



LIAG®
USA

LAUFER
Valve Technology Inc.

DMV Product Recovery
Pigging Systems for hygienic processes

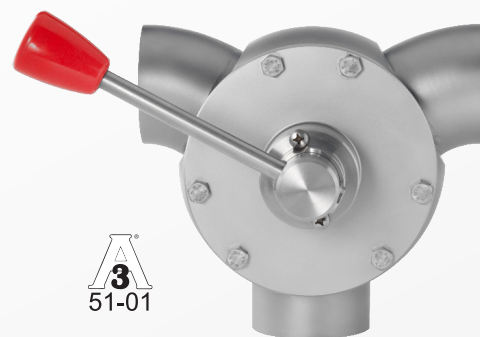
LIAG® DMV Pigging System for hygienic processes and viscous, fast hardening media

Hygienic - Modular - Efficient

Process systems cleaned with pigs are becoming increasingly important for hygienic processes. Increased environmental consciousness, costly waste water treatment and product losses, superior hygienic standards and production streamlining are some of the reasons.

Features

- Minimum product loss
- Safe separation of product - no mixed phases
- Faster changeovers
- Maximum product quality
- Reduction of time consuming cleaning and waste water generation
- Environmentally sound systems



Sterile processes pose stringent demands on system components

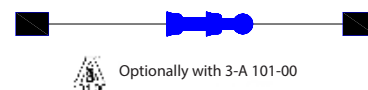
For this processes we offer DMV pigging systems featuring 3-A rated CIP/SIP LIAG® free flow arc valves and specifically designed pig launching and receiving stations without dead pockets. Simplifying the modular component design, thread and clamp unions are virtually no longer needed, minimizing typical hygienic risk areas by design. All LIAG® arc valves, even when welded in place, can be easily disassembled for maintenance.



DMV operation procedures

One way

Manual return of pig



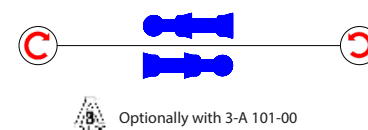
Single loop

Automatic return of pig from receiving to launching station, then manual change of direction



Bi-directional with turning station

Automatic return of pig by use of LIAG® turning station (closed system CIP/SIP automated)



Double loop (Bi-directional)

Automatic return of pig by use of LIAG® pig diverter arc valves (closed system CIP/SIP automated)



Ring system

Closed system CIP/SIP automated

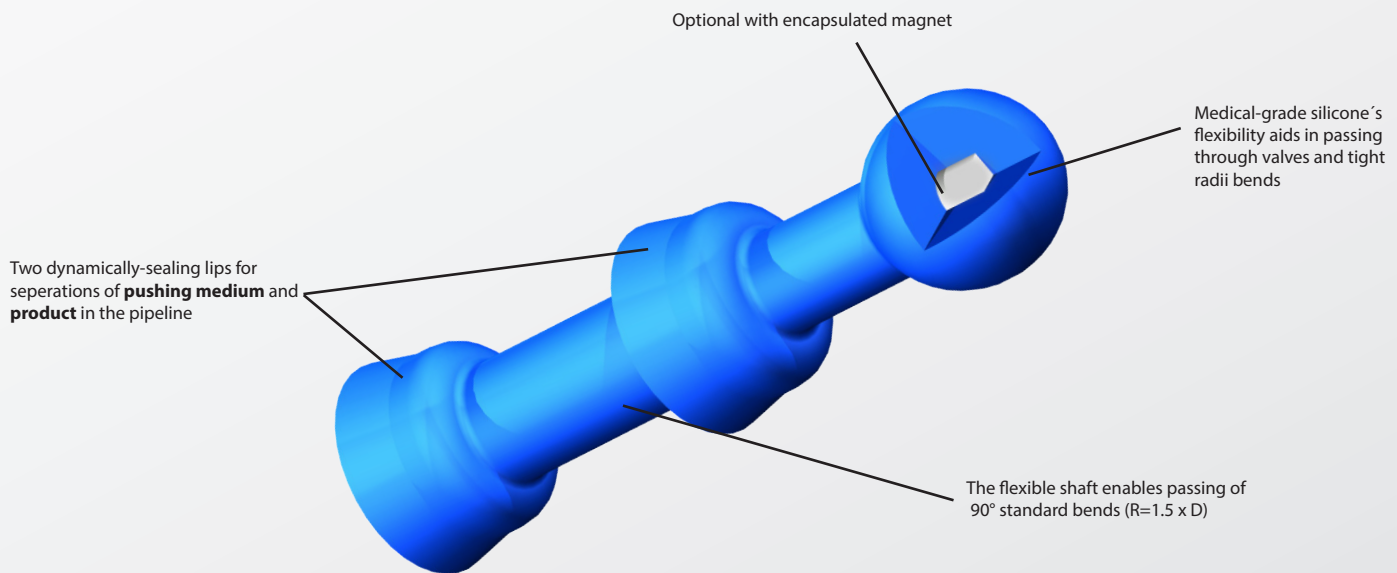


Made by Know-how

DMV lip pig – reliable tight

The DMV pigging system works with a 2-seal lip pig and are of homogeneous hygienic design. They offer excellent cleaning effect and are virtually free of wear. Two dynamic lips form a reliable seal with the pipe wall, the action of pressure and counter pressure forms the seals to the pipe wall, compensating for minor deviations in the pipe geometry.

The pigs are highly flexible and can pass tight radii ($R = 1.5 \times D$). Dynamic lip pigs are optionally equipped with a magnet for location and control.



DMV pig launching and receiving station

To satisfy the diverse requirements of the wide range of processes, the optimum pigging procedure is always designed to the specific project.



Features DMV Pigging System

- Sterile and closed pipe systems
- No dead pockets with LIAG® CIP/SIP free flow arc valves
- Optimized cleaning result with dynamic DMV lip pigs
- Capable of passing 90° standard bends ($R = 1.5 \times D$)
- Available with in system cleaning of the pig
- Optimally suited for hygienic processes and highly viscous, fast hardening media, e.g. yogurt, dressings, soft cheese, chocolate, tooth paste, etc.
- Optionally 3-A 101-00 and FDA compliance

Hygienic - Modular - Efficient

Basic facts

| | |
|------------------------|--|
| Norminal sizes: | Inch: 1.5" / 2" / 2.5" / 3" / 4" DIN: 40 / 50 / 65 / 80 / 100 |
| Radius of the bends: | Capable of passing 90° standard bends R= 1.5 x D |
| Multi-mode: | Manual, semi or fully automated |
| DMV pig pushing media: | e.g. product, water, air etc. |

Materials

| | |
|-------------------------------------|--|
| Inox parts in contact with product: | AISI 316L (1.4404 / 1.4435) |
| Other inox parts: | AISI 304 (1.4301) |
| O-ring seals: | EPDM, FKM (Viton®), FEP, other grades upon request |
| Shutter material: | PTFE, alternatively: PTFE+15% Peek , Tecapeek® |
| DMV lip pig: | Silicone with FDA compliance |

Surfaces

| | |
|--------------------------|---|
| In contact with product: | $R_a \leq R_a \leq 32 \mu\text{m}$ (0,8 μm) |
|--------------------------|---|

Range of Temperature

| | |
|-----------|-------------------------------------|
| Standard: | -13°F (-25°C) up to +230°F (+110°C) |
| Optional: | -13°F (-25°C) up to +302°F (+150°C) |

Pushing pressure DMV lip pig

Depending on product (viscosity) and length of the pipe work:
min. 14.5 psi - max. 145 psi (min. 1 bar - max. 10 bar)

Further option

3-A 101-00 and FDA compliance

Rentability

For ROI calculations please visit our website www.laufer-valve.com

Important note

LIAG® DMV pigs should only be used in pigging systems, which are designed for this type of pig. The supplier will not assume any kind of function warranty or product liability and no responsibility for any kind of damage to persons or property due to improper use.

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