

JAG MS pigging system



With the JAG MS pigging system, **JAG Jakob AG Prozesstechnik**, your partner for plant engineering and automation, has developed a flexible, modular solution for operation in open systems.

The JAG MS was designed specifically for complex applications in the pharmaceutical and chemicals industry, in biotechnology, and in the cosmetics, food and any other sectors that use pumpable products.

Benefits and features of the JAG MS pigging system

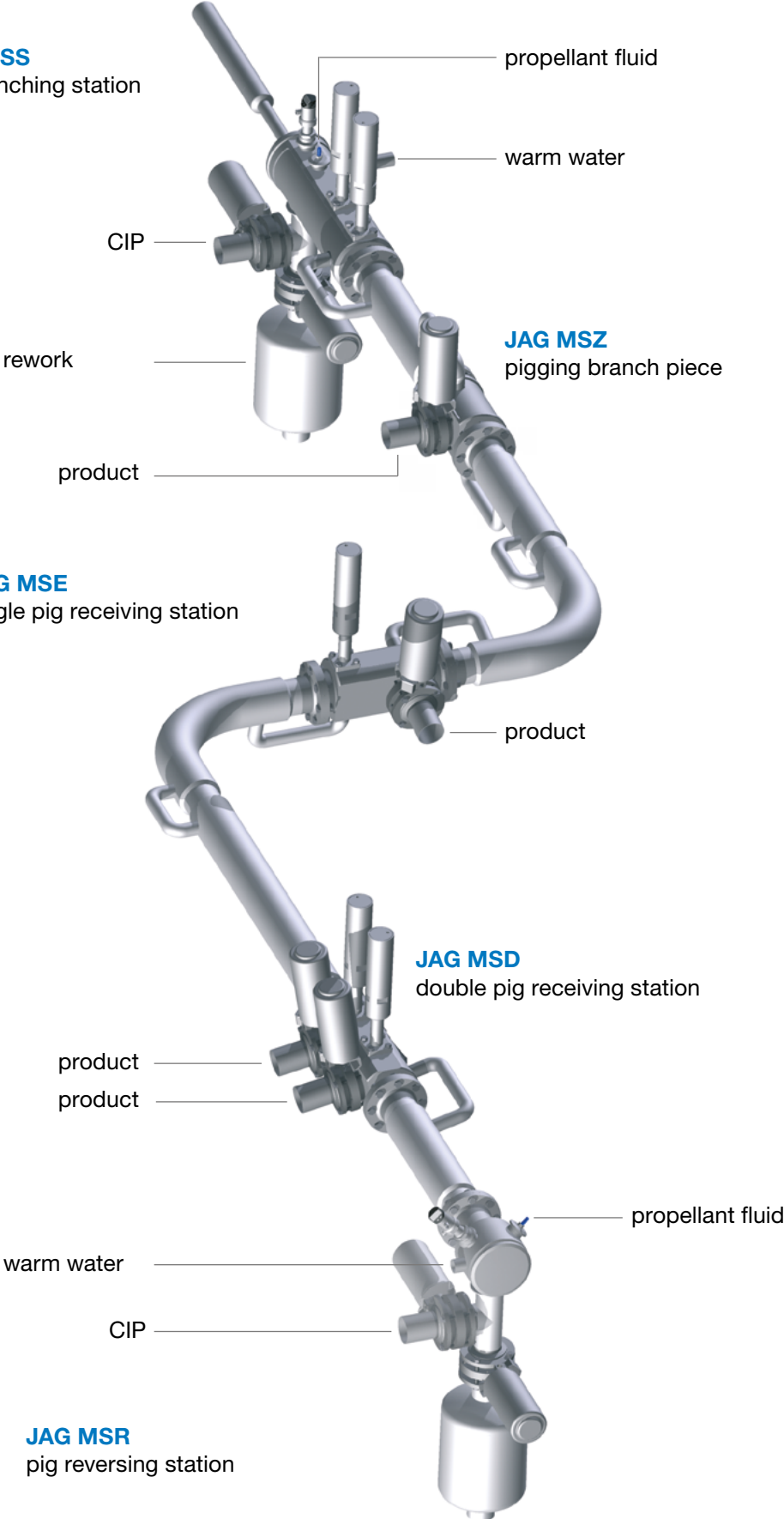
- JAG MS has been designed in accordance with hygienic principles and has no dead spaces that cannot be monitored.
- Dual-pig technology is used for path switching, while the system can be expanded with a third pig if required.
- The pigs are cleaned together with the pipeline in the launching station using a special cage structure, meaning that pigs do not need to be removed from the pipeline system for cleaning.
- The launching and reversing stations are fitted with connecting nozzles for rework recovery.
- JAG MS modules are available with or without integrated trace heating for hot water.
- Sturdy design and low-maintenance valve technology help reduce maintenance and investment costs.

The JAG MS pigging system is flexible in its composition

The JAG MS pigging system comprises five modules and the JAG MSK pigging control system, all of which can be flexibly combined with one another to suit customer requirements. Customisations, retrofits and enhancements are possible at any time as required.

JAG MSS

pig launching station



propellant fluid

warm water

CIP

rework

product

JAG MSZ

pigging branch piece

JAG MSE

single pig receiving station

product

JAG MSD

double pig receiving station

product

product

propellant fluid

warm water

CIP

JAG MSR

pig reversing station

An overview of the JAG MS pigging system

JAG MSK pigging control system

The JAG MSK pigging control system is based on the JAG PdiCS automation system, which operates the directional control valves, positions the pigs and sets the pigging speed, which is different for each product. Can be integrated flexibly into existing control solutions.

JAG MSE single pig receiving station



Acts like a set of points to catch pigs. The pig is caught in the receiving station, while on the rear side the product is diverted into a container or another pipeline.

JAG MSD double pig receiving station



The double receiving station can catch pigs in both directions, allowing both sides of the pigging pipeline to be used. The rear side is used to divert the product while a different product can be fed in on the front side.

JAG MSS pig launching station



The pig launching station is the first pipeline component in an open pigging system and is used to feed pigs into and back out of the pipelines. The JAG pig launching station can accommodate two pigs, which are held in place in a cage and cleaned automatically during the CIP process.

JAG MSZ pigging branch piece



Used to feed products into or out of an unpiggable pipeline.

JAG MSR pig reversing station



The pig reversing station is the final pipeline component in an open pigging system and returns the pigs back to the launching station once pigging is complete.

Technical data

Seals in contact with product	EPDM, PTFE
Product temperature range	5–65°C
CCIP/SIP suitability	85°C for 30 minutes
Dimensions	DN 50, DN 65, DN 80, DN 100
DN 100	316 L
Parts in contact with product	316 L
Pressure range	1.5 - 8 bar
Trace heating	5°C - 65°C
Pig propellant	air, water, CO2, N2
Pig	silicone, HNBR, Vulkocell, EPDM, Viton

Benefits of using pigging systems

- Increased productivity thanks to more efficient product changeovers
- Low-loss purging processes in pipeline systems for high-value or high-risk products
- Marked increase in productivity owing to low-intermix transfer of different products sent consecutively via the same pipeline system
- Reduced need for solvents for cleaning processes
- Less contaminated waste water, as solids can be recovered prior to CIP

Example from practice

Dual-pigging technology combined with pig receiving stations enables paths to be kept free without having to use valve mechanisms that are difficult to clean.

