

## SAMPLING FOR LIQUID AND GAS





All products are Swiss made in our 4000 m<sup>2</sup> production facility.



# BIAR, EXPERT IN SAMPLING SYSTEMS

#### **SPECIALIZED EXPERTISE**

BIAR specializes in designing and manufacturing liquid and gas sampling systems for pipeline or reactor.

Working as a partner with world leaders in the chemical industry for nearly 30 years, today BIAR has the capacity to develop solutions for the most complex sampling.

#### **CUSTOMER REFERENCES**

Bayer, Lanxess, Saltigo, Aliseca, BASF, DSM, Lonza, Evonik, SABIC, Syngenta, Rütgers, AKZO, DOW, Gastron, Bluestar, Merck, Wacker...

#### **PIONEER**

BIAR took the lead when, as early as 1983, it developed the first sampling valve with a hand wheel and conical seat.

#### **SWISS QUALITY**

Proud of its Swiss roots, BIAR's manufacturing style emphasises quality, durability and high precision. A modern infrastructure and highly qualified staff allow BIAR to focus its expertise on what it knows best.

#### Certificates:

 $\rightarrow$  ISO 9001  $\rightarrow$  TA-Luft

ightarrow ISO 3834-2 ightarrow ATEX

 $\rightarrow$  CE





Piston injector and safety cabinet - simple solutions to reduce risks.

# BIAR – ENGINEERED SOLUTIONS TO FIT YOUR NEEDS

#### **SECURITY**

Due to excellent construction and design BIAR valves and accessories reduce typical risks such as inhaling toxic fumes, skin burns, explosions, etc.

#### **EFFICIENCY**

Our actuators provide a controlled and accurate dosage. A high quality sample is achieved through many options.

#### **REAL ADVANTAGES FOR YOU**

- → Process security improvement
- → Personnel security improvement
- $\rightarrow$  Improvement of sampling time
- ightarrow Positive impact on the environment
- ightarrow Quality and reliability of samples

#### **SIMPLICITY**

Our valves will be adapted to your piping. Our products are designed to reduce handling, improve cleanliness and minimise maintenance.

- ightarrow Simplified sampling
- ightarrow Directly representative samples
- $\rightarrow$  No process interruption
- $\rightarrow$  High toxicity sampling
- $\rightarrow$  High temperature sampling
- $\rightarrow$  High pressure sampling
- → Vacuum sampling
- $\rightarrow$  Transport solution





Our experts will guide you to the best solution for your needs.



### A VALVE FOR EVERY NEED

#### YOUR NEEDS

BIAR systems are suitable for all your liquid or gas sampling requirements, from polluted water to highly hazardous gases.

- $\rightarrow$  Liquids
- $\rightarrow$  High viscosity and slurries
- $\rightarrow$  Gas
- $\rightarrow$  Liquefied gas

Many receptacles and options are available depending on the security level required.

#### **BIAR'S SUITABLE PRODUCT**

BIAR's agents and consultants will help you select the right product:

- → Technical characteristics [material, size]
- → Valve's position [in-line vertical or horizontal, top of reactor]
- → Security level [toxic products, corrosive, explosive,...]
- $\rightarrow$  Sample volume
- ightarrow Sampling conditions [Temperature, pressure, vacuum]









1. In-line sampling valve
2. Quantitative and chamber sampling
3. Gas and liquefied gas sampling
4. Reactor sampling





Following our quality procedures, each valve is checked before shipping.



## BENEFITS OF BIAR SYSTEMS

#### **NO DEAD SPACE**

BIAR systems are designed to avoid dead space, improve cleanliness and avoid contamination.

#### **SPRING-TO-CLOSE HAND WHEEL**

The actuators such as the Magic Hand Wheel provide an accurate flow and an intuitive use.

#### MANY ACCESSORIES AND OPTIONS

The quick connection and accessory interchangeability provide a customised solution to meet your needs.

#### **CUSTOMIZATION**

Our R&D department combined with 30 years of experience in the field allow us to find solutions to the most complex sampling problems.



Principle of conical seat









#### CONSULTATION AND FOLLOW-UP

To guarantee the quality of service, BIAR has a unique point of sale and production, allowing timely interactions and improving communication between technical consultants and different services from production to invoicing.

Our worldwide presence through regular site visits and contacts enables us to have a direct relationship with our customers.

#### **EXPERTISE AND DEVELOPEMENT**

BIAR is the leader in engineering sampling solutions with its own design center. Experts at BIAR create specific solutions for customers' individual projects.

#### **AFTER-SALES SERVICES**

To maintain our valves, we guarantee the supply of spare parts for 10 years. Furthermore, our repair workshop will take care of other important repairs.

#### **AVAILABILITY**

- → A personal technical consultant that will follow up from the inquiry to the delivery.
- ightarrow An American subsidiary
- ightarrow A local agent



## IN-LINE SAMPLING VALVES AND ACCESSORIES

#### **ACTUATORS**





Hand lever







Hand wheel

Manual closure



Cooling extension

Spring-to-close actuators

Hand wheel

### **TYPES OF VALVES**





Vertical stainless steel



Wafer type stainless steel or PFA



Lateral stainless steel

#### STANDARD CHARACTERISTICS

Size: DN10 to DN200 [  $\frac{1}{2}$  " to 8"] Materials: Stainless steel, Hastelloy® or Monel®.

PFA lined

**Temperature:** -40 to 350°C (-40 bis 660°F)

Pressure: Vacuum to 160 bar [600 psi] Other sizes and materials on request

#### INTERCHANGEABILITY OF ACCESSORIES



Open receptacles



Partially closed receptacles



Security: Tailored to requirements









#### BIAR SA

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