



BURN THE RUBBER FIND YOUR SOLUTION

SMC – YOUR PARTNER IN THE TIRE INDUSTRY

YOUR AUTOMATION PARTNER



SMC – YOUR PARTNER IN THE TIRE INDUSTRY

Your satisfaction is our goal



SMC is a leading manufacturer of pneumatic and electric automation technology.

By providing individual customer solutions we have worked with numerous leading tire manufacturers around the world. With a high knowledge of both the current and future requirements in automated production processes, we have developed cost effective solutions for an extensive array of applications. On the example of a curing press we are showcasing here a number of selected products, which primarily focus the current trending topics of SMC: Energy Efficiency, Machine Safety and Industry 4.0.

Total Productive Maintenance with SMC

In the context of Industry 4.0, topics such as flexible production, predictive maintenance and the avoidance of machine stoppages are becoming increasingly important. SMC offers solutions based on the principles of Total Productive Maintenance. Do you wish to know how to run your production processes more efficiently?

Today and in the future? Our serial interface components with integrated monitoring capabilities will help you to save both time and money.

Increase Energy Efficiency

At SMC, we focus on energy management in automation by introducing cutting-edge technologies and the development of energy efficient products. Using the latest measurement technology, our Energy Saving Audits will provide you with accurate feedback on your energy consumption in your production processes.

Ensure Machine Safety

Our commitment to Machine Safety through the development of state-of-the-art safety components can assist you in the implementation of ISO 13849. SMC sets first-class standards, even at the construction stage, and guides you on your way to ensure Machine Safety.

SMC TECHNOLOGY FOR CURING PRESS

Simplified representation

1

MODULAR
F.R.L. UNIT

2

SERIAL
TRANSMISSION
SYSTEM

3

VALVE
MANIFOLD

4

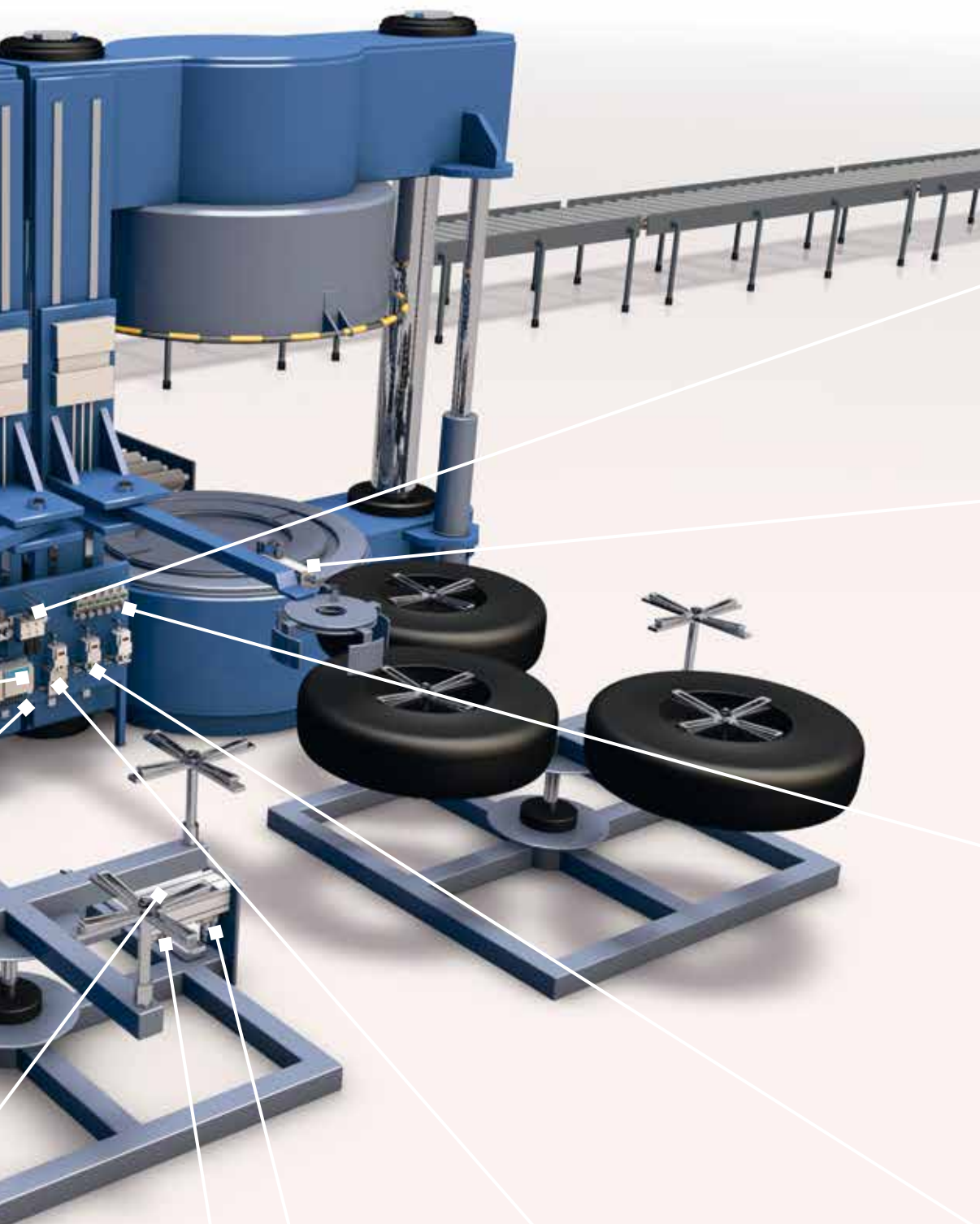
ISO
INTERFACE
SOLENOID
VALVE

5

HEAT
RESISTANT
TUBING

6

ISO
CYLINDER



12

**VENTING
VALVE**

11

**ELECTRIC
ACTUATOR**

10

**COMPACT
MANIFOLD
REGULATOR**

7

**PRESSURE
AND FLOW
VALVE**

8

**STANDBY
VALVE**

9

**ELECTRO-
PNEUMATIC
REGULATOR**

SMC PRODUCTS

Suitable components for your application

1. Modular FRL Unit

- > Quick and easy assembly
- > Space saving
- > Easy maintenance
- > Additionally with: dual residual pressure release valve with soft start-up function, ISO13849-1 (see **12. Venting Valve** page 9)
- > LoTo Solution



Item:
AC

2. Serial Transmission System

- > EX600 with integrated web server
- > Integrated cycle counter for solenoid valves
- > Remote access via web server diagnosis, fault correction
- > Integration of sensor/actuator
- > Open protocol standards



Item:
EX600

3. Valve Manifold

- > Improved productivity with outstanding reliability
- > Reduced installation costs and assembly time alongside remarkable flexibility in design
- > Space saving with improved operability
- > Air saving by using a variety of valve sizes on one manifold
- > High system reliability through improved safety features and better visibility
- > Also available with safety functions



Item:
SY

4. ISO Interface Solenoid Valve

- > Interchangeability
- > Heavy duty
- > Conform to the ISO standard
- > Available also with M12 connector
- > Metal steel sealing (long life time)



Item:
EVS7-6/8/10

5. Heat Resistant Tubing

- > High purity fluoropolymer tubing
- > Up to 260 °C
- > Materials: super PFA
- > 14 size variations



Item:
TL

6. ISO Cylinder

- > Light weight
- > Able to adapt to multiple applications
- > Great accuracy thanks to its minimum piston rod deflection
- > Smooth operation with optimum control of the speed and cycle time – easy and fine adjustment of the air cushion valve



Item:
CD55

7. Pressure and Flow Valve

- > Cuts air consumption by operating the return stroke at a reduced pressure
- > Can reduce air consumption by 40 %



Item:
ASR



Item:
ASQ

8. Standby Valve

- > Demand-LED-control of the pressure
- > Increase life time and efficiency, decrease of leakage
- > Reduces pressure when it's not needed



Item:
VEX

9. Electro-Pneumatic Regulator

- > Lightweight design with a bright and easy to read LED-display
- > IP65 housing
- > Stepless control of air pressure proportional to an electrical signal



Item:
ITV

10. Compact Manifold Regulator

- > Allows a high degree of freedom for selection according to the installation conditions
 - Handle position: top, front, bottom
 - Piping direction: top ported, bottom ported
 - One-touch fitting types: straight, elbow
- > Standard model equipped with backflow function
- > Compatible with digital pressure switch
- > Reverse flow function is equipped as a standard



Item:
ARM

11. Electric Actuator

- > High levels of accuracy and repeatability
- > A clean, smooth, quiet solution
- > Multi positioning, synchronized motion or speed/force control
- > Energy saving drive, no compressed air required



Item:
LEY

12. Venting Valve

- > Safety component as per Directive 2006/42/EC
- > For maximum category 4
- > Venting capacity up to 2,180 l/min (ANR)
- > Compatible with SMC air preparation units
- > Soft-start function (optional)
- > Different categories and sizes available



Item:
VP-X538

FURTHER SMC PRODUCTS

Venting Valve

- > Safety component as per Directive 2006/42/EC
- > For maximum category 2
- > Venting capacity up to 3,700 l/min (ANR)



Item:
VP-X536

Venting Valve

- > Safety component as per Directive 2006/42/EC
- > For maximum category 4
- > Venting capacity up to 13,000 l/min (ANR)



Item:
VG342-X87

Magnetic Valve

- > Numerous valve options
- > Rubber-sealing for bi-stable valves with detent (as per ISO 13849-2)



Item:
VQC-X

Standard Guided Cylinder With Air Cushion

- > Locking function
- > Internal guide shafts (longer lifetime)
- > Compact body



Item:
MGP-AZ

Multi-stage Ejector

- > Large flow rate
- > Energy Saving
- > 3 stage diffuser construction



Item:
ZL212

Ionizer

- > Feedback sensor
- > Rapid elimination of static electricity
- > Many different ionizer types available



Item:
IZS42

Digital Flow Switch

- > Conforming to IP65
- > Also for water, chemicals and de-ionised water
- > Flow rate setting and monitoring are possible with the digital display
- > Two independent flow rate settings are possible



Item:
PF2A

Automatic Leak Detection System

- > Detect air leakages as and when they occur
- > Confirm the exact value of the leak in l/m
- > Provide maintenance personnel with a detailed report on where the leakages are located without the need to investigate individual components
- > Improve the competitiveness of your machine



Item:
ALDS

SERVICES TO RAISE YOUR PRODUCTIVITY

SMC Customized Services set the focus on four areas



SMC PERFORMANCE IMPROVEMENT

Reduced total cost of ownership (TCO) due to:

- Machinery and system design consultation
- Elimination of production bottle-necks
- Optimization and modernization of machinery and systems



SMC MAINTENANCE SIMPLIFICATION

Reduced maintenance and service costs due to:

- Control and optimization of compressed-air quality
- Review and optimization of maintenance activities
- Support with the standardization of compressed-air components





SMC ENERGY SAVING

Reduced energy costs due to:

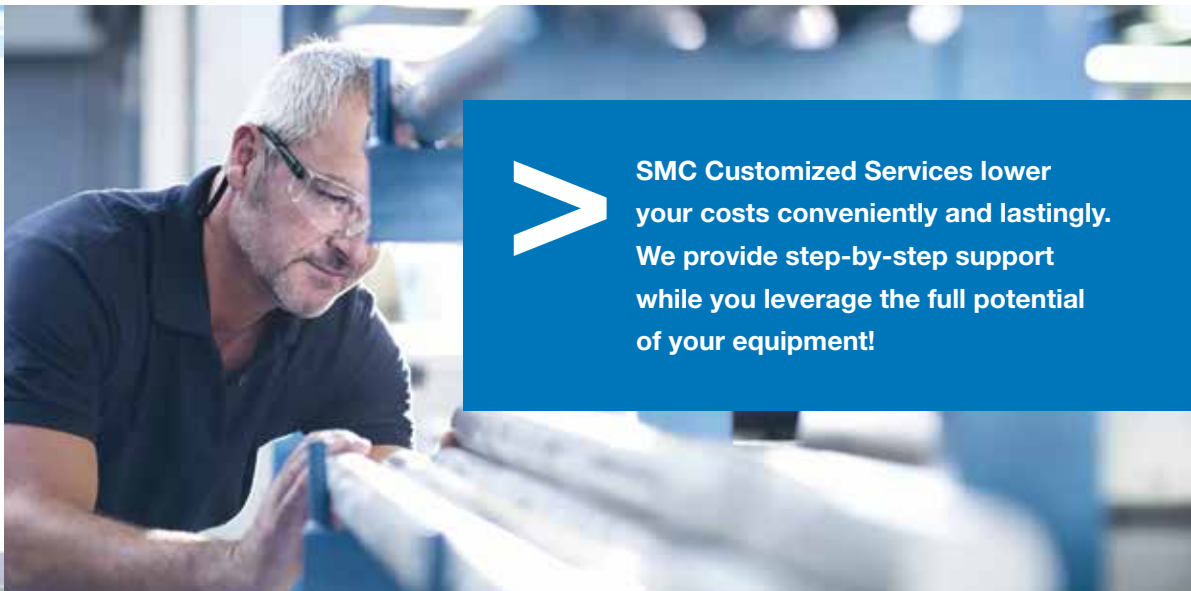
- Leakage detection/diagnostics
- Optimization of applications with high energy consumption
- Consultation in the planning stage of pneumatic systems



SMC CUSTOMIZED TRAINING

Reduction of the various operating expenses due to:

- Careful use of compressed air
- Fast troubleshooting if pneumatic defects occur
- Professional use of components



SMC Customized Services lower your costs conveniently and lastingly. We provide step-by-step support while you leverage the full potential of your equipment!



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