Gas control on a high level





Spectron has been a **manufacturer** of gas supply systems for more than **50 years**. This **experience**, combined with constant **innovation and sustainability**, is the foundation for success with **unique** products in all areas of **modern gas supply**.

Gases and gas mixtures are being used for many different applications within **industrial**, **laboratory**, **medical**, **environmental** and many other sectors. In order to meet this large variety of demands, we have developed the relevant product ranges specific to such. This guarantees that we sufficiently meet the required process parameters and the **safety** standards in almost every case.

Spectron is a diverse product family, which contains all the appropriate components for a wide spectrum of gases and applications. This means we can cover your requirements from a simple valve for an industrial gas up to fully automatic gas cabinets for semiconductor gases.

Spectron also includes alarm and control systems for gas applications.

Spectron components guarantee **maximum quality** by using high grade materials and a quality assurance program according to ISO 9001.

Our product development program continuously implements **state-of-the-art technology**. Our components are frequently adapted based on the latest know-how, requirements, expertise and standards.

#### **Product overview**



#### **Spectrotec**

Gas supply equipment for non corrosive industrial gases



#### **Spectrocom**

Gas supply equipment for non corrosive gases and gas mixtures up to quality 5.0



#### **Spectrolab**

Gas supply equipment for non corrosive gases and gas mixtures up to quality 6.0



#### **Spectrocem**

Gas supply equipment for corrosive and toxic gase & gas mixtures up to quality 6.0



#### **Spectropur**

Gas supply equipment for ultra high purity gases from grade 6.0



#### Spectrosys

Alarm- and control systems for gas supply equipment



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## Gas supply equipment for non corrosive industrial gases

## spectrotec

#### Product line advantages for you

- This range covers extremely high flow and high-pressure requirements as well as heavy duty requirements.
- The Spectrotec product range is versatile and flexible by design, making it the right solution for many different customer-specific applications:
  - Oxyfuel processes, such as cutting, welding, brazing, heating, metal spraying, etc.
  - Electrical welding processes such as MIG, MAG, TIG and forming
  - Melting
  - Inertization, purging
  - Water treatment
  - Controlled atmospheres (ovens, furnaces)
  - ... and many other industrial applications such as fish farming, glass production, fire fighting systems etc.



#### **Products**



#### Pressure regulators

- · Diaphragm type regulators
- · Piston type regulators



#### Pressure control panels

- For single cylinder gas supply or with automatic change-over
- Diaphragm or piston type pressure regulators with high control accuracy for up to 200 bar outlet pressure



#### **Tapping points**

- Compact design for single or multiple tapping points
- Inlet pressure shut-off with ball valve



#### Filters

- Brass filter for separating dirt particles such as rust, sand, or chips carried along in gas piping
- Easy change of the filter cartridges



- Contact pressure gauges
- · Pressure transmitters
- Flowmeters
- Valves



## Gas supply equipment for non corrosive gases and gas mixtures up to quality 5.0

# spectrocom

#### Product line advantages for you

- Spectrocom equipment achieves high requirements in cleanliness, precision and reliability by using stainless steel diaphragms.
- This range is limited to standardised and competitive products.
- Spectrocom components, by design and in their performance, make them a natural fit for the following applications:
  - Laboratory applications such as e.g. GC, HPLC, GCMS, AAS, ICP
  - Dosing of gases
  - Laser applications
  - Carbon monoxide applications

# spectro com

#### **Products**



#### **Pressure regulators**

- · 1- and 2-stage regulators
- International cylinder connections



#### Pressure control panels

- For single cylinder gas supply or with automatic change-over
- Diaphragm type pressure regulators with high control accuracy for up to 10 bar outlet pressure



#### **Tapping points**

- Tapping points for wall mounting
- · Optional outlet control valve



#### **Purge devices**

- For single or double sided pressure control panels
- Non-return valve in the purge gas inlet



## Gas supply equipment for non corrosive gases and gas mixtures up to quality 6.0

# spectro lab

#### Product line advantages for you

- Achieves the highest standards in cleanliness, precision and reliability by using stainless steel or Hastelloy diaphragms.
- The Spectrolab product range is versatile and flexible by design, making it the right solution for many different customer-specific applications.
- Individual configuration encompassed within a modular system to meet your requirements.
- A separate mounting profile saves time and money on installation.
- Laboratory design: components manufactured in chrome plated brass or brass and encased within special plastic covers make them a natural fit for laboratory furniture.
- Spectrolab components, by design and in their performance, make them a natural fit for the following applications:
  - R&D
  - Laboratory such as e.g. GC, HPLC, GCMS, AAS, ICP
  - Laser applications
  - Regulating and dosing of high purity gases in the industry



#### **Products**



#### Pressure regulators

- 1- and 2-stage regulators
- Flexible configurations



#### **Valves**

- · Compact diaphragm valves
- Optional with pneumatic actuator for up to 300 bar



#### Pressure control panels

- For single cylinder gas supply or with automatic change-over
- Diaphragm type pressure regulators with high control accuracy for up to 200 bar outlet pressure



#### Laboratory tapping points

- Compact design by patented concept
- Integrated shut-off valve in the rear-wall connector



#### **Tapping points**

- Designed for easy installation
- Modular system can be extended of into multiple tapping points



- Contact pressure gauges
- Pressure transmitters
- · Flow meters



## Gas supply equipment for corrosive and toxic gases and gas mixtures up to quality 6.0



#### Product line advantages for you

- Achieves the highest standards in cleanliness, precision and reliability by using stainless steel or Hastelloy diaphragms.
- The Spectrocem product range has a wide variety of unique products for professional and safe handling of corrosive or toxic gases or gas mixtures.
- Patented purging devices maintain the gas purity and can be used in combination with our Spectrosys alarm and control systems for remote control.
- Individual configuration encompassed within a modular system to meet your requirements.
- Laboratory design: components manufactured in stainless steel and encased within special plastic covers make them a natural fit for laboratory furniture.
- Spectrocem components, by design and in their performance, make them a natural fit for the following applications:
  - R&D
  - Laboratory such as e.g. GC, HPLC, GCMS, AAS, ICP
  - Regulating and dosing of high purity gases in the
  - industry
  - Calibration
  - Refineries



#### **Products**



#### **Pressure regulators**

- 1- and 2-stage regulators
- Flexible configurations



#### **Valves**

- Compact diaphragm valves
- Optional with pneumatic actuator for up to 300 bar



#### Pressure control panels

- For single cylinder gas supply or with automatic change-over
- Diaphragm type pressure regulators with high control accuracy for up to 200 bar outlet pressure



#### Laboratory tapping points

- Compact design by patented concept
- Integrated shut-off valve in the rear-wall connector



#### Tapping points / sticks

- · Designed for easy installation
- Modular system can be extended into multiple tapping points
- · Compact point of use sticks



- · Purge devices
- Contact pressure gauges
- Pressure transmitters



## Gas supply equipment for ultra high purity gases from grade 6.0

# spectro pur

#### Product line advantages for you

- The Spectropur product range has a wide variety of unique products for professional and safe handling of ultra-high-purity gases.
- Spectropur components are manufactured from stainless steel with plasma or electro-polished surfaces and Hastelloy diaphragms in order to achieve the highest standards in cleanliness, precision and reliability.
- The dead space optimized components are sealed metal to metal using VCR technology.
- Patented purging devices maintain the gas purity and can be used in combination with our Spectrosys alarm and control systems for remote control.
- Individual configuration encompassed within a modular system to meet your requirements.
- Spectropur components, by design and in their performance, make them a natural fit for the following applications:
  - Semiconductor production acc. to **SEMI specifications**
  - Laser applications
  - Optical fibre technology
  - Photovoltaic



#### **Products**



#### Pressure regulators

- With tied diaphragm
- · Flexible configurations



#### **Valves**

- · Compact diaphragm valves
- Optional with pneumatic actuator for up to 300 bar



#### Pressure control panels

- For single cylinder gas supply or with automatic change-over
- Components with VCRconnections



## Gas cabinets with control system

- Flexible configuration with pressure control panels or gas withdrawal units
- Complete solutions with fully automatic controller



## Gas withdrawal units + VMP / VMB

 Flexible configuration incl. pressure regulator, valves, filters, gauges and purge devices



- · Vacuum generators
- · Contact pressure gauges
- Pressure transmitters



### Alarm- and control systems for

#### gas supply equipment

## spectrosys

#### Product line advantages for you

- Spectrosys includes alarm and control systems which are specific to gas supply systems.
- The Spectrosys product range has a wide variety of unique products for professional and safe handling of gases by monitoring or controlling the processes and applications.
- Versions for EEX areas (flammable gases) can also be provided as standard units.
- Spectrosys products can be used for almost every gas supply system within the industrial, laboratory and research sectors:
  - Low gas control
  - Pressure control
  - Emergency shut off
  - Automatic change-over
  - Automatic purging
  - Automatic process control



#### **Products**



#### **FloAlarm**

- For 6 analogue or 12 digital inputs
- · Optional with Modbus



#### FloStop FS1

- Control unit to support a pneumatic valve or 1 electrical relay
- Emergency shut-off



#### **FloMaster**

- Management of all signals from up to 32 FloAlarm-Modbus units
- Forwarding of the alarms to a BMS or via WLAN



#### FloPurge FP4

- Automatic purging
- Individual programmable purge cycles before and after the cylinder change



#### FloSwitch FS4

- Automatic change-over for 2 gas supply systems
- · Low gas alarm







#### Accessories

- Gas cylinder scales
- Contact pressure gauges
- · Pressure transmitters



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#### Spectron Gas Control Systems GmbH Monzastr. 2c 63225 Langen Germany

info@spectron.de www.spectron.de

