

Safe packaging and dispense of Pentanes

Julius Hoesch chemical distribution was founded in 1865. The company employs 130 people and has an annual turnover of 90 M Euros, offering a product range of 120,000 chemicals to over 5,000 customers. Up to 6,000 different chemical products are always available on stock.

The chemical products offered include: acids, solvents, specialty chemicals such as dry-cleaning chemicals, water treatment chemicals, preservatives, adhesives, de-foaming agents, diesel, lubricants etc. J. Hoesch's products are used in a wide range of different industry sectors, such as the coating and adhesive industry, the cleaning and disinfection industry, the petrochemical and the metal working industry, paper processing, cosmetics and the pharmaceutical industry as well as in the construction industry.



JULIUS
HOESCH
DÜREN



**Safe packaging and dispense
for Pentanes:
100 L stainless steel
container
with Macro Valve**

Safe dispense of Pentanes

J. Hoesch decided to implement the **Micro Matic system for Pentanes** from the time they started to include it in their chemical product range and to deliver it to their customers, approximately 15 years ago. They have always used the Micro Matic system, since there is no other closed system that can offer the same level of safety and reliability for dispensing hazardous liquid chemicals from containers.

Pentanes are purchased in bulk from different suppliers and re-packaged in 100 L stainless steel drums equipped with the **Micro Matic Macro Valve**. The drums are filled in a closed system using the **Macro Valve Fill-Head**. The chemicals are discharged at the customer's site using the dry-break **Macro Valve Coupler** in a completely closed system, enabling a safe and quick transfer of the products.

J. Hoesch has been very successful in marketing and distributing the Pentane product range in stainless steel containers with the Macro Valve closed system supplied by **IPI Global**. "The Micro Matic system is very safe and very easy to use" – reports Mr. Ralph Mahlow, Technical Manager at J. Hoesch – "our customers have responded very positively and are very happy to use it. At the same time the German Health and Safety organizations (Arbeits- und Gesundheitsschutz) have also shown a high degree of acceptance and given a positive feedback about the adoption of Micro Matic closed systems."

Application

The **Macro Valve system** is used for packaging and dispensing the following Pentanes and Pentane compounds:

- ◆ n-Pentane
- ◆ n-Pentane/Isopentane 80:20,
- ◆ Isopentane,
- ◆ Isopentane/Cyclopentane 75:25,
- ◆ Cyclopentane,
- ◆ Cyclopentane/n-Pentane 70:30

Safe & Cost-effective

Safe packaging and dispense of Pentanes

Safe & Cost-effective



Filling Pentanes with Macro Valve Fill-head



**Macro Valve Fill-head:
On disconnection there is
no product residue on the
Macro Valve and Coupler**

Implementing the Macro Valve system for dispensing Pentanes

The **Macro Valve and Coupler** feature a unique keyed flange to ensure product integrity, while the special security neck prevents unauthorised removal of the Valve from the container. They are available with a wide range of seal materials, such as Viton and FKM-HiPer, which are compatible with the Pentane compounds.

The Micro Matic closed system was first introduced into J.Hoesch by their Pentane manufacturer and supplier, who was using the system already.

There were some concerns about the price initially, but these were overcome by the advantages that the system offered in terms of safety, quality and reliability.

During the introduction phase, the technical team tested the system by filling the drums, implementing a multi-trip container system and a maintenance service for drums and the Micro Matic valve system.

The introductory period was successful and J. Hoesch has since continued to supply Pentanes and Pentane compounds using the Micro Matic Macro Valve system.

Key benefits

The **Macro Valve system for Pentanes** offers the following advantages:

- ◆ Enhanced safety in handling pentanes
- ◆ Ease of handling and efficient filling and emptying of containers
- ◆ Security and protection of product integrity
- ◆ Enables inert gas dispense with a pressure up to 2 bar
- ◆ Reduced storage space requirement
- ◆ Reduced packaging disposal costs
- ◆ Robust, reliable and reusable for many years.