Pigging system questionnaire

Information for the design of pigs and pigging systems

Please fill in what is known. You can leave unknown values blank or estimate them and mark them as estimates.

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1 Contact and project

Company

Contact person

Phone

Email

Plant location

Date

Project or plant

2 Task

Multiple answers possible

Type of project

- ☐ New pigging system
- ☐ Extension of an existing pigging system
- ☐ Conversion of a previously non-piggable line
- ☐ Replacement pigs or spare parts

What should the pigging system achieve?

- ☐ Recover product from the line
- ☐ Simplify product or batch changeovers
- ☐ Reduce flushing and cleaning effort
- ☐ Empty the line before shutdown or maintenance

Required scope of supply

- ☐ Pigs
- ☐ Pig to customer specification
- ☐ Launching and receiving station
- ☐ Piggable valves
- ☐ Pig diverters
- ☐ Control and pneumatics
- ☐ Complete pigging system

Preferred pigging system

- ☐ Open system (pig is removed at the destination)
- ☐ Closed system (pig remains in the line)
- ☐ Dual-pig system
- ☐ Not yet decided, please recommend

3 Product

Product or medium (name)

Number of products or grades

Viscosity mPa·s

Density kg/l

Product temperature min. / max. °C

Solids, particles, fibres (type, size)

Product characteristics

- ☐ adhesive or sticky
- ☐ abrasive
- ☐ chemically aggressive
- ☐ becomes viscous or solid when cooling
- ☐ foaming
- ☐ shear-sensitive

Special requirements

- ☐ Food contact
- ☐ Pharmaceutical (GMP)
- ☐ Cosmetics
- ☐ Potentially explosive area

Product value (for cost-effectiveness) €/kg

Current product loss per changeover, estimated kg or l

4 Pipeline

For several lines, please give details for each line or enclose a sketch.

Pipeline

☐ existing ☐ to be newly built ☐ already designed to be piggable

Pipe standard

Outside diameter × wall thickness mm

Pipe material, surface

Type of connection (welded, flanged, threaded)

Length from launching to receiving station m

Number of bends

Bend radius mm or × D

Difference in height, risers m

Number of sources and destinations

Fittings in the line (valves, branches, sight glasses, measuring points)

5 Operation

Flow rate m^3/h

Max. operating pressure bar

Pump (type)

Pig runs per day

Operating days per year

Shifts per day

Direction of pig travel

☐ one direction only ☐ outward and return run

Propellant

☐ Compressed air ☐ Nitrogen ☐ Product ☐ Water or flushing medium

Available propellant pressure bar

Installation (indoors, outdoors, space available)

6 Cleaning

Cleaning process

☐ CIP ☐ SIP or sterilisation ☐ Flushing with water ☐ manual or dismantled ☐ no cleaning

Cleaning media and concentration

Max. cleaning or sterilisation temperature °C

Cleaning frequency

Pig during cleaning

☐ remains in the line ☐ is removed beforehand ☐ not yet decided

7 Control and version

Mode of operation

☐ manual ☐ semi-automatic ☐ fully automatic

Pig detection insert

☐ without (OM) ☐ with pig detection insert (M) ☐ with encapsulated pig detection insert (MK) ☐ please recommend

Valve actuation

☐ Manual ☐ pneumatic ☐ electric

Existing control system (manufacturer, bus system)

Control voltage

Ex zone, if applicable

Required documentation (e.g. material certificates)

8 Documents and remarks

Enclosed documents

☐ Flow diagram ☐ Isometric drawing or sketch of the line ☐ Photos of the plant ☐ Drawing or sample of an existing pig

☐ Product data sheet

Required delivery date

Budget, if known

Remarks