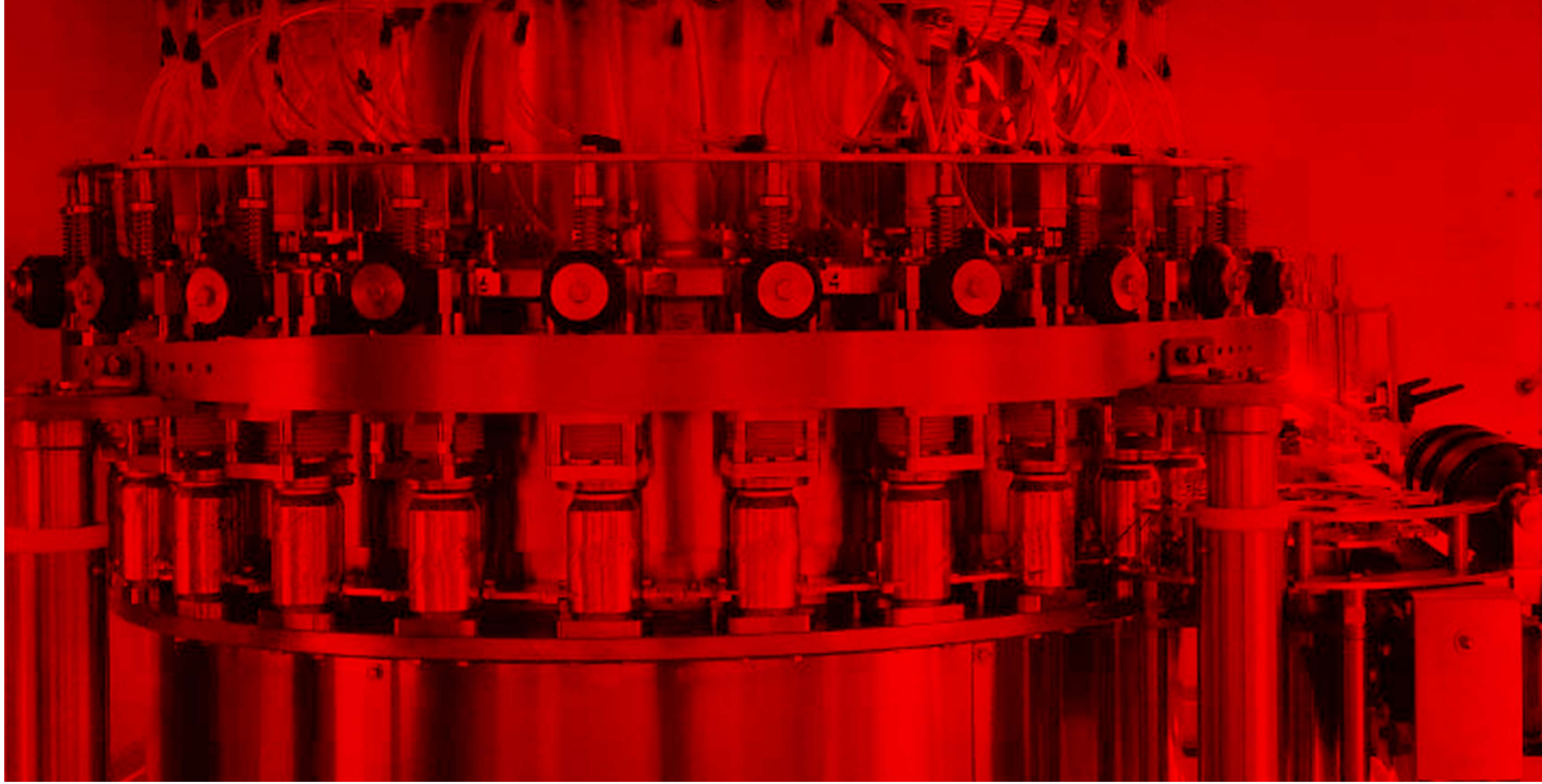


CAN FILLER
TECNA ISO C-FM

KNOW HOW AND PASSION

INPAK GROUP
Your Global Partner in Packaging Machine Solutions

FILLING SYSTEMS FOR CANS ELECTROPNEUMATIC

ISOBARIC

VOLUMETRIC

FROM 8 to 90 FILLING VALVES

From 3.600 cph to 55.000 cph

DIFFERENT PRODUCTS

FILLER SYSTEM FOR CAN

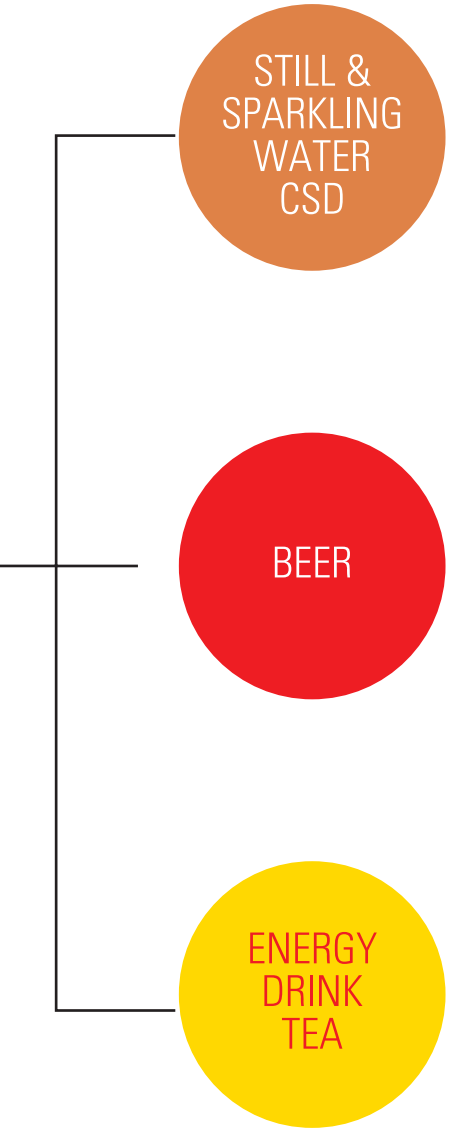
COLD FILL STILL or CARBONATED WATER
CSD
BEER

TECNA ISO C FM

TECNA ISO-C FM
FILLING SYSTEM FOR BEVERAGES IN CANS

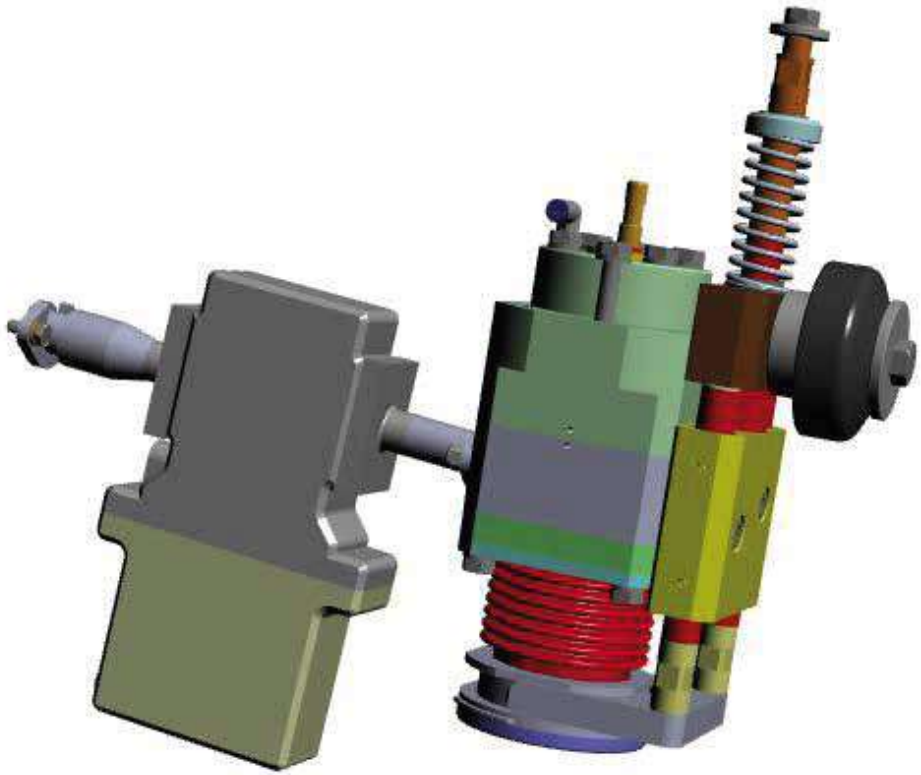
TECNA ISO C FM/HF

HOT FILL FOR RTD, ENERGY DRINKS or TEA



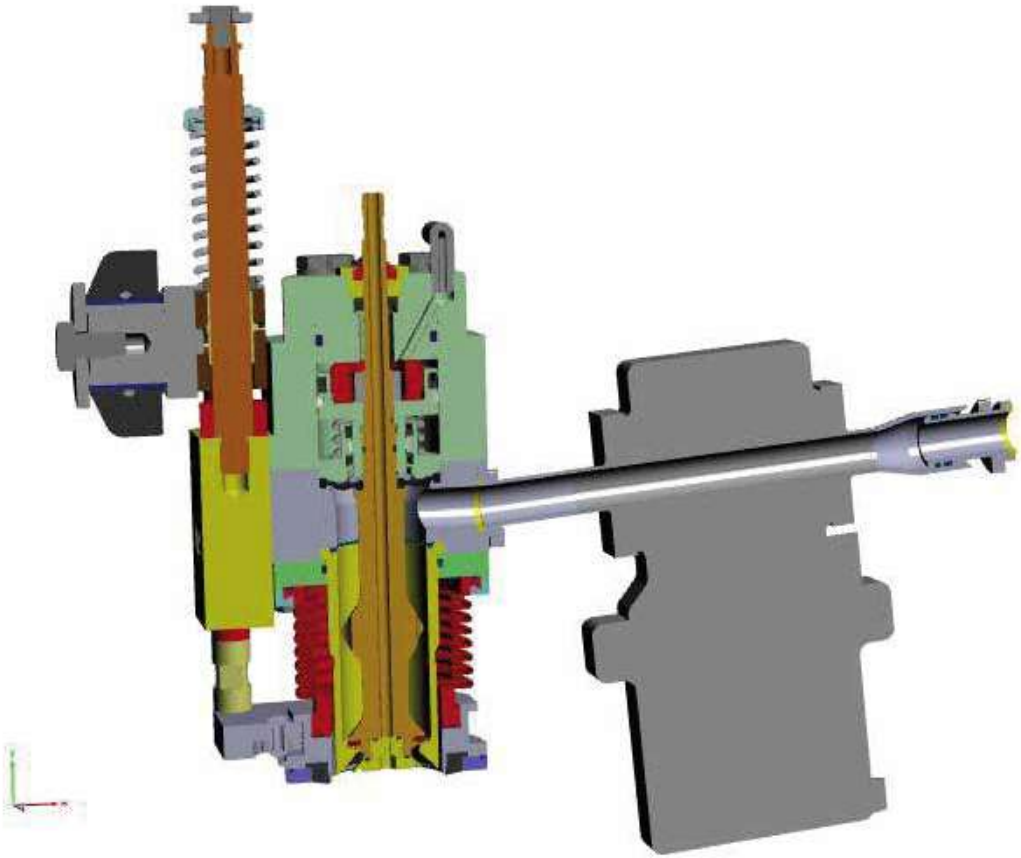
FILLING VALVE TECNA ISO C-FM

Electropneumatic filling valve



FILLING VALVE TECNA ISO C-FM

Electropneumatic filling valve



MAIN TECHNICAL FEATURES

Hygienic design: easy to clean

CO2 flushing before filling:
less foaming and minimal oxygen pick up during filling

No part of the valve requires replacing for changeover

Faster and easier maintenance

FILLING VALVE TECNA ISO C-FM

- Pressurization, filling and snifting pneumatic controlled
- Volumetric electronic filling system (E+H flow meters)
- NO MORE CAN LIFTERS
- Empty can flushing by CO2
- For every can/product a single recipe (easy to operate)
- Automatic level adjustment by control panel
- No changes, for the filling valve, from 200 lid to 202 or 206

SMALL VALVE

Small valve for phases management

Teflon membrane with only few millimeters of movement.

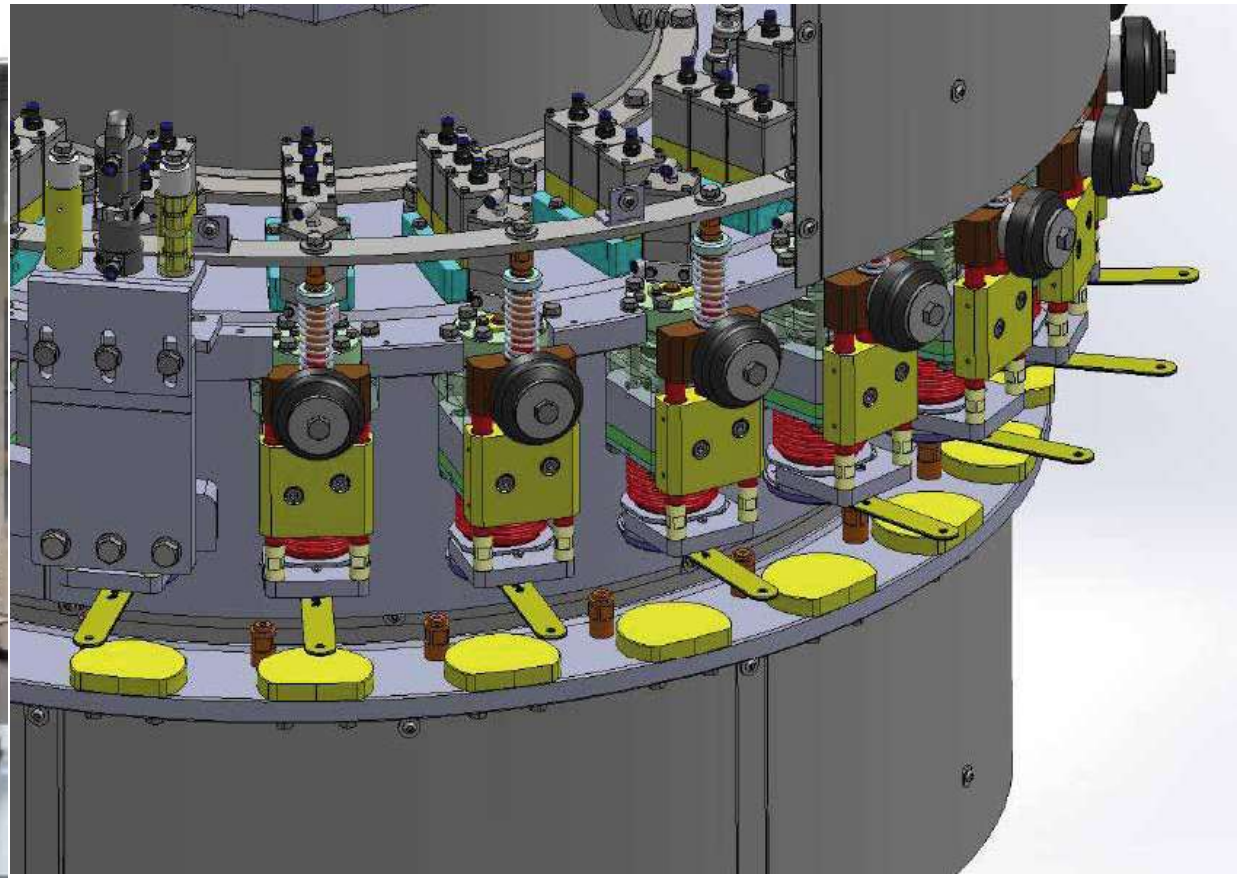
Always the same valve for different phases

Always the same spare parts for all small valves

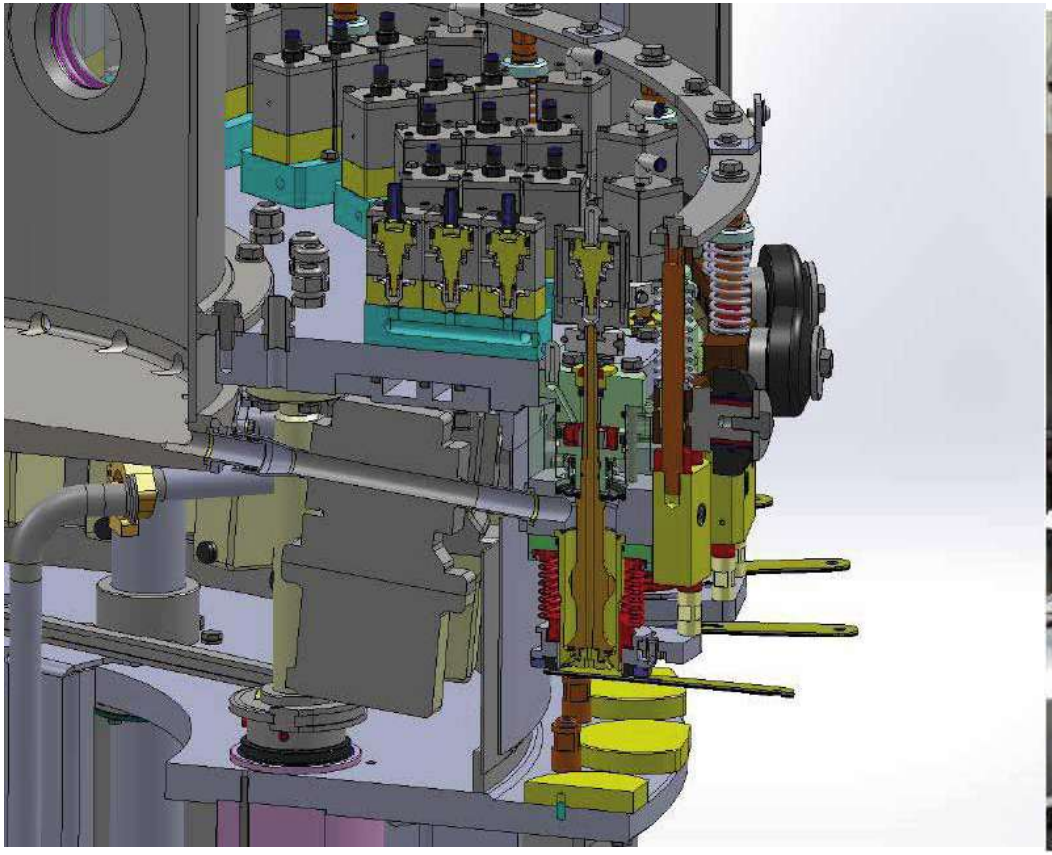
AIR RETURN valve

CIP valve
SNIFTING valve
FLUSHING valve

NO CANS FILLER

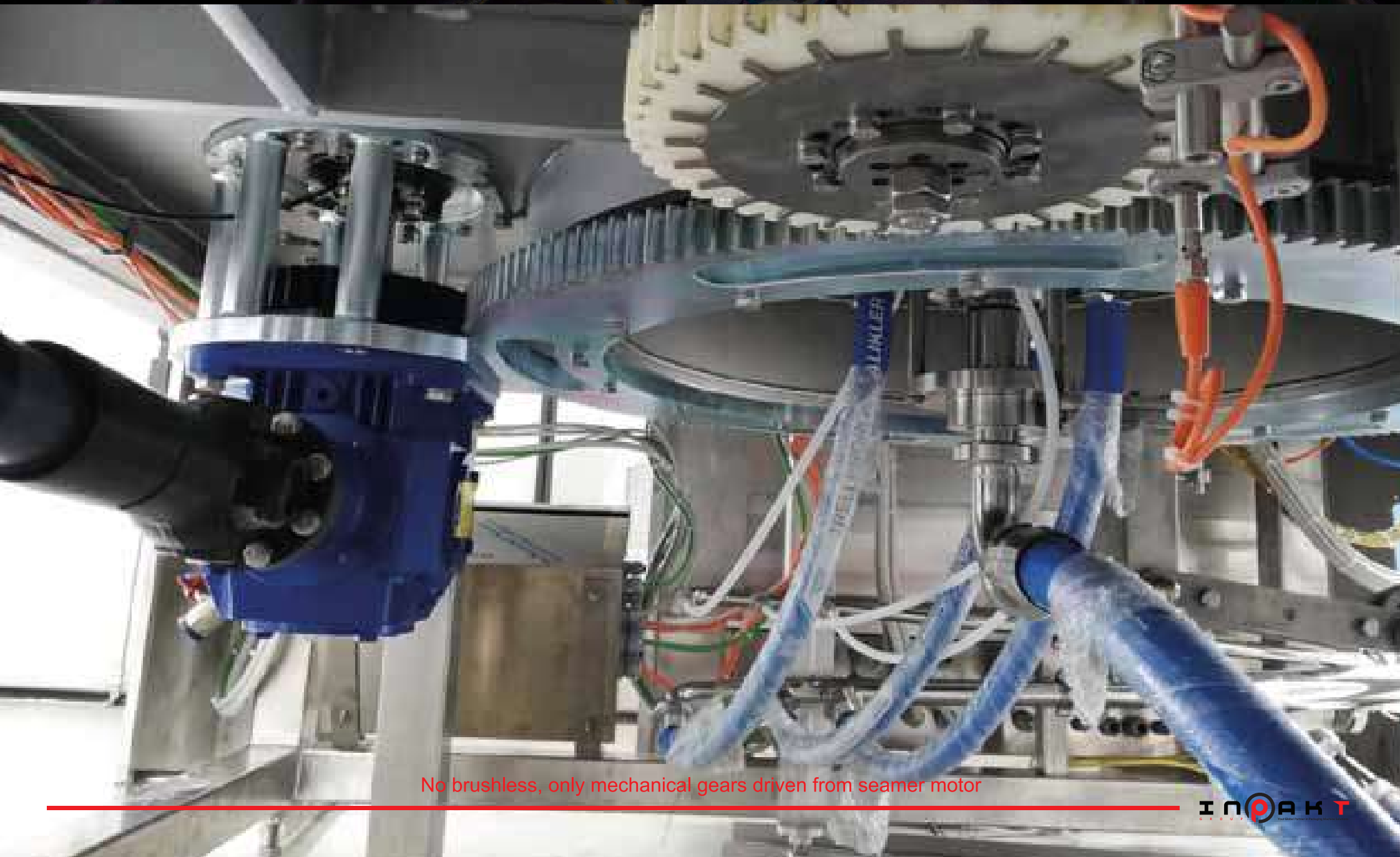


NO CANS FILLER



BASEMENT

TRANSMISSION



No brushless, only mechanical gears driven from seamer motor

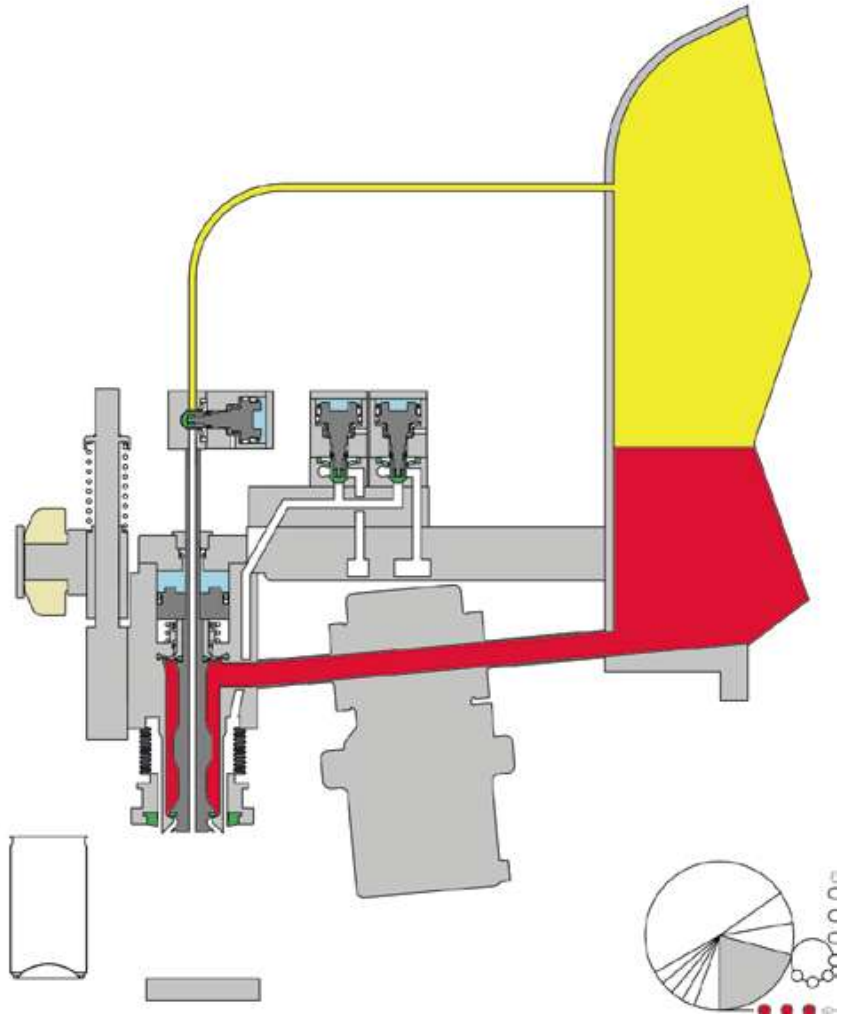
FILLING CONTROL SYSTEM

- Each valve is controlled in indipendente way
- Setting parameters, feedback and alarms transimetted back to the operator interface
- Filling operating parameters set according to the characteristic of each product
- Fine tuning of filling parameters of each valve
- Possibiltiy to disable valve without stopping the production
- Possible filling by time in case of failure of flow metervalve

TECNA ISO C-FM FILLING VALVE
ISOBARIC ELECTROPNEUMATIC VOLUMETRIC

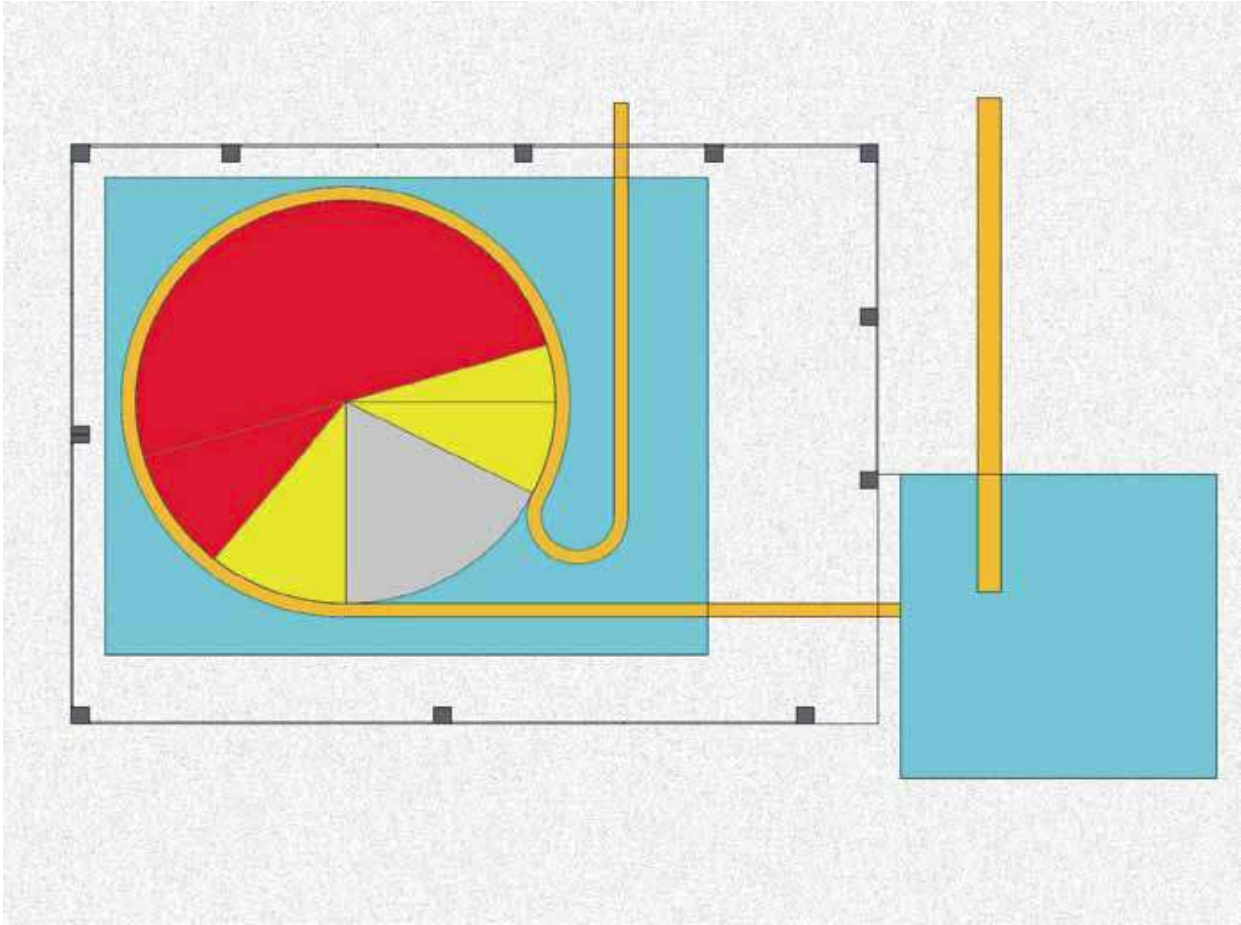
1. Control cylinder for product valve
2. Pressurisation and return gas valve
3. Snifting valve
4. CO2 flushing and CIP return valve
5. Magnetic flow meter

LINK FILLING PHASES

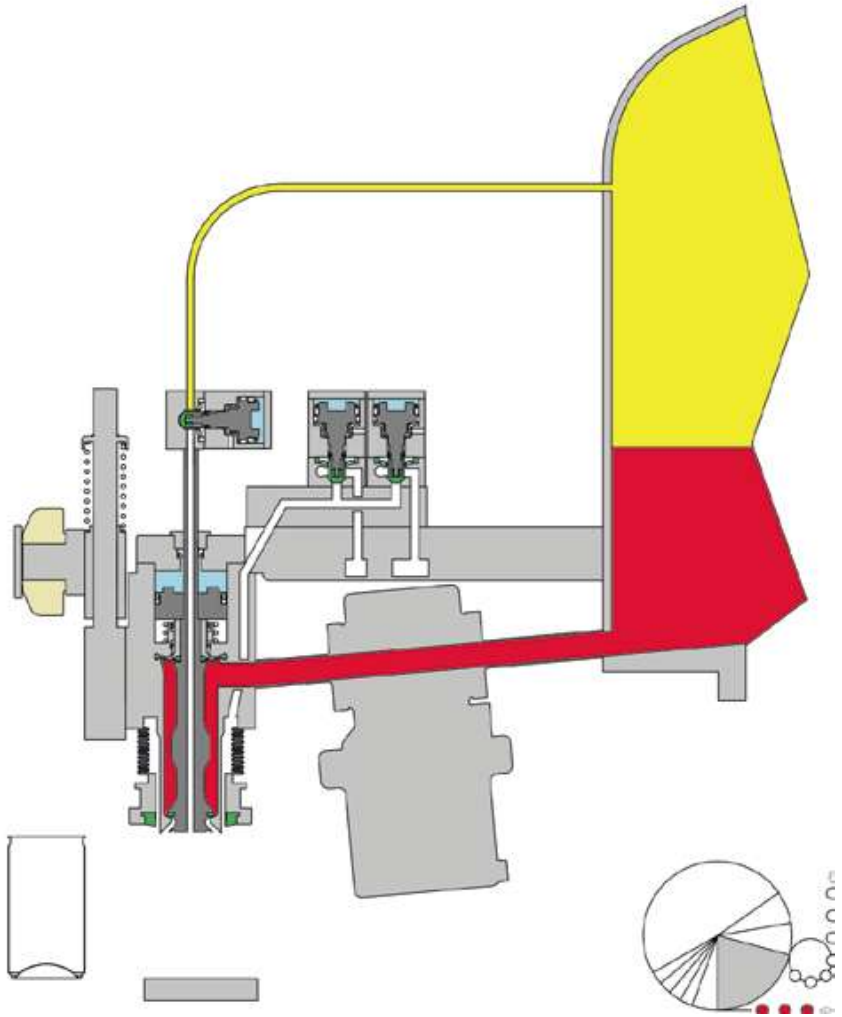


TECNA ISO C-FM

1. Empty can flushing
2. Empty can pressurisation
3. Product filling
4. Production settle
5. Sniffing



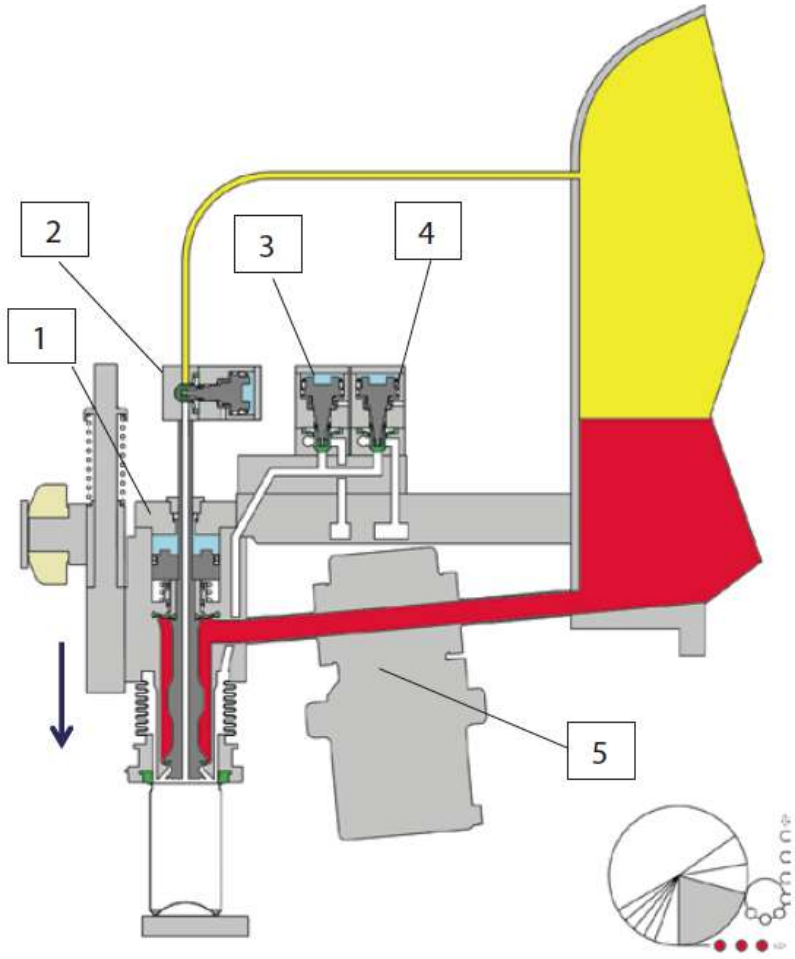
STEP 1 CAN LOADING



STEP 2 CANS MOUTH CLOSURE

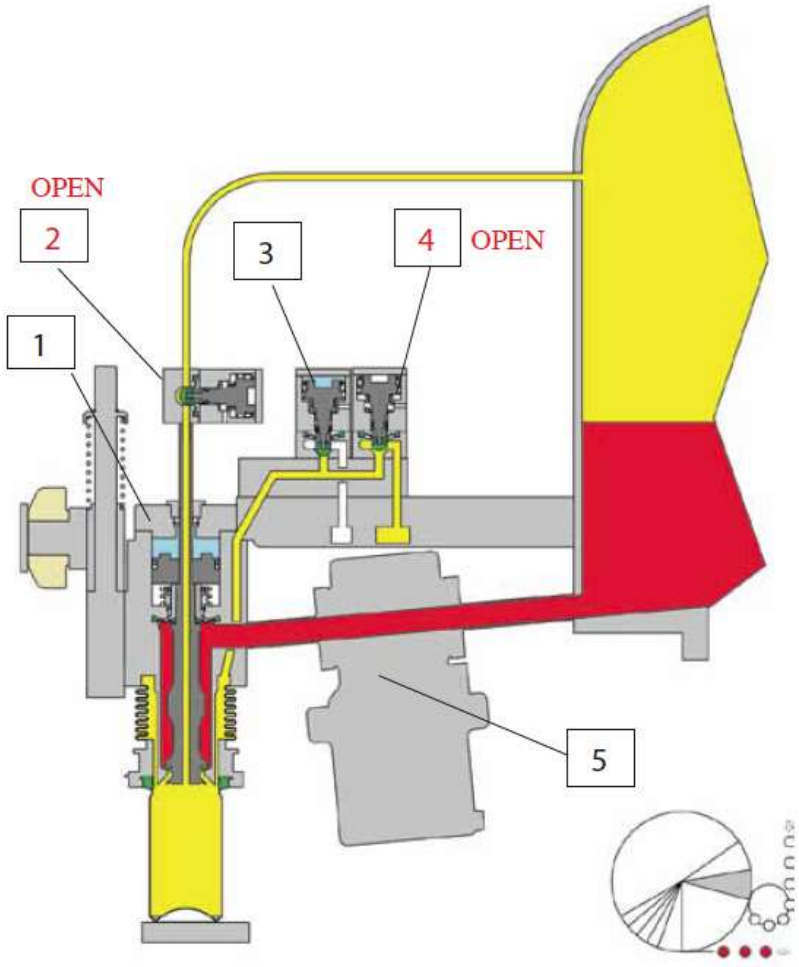
1. Control cylinder for product valve
2. Pressurisation and return gas valve
3. Snifting valve
4. Co2 flushing and cip return valve
5. Compensation spring

No more can lifting



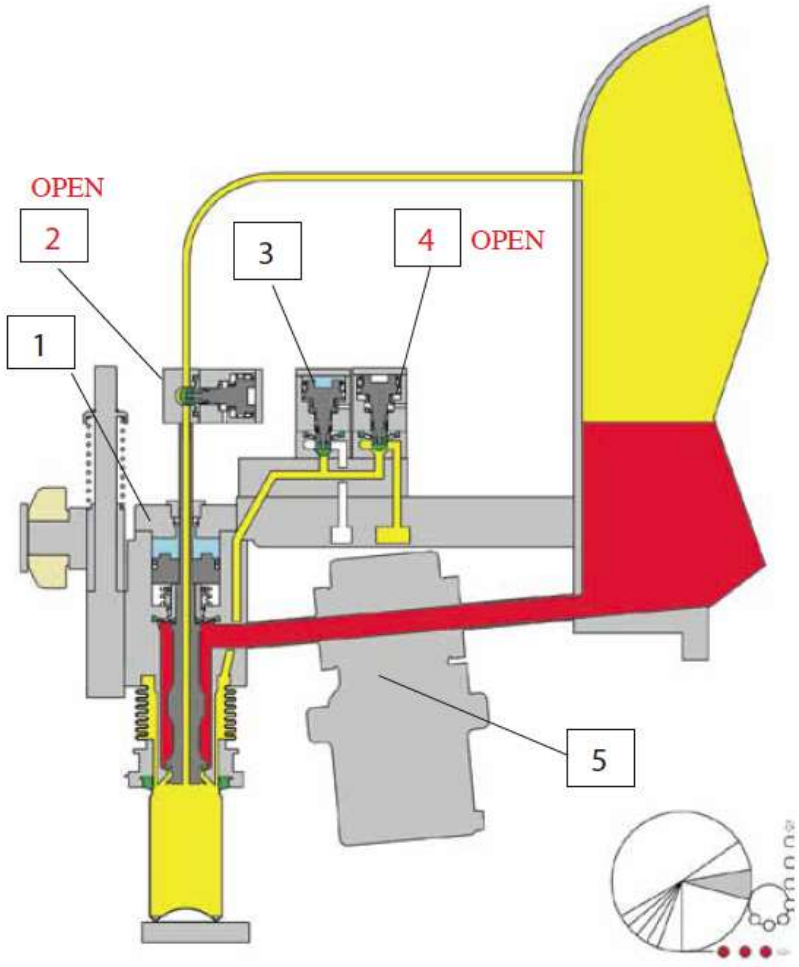
STEP 3 EMPTY CANS CO2 FLUSHING

1) Control cylinder for product valve
2) Pressurisation and return gas valve (OPEN)
3) Snifting valve (CLOSED)
4) CO2 flushing and CIP return valve (OPEN)
5) Magnetic flow meter



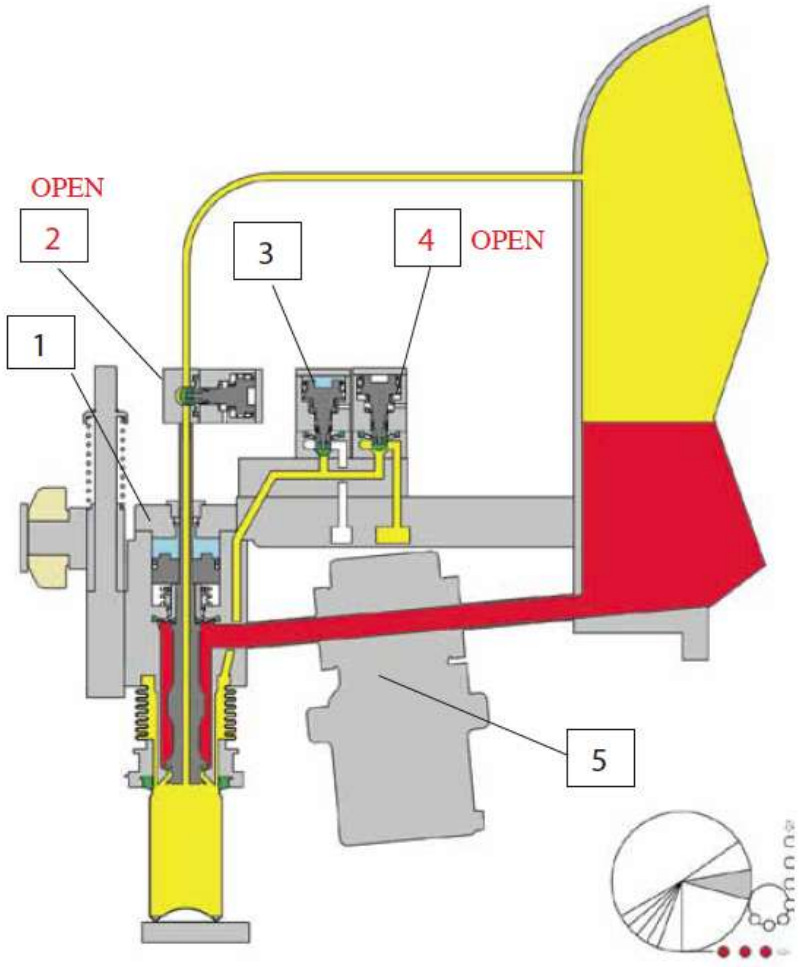
STEP 4 EMPTY CANS PRESSURIZATION

1) Control cylinder for product valve
2) Pressurisation and return gas valve (OPEN)
3) Snifting valve (CLOSED)
4) CO2 flushing and CIP return valve (CLOSED)
5) Magnetic flow meter



STEP 5 PRODUCT FILLING

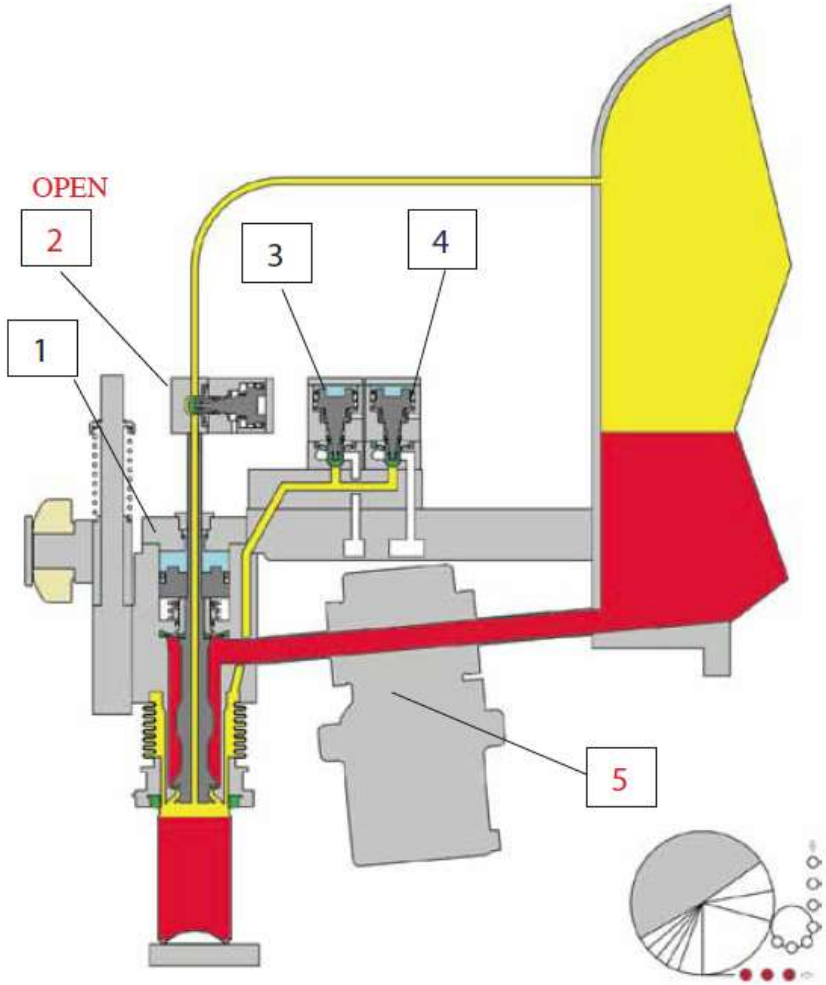
1) Control cylinder for product valve (OPEN)
2) Pressurisation and return gas valve (OPEN)
3) Snifting valve (CLOSED)
4) CO2 flushing and CIP return valve (CLOSED)
5) Magnetic flow meter



STEP 6 END OF FILLING

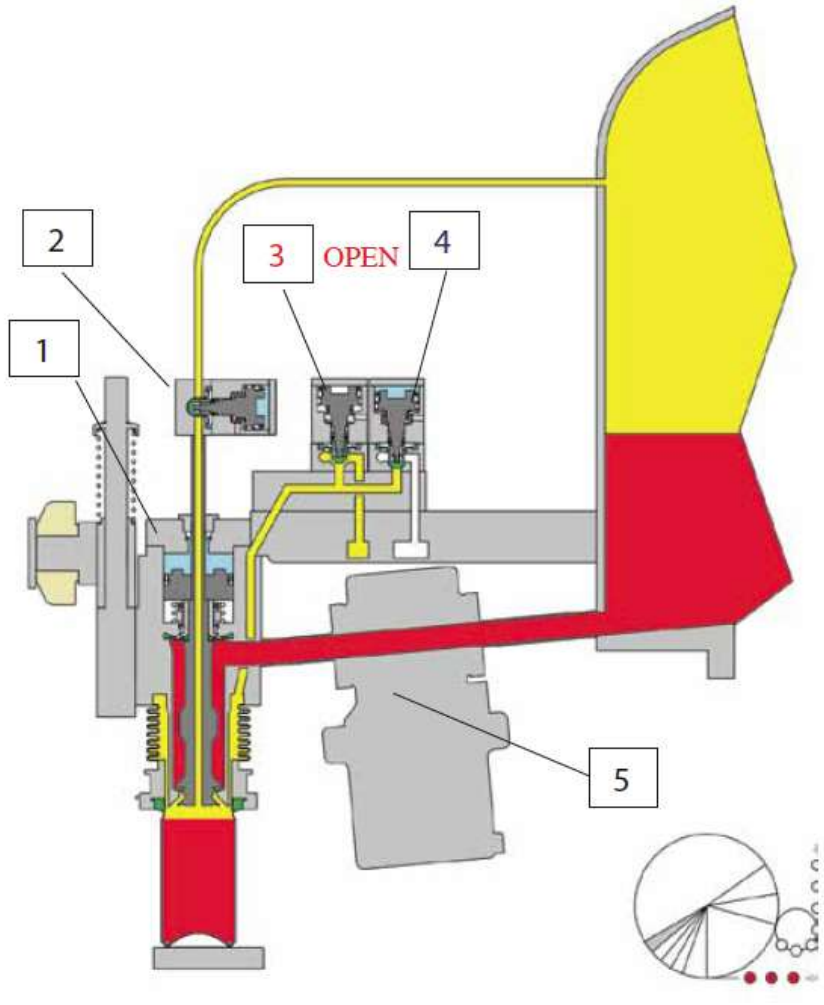
1) Control cylinder for product valve (CLOSED)
2) Pressurisation and return gas valve (OPEN)
3) Snifting valve (CLOSED)
4) CO2 flushing and CIP return valve (CLOSED)
5) Magnetic flow meter

Liquid doesn't touch the valve
No drops, no foam into the venting tube



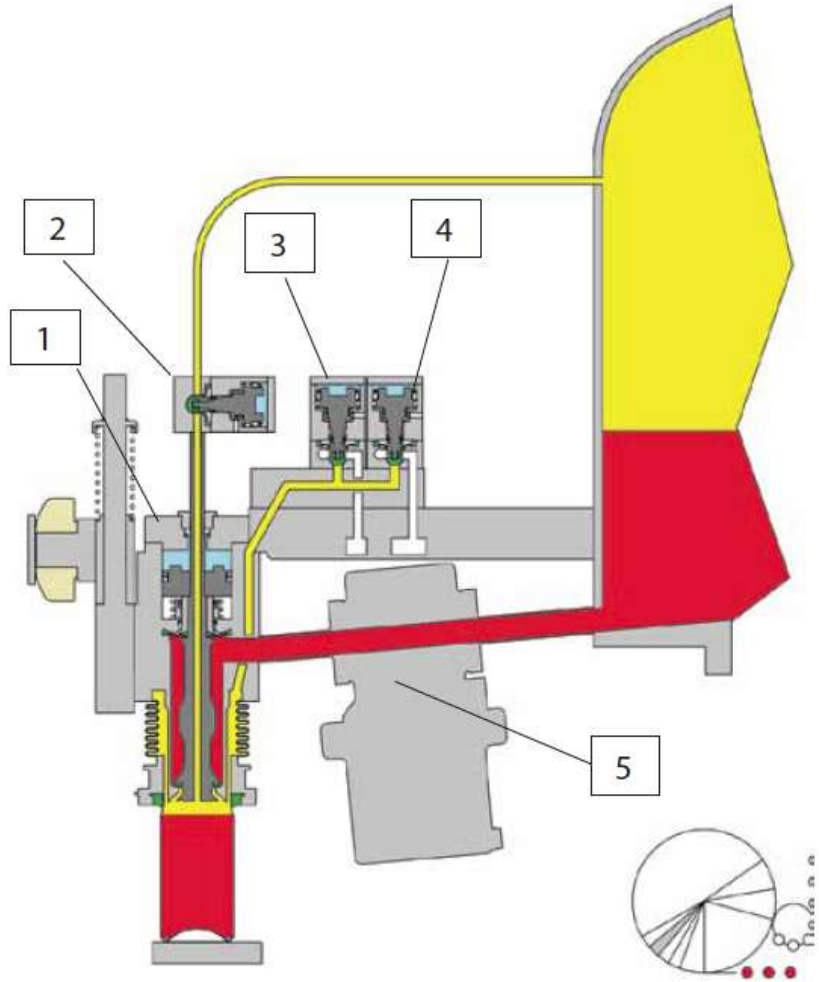
STEP 7 1° DECOMPRESSURE

1) Control cylinder for product valve (CLOSED)
2) Pressurisation and return gas valve (CLOSED)
3) Snifting valve (OPEN)
4) CO2 flushing and CIP return valve (CLOSED)
5) Magnetic flow meter



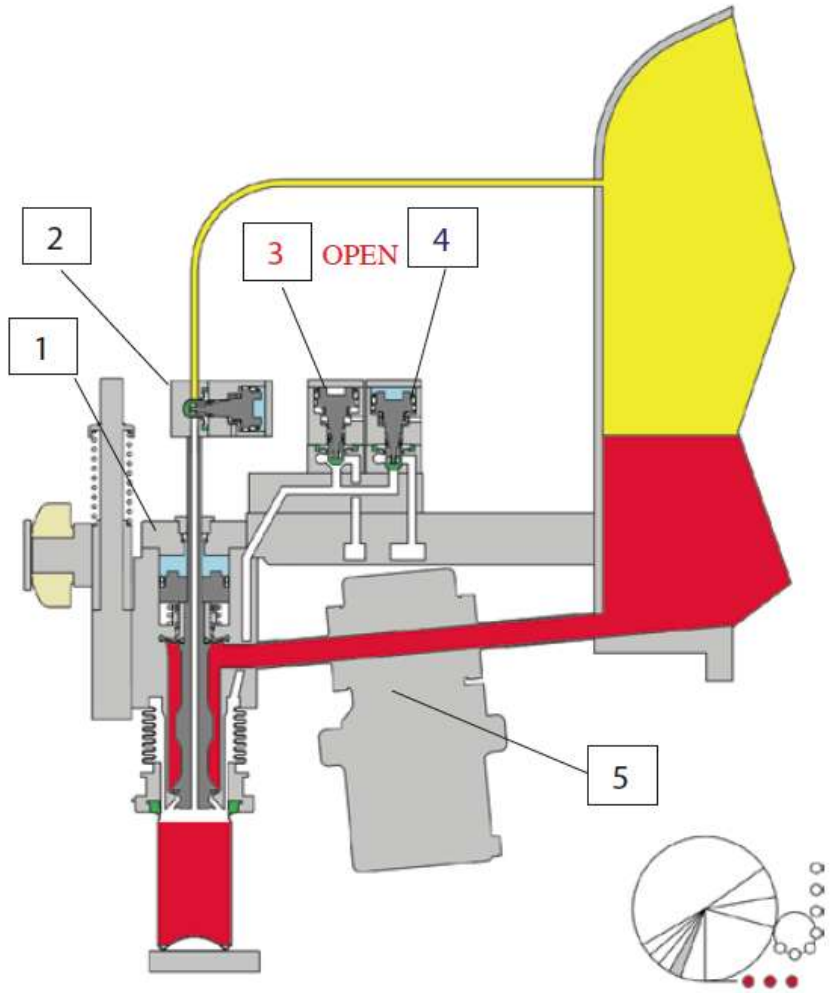
STEP 8 1° PAUSE

1) Control cylinder for product valve (CLOSED)
2) Pressurisation and return gas valve (CLOSED)
3) Snifting valve (CLOSED)
4) CO2 flushing and CIP return valve (CLOSED)
5) Magnetic flow meter



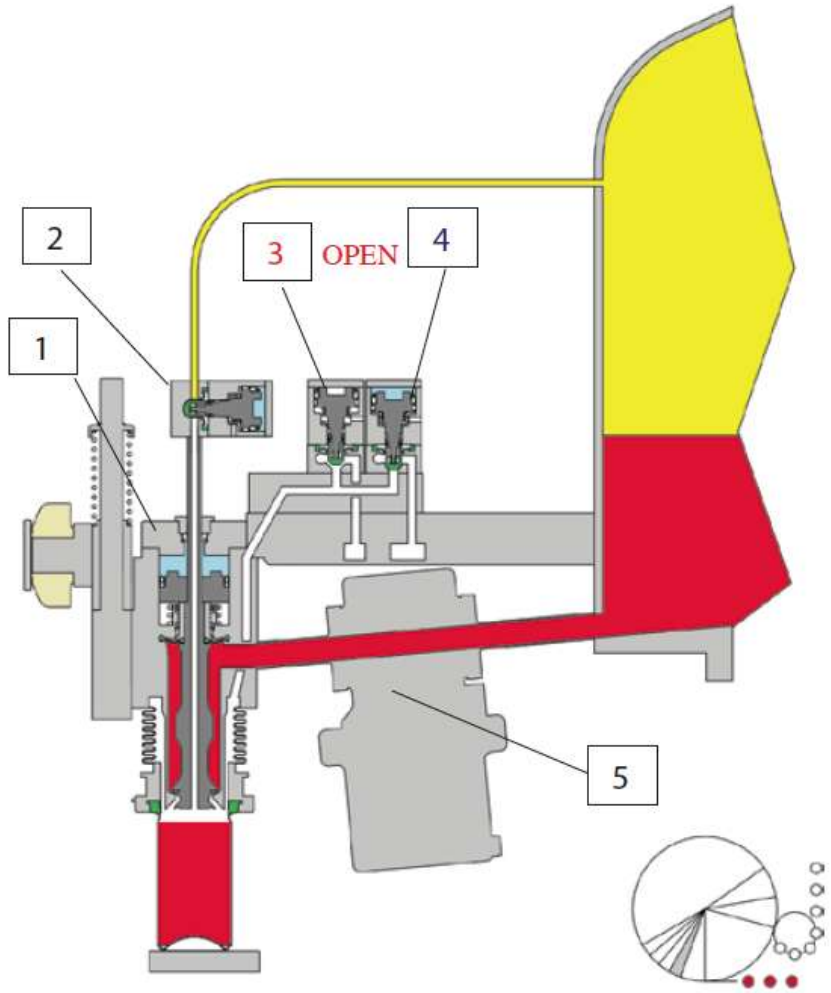
STEP 9 2° DECOMPRESSURE

1) Control cylinder for product valve (CLOSED)
2) Pressurisation and return gas valve (CLOSED)
3) Snifting valve (OPEN)
4) CO2 flushing and CIP return valve (CLOSED)
5) Magnetic flow meter



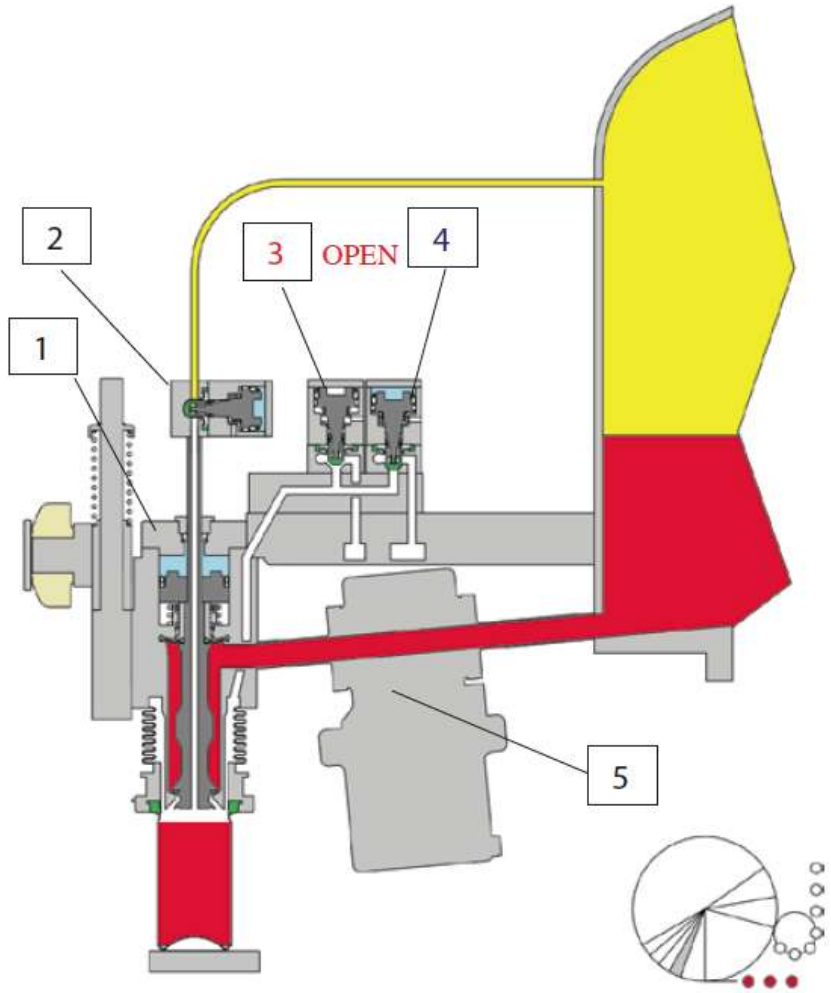
STEP 10 2° PAUSE

1) Control cylinder for product valve (CLOSED)
2) Pressurisation and return gas valve (CLOSED)
3) Snifting valve (CLOSED)
4) CO2 flushing and CIP return valve (CLOSED)
5) Magnetic flow meter



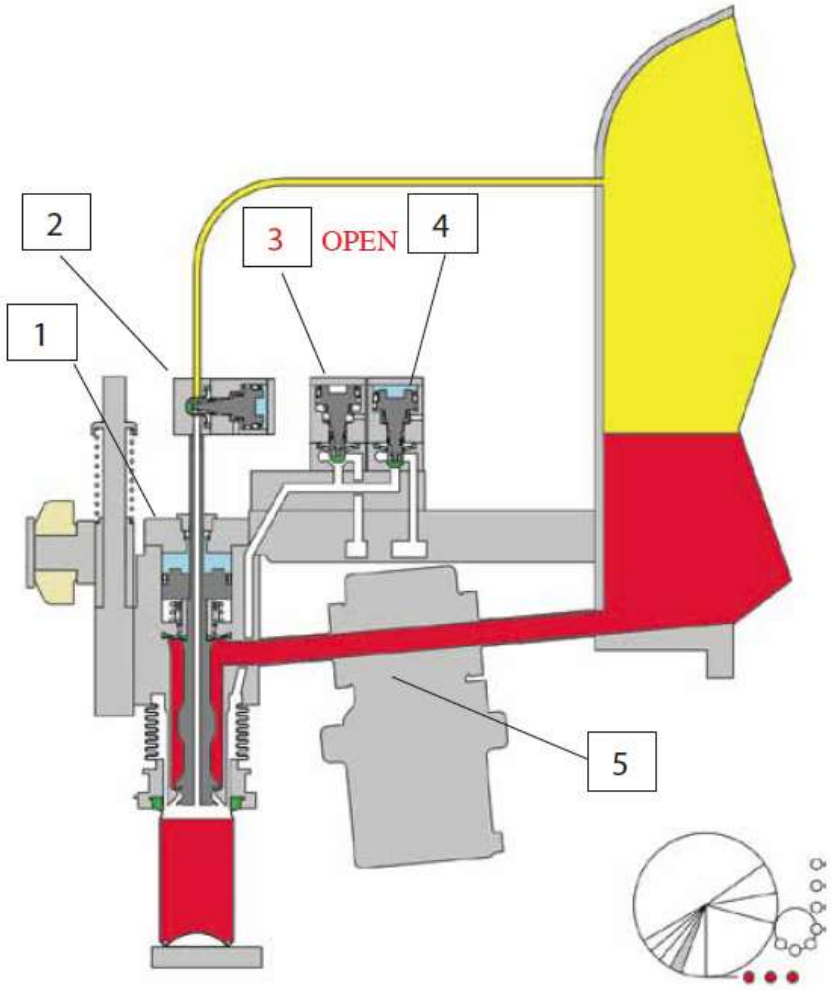
STEP 10 2° PAUSE

1) Control cylinder for product valve (CLOSED)
2) Pressurisation and return gas valve (CLOSED)
3) Snifting valve (CLOSED)
4) CO2 flushing and CIP return valve (CLOSED)
5) Magnetic flow meter



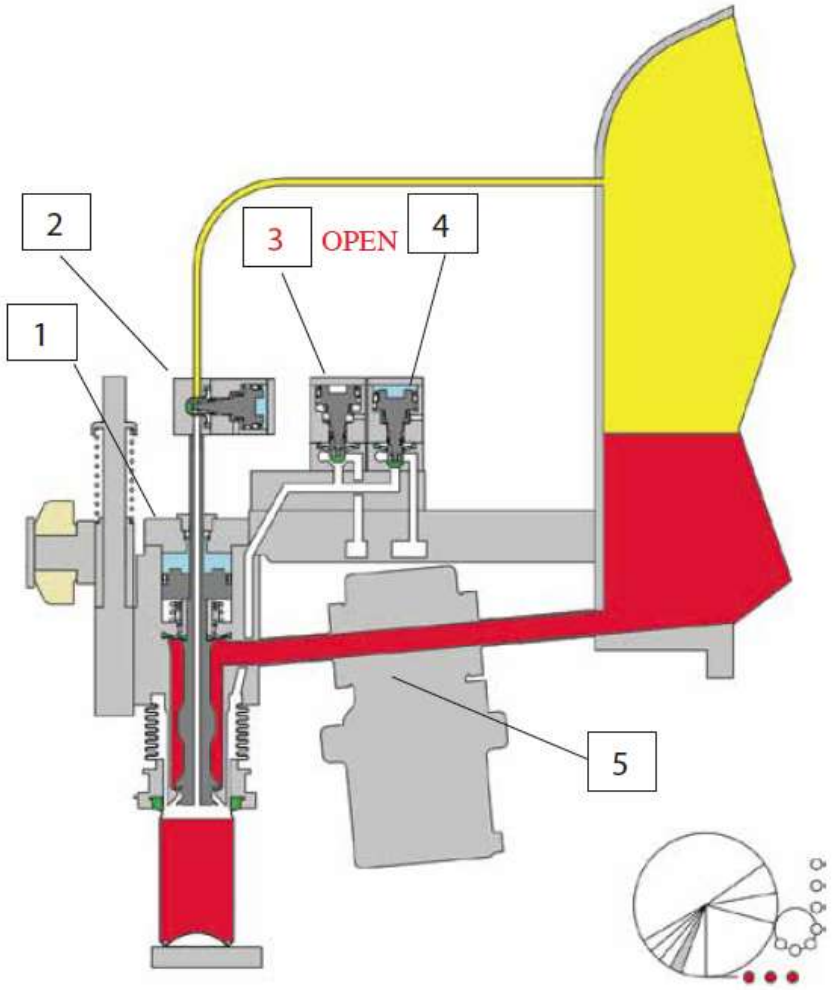
STEP 11 PAUSE before exit

1) Control cylinder for product valve (CLOSED)
2) Pressurisation and return gas valve (CLOSED)
3) Snifting valve (CLOSED)
4) CO2 flushing and CIP return valve (CLOSED)
5) Magnetic flow meter



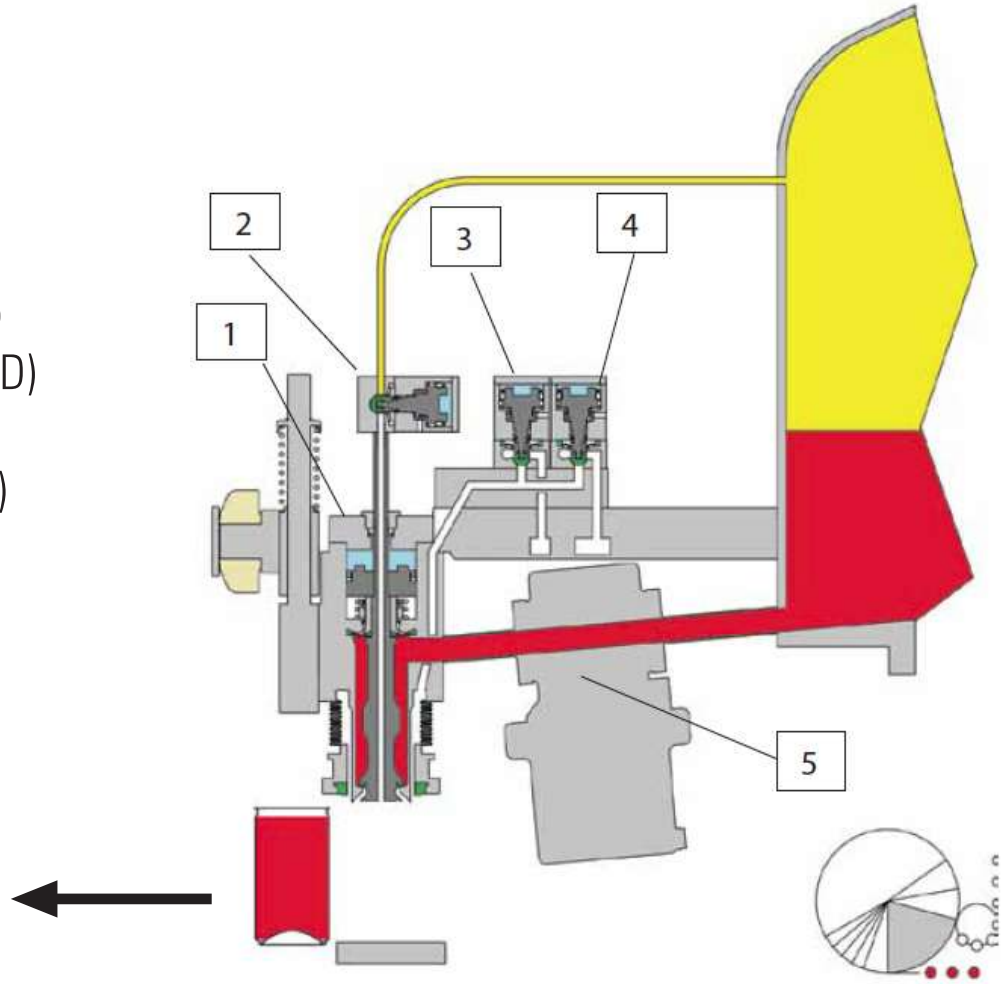
STEP 12 FILLING VALVE MOVEMENT

1) Control cylinder for product valve (CLOSED)
2) Pressurisation and return gas valve (CLOSED)
3) Snifting valve (CLOSED)
4) CO2 flushing and CIP return valve (CLOSED)
5) Magnetic flow meter



STEP 13 FULL CAN EXIT

1) Control cylinder for product valve (CLOSED)
2) Pressurisation and return gas valve (CLOSED)
3) Snifting valve (CLOSED)
4) CO2 flushing and CIP return valve (CLOSED)
5) Magnetic flow meter



TIPICAL CAN FILLER RECIPES

Typical Can filler Recipes				
NAME RICIPE			F01 330 ml	F02 440 ml
Set point tank level		%	50	50
Tank Pressure Set		Bar	2,7	2,7
Can volume		ml	330	440
Anticipate FV closure		ml	-5	-6
Max filling time		sec.	3	4
Filler Tank heigt		mm	116	150
Gas Fluxing		sec.	0,5	0,7
Pressurization Time		sec.	0,5	0,6
Waiting		sec.	0,2	0,3
1° Decompression		sec.	0,2	0,2
Pause		sec.	0,3	0,2
2° Decompression		sec.	0,5	0,8
Pause		sec.	0,4	0,2
3° Decompression		sec.	1	1
Pause		sec.	0	0
4° Decompression		sec.	0	0
Final pause		sec.	0	0

SEAMER SUPPLIERS FLEXIBILITY

Matrix can integrate different seaming suppliers as:

- Angelus
- Ferrum
- 9italian manufacturers

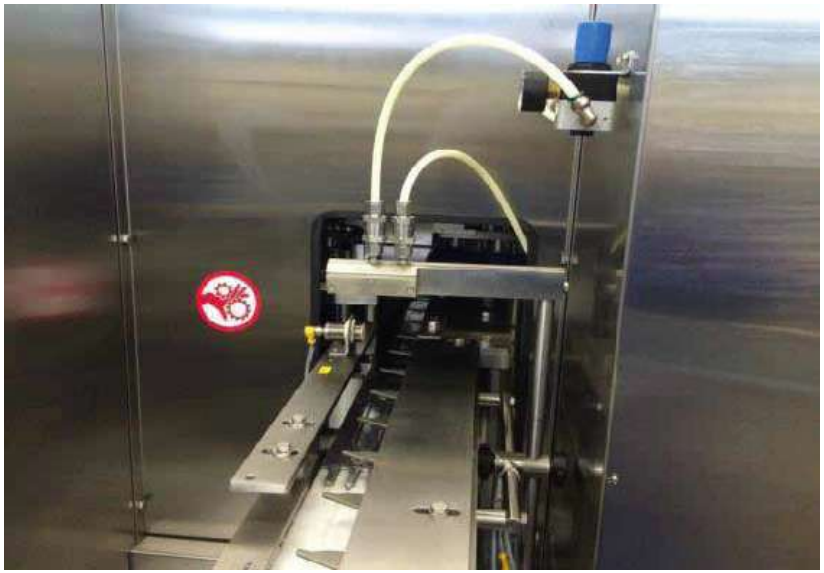
UNDERCOVER GASSING

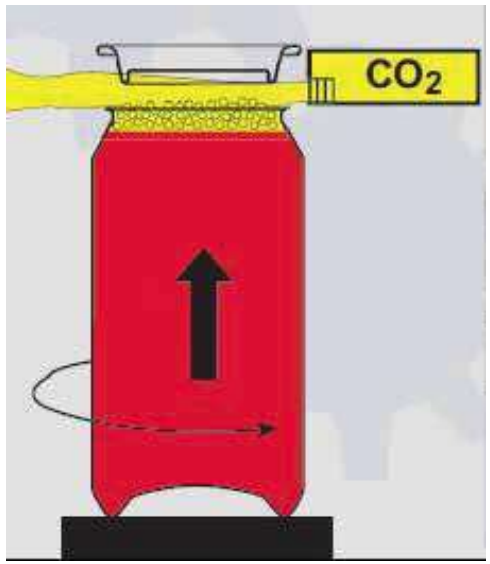
Just before the lid is applied a high flow and low pressure of CO2 stream is released between the lid and the can body by the seamer starwheel lid feeder.

The undercover gassing device avoids and/or minimize the amount of air in the can headspace

CO_2 Release

Bubbles breaker



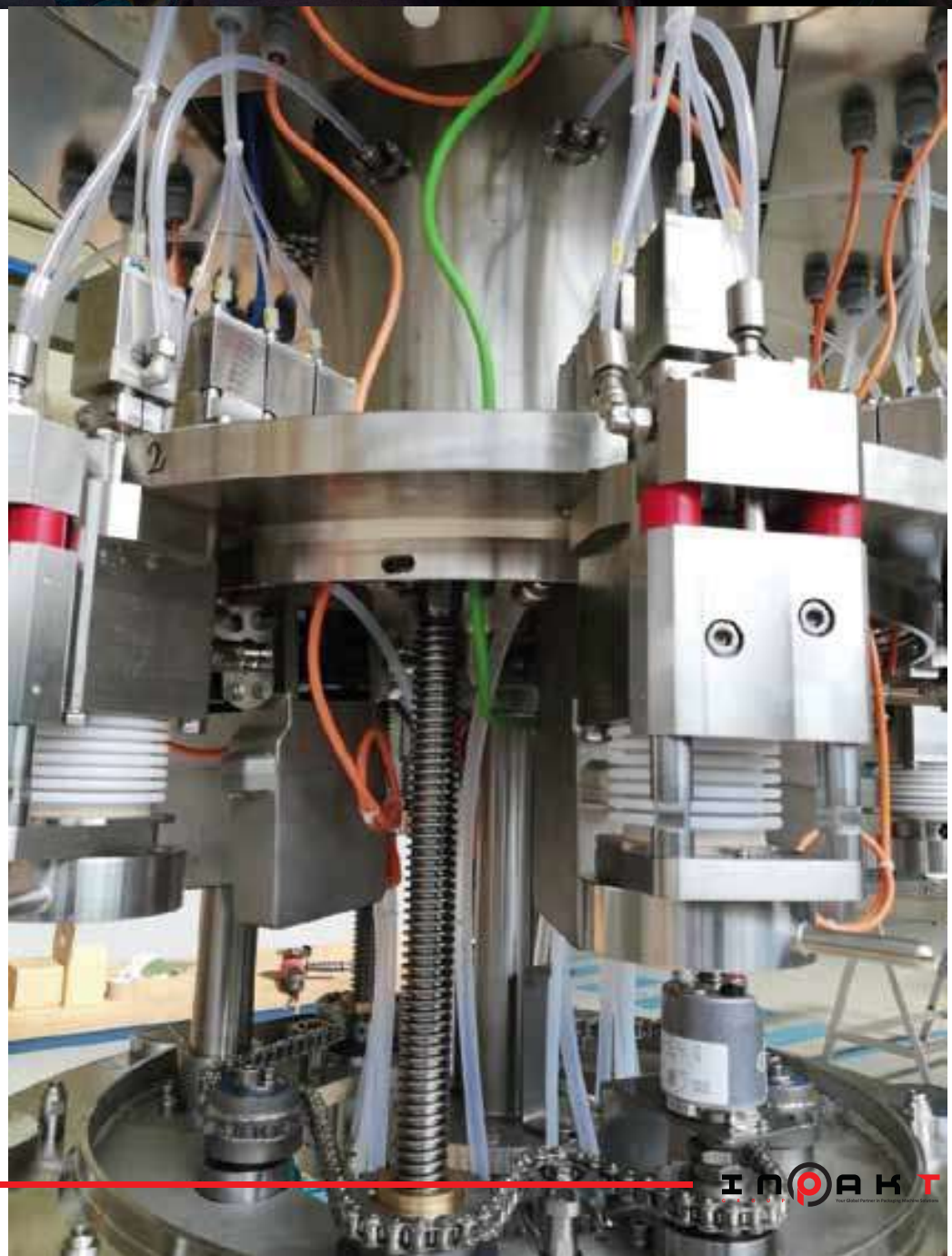


FORMAT CHANGE OVER DIFFERENT CAN HEIGHT

FORMAT CHANGE OVER DIFFERENT CAN HEIGHT

Automatic height adjustment for the filler:

- Filling valve support driven by electrical motor
- Memorizing system of can height
- User friendly system
- Minimal change over time and high precision in adjustment



FORMAT CHANGE OVER DIFFERENT CAN BODY DIAMETER

Diam. 57 mm

Diam. 66 mm

FORMAT CHANGE OVER DIFFERENT CAN BODY DIAMETER

Can infeed, Infeed starwheel and guide replacement, Wormscrew replacement, Wormscrew counterguide adjustment

FORMAT CHANGE OVER DIFFERENT CAN BODY DIAMETER

Filling carousel Can holding sectors replacement

FORMAT CHANGE OVER
DIFFERENT CAN BODY DIAMETER AND DIFFERENT LID

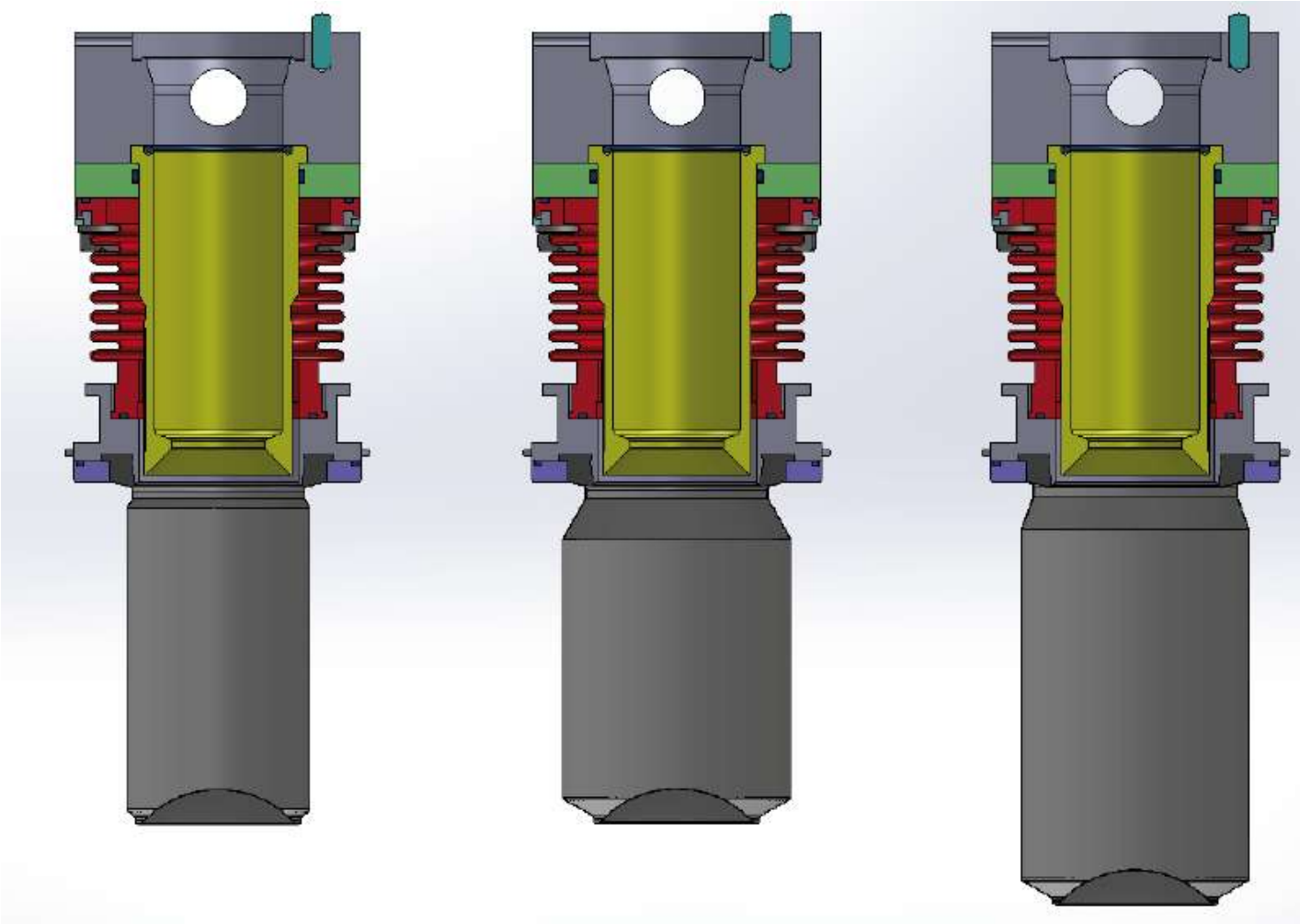
LID 200

LID 202

53 mm

57mm

NO CHANGE PARTS IN THE FILLING
VALVE IN CASE ..200.. 202..206 LID

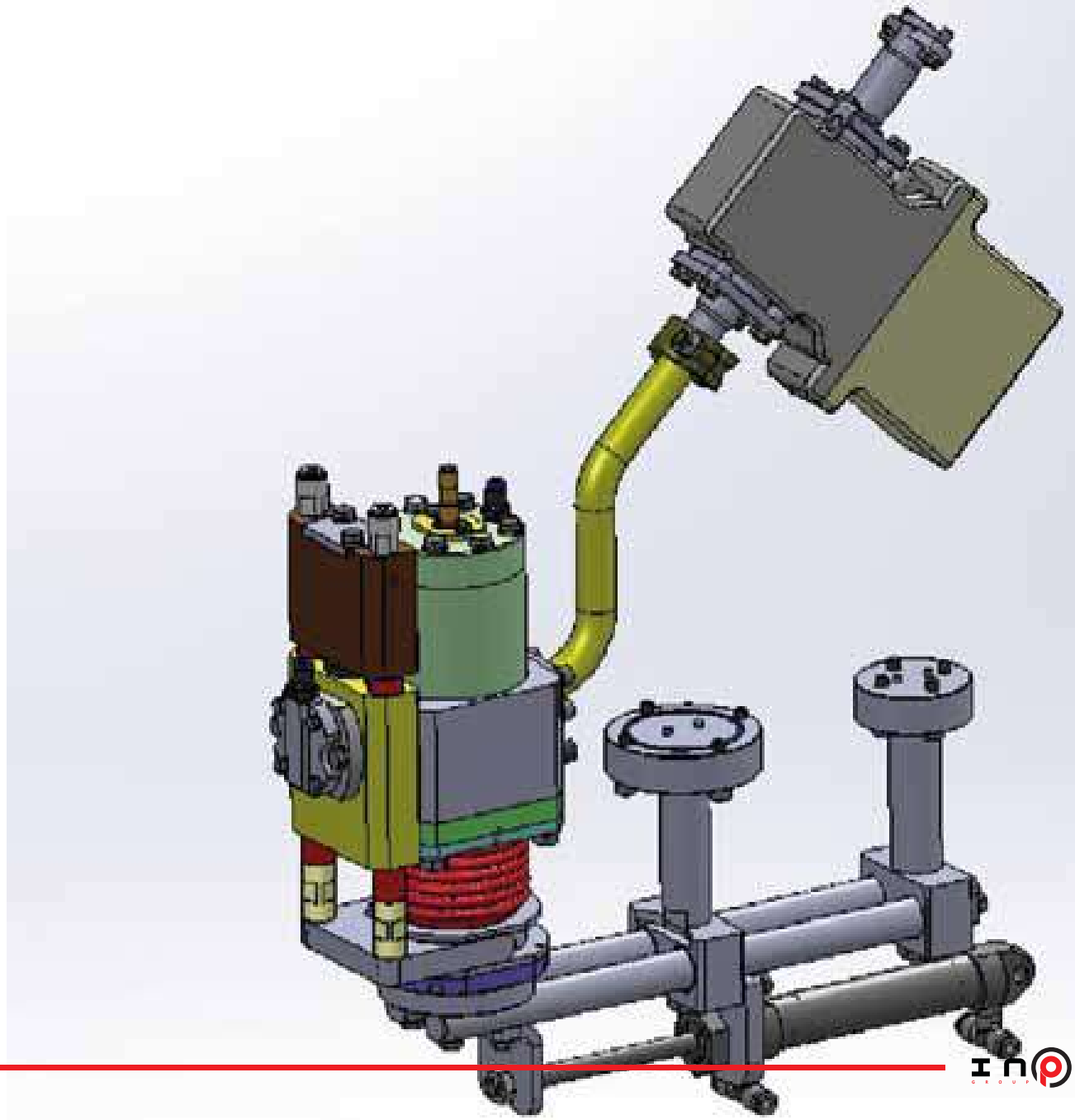


CLEANING

Dummy Cans for CIP

CLEANING

As option:
Automatic Dummy
Cans for CIP



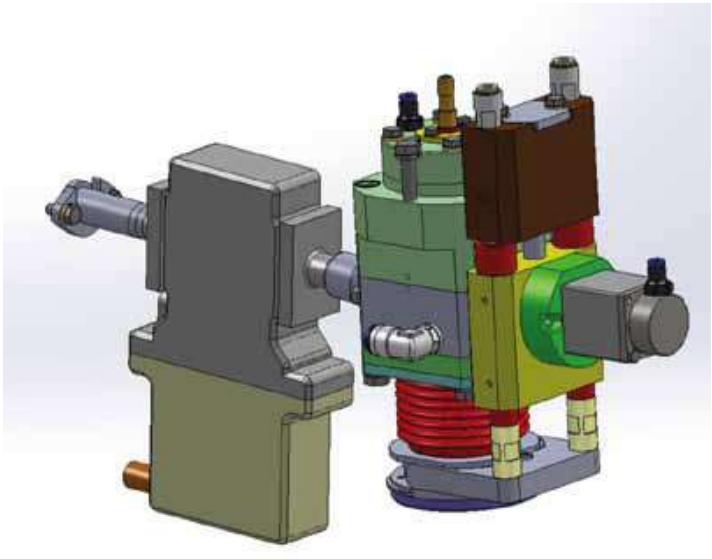
FILLING OF STILL DRINKS

Filling with nitrogen in case
of still sensitive products

Nitrogen dosing device

HOT FILL

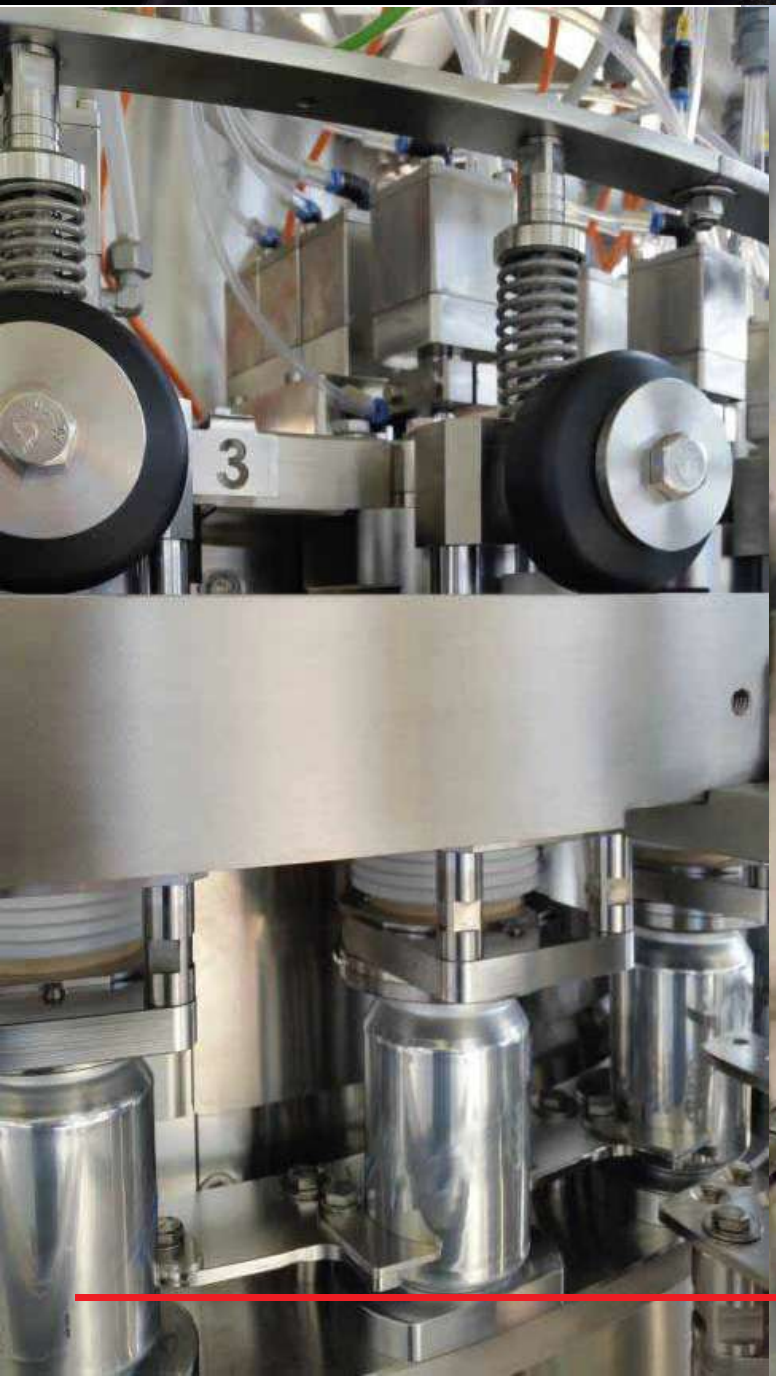
Buffer feeding tank
Ricirculation system into the filling valve
Recovery tank to pasto unit



10.8.1,rotary rinser, no by gravity, no depal from the top, labelling of no printed cans before the rinsing

FILLING VALVE TECNA ISO C-FM

FILLING VALVE TECNA ISO C-FM



FILLING VALVE TECNA ISO C-FM

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