


 Düsseldorf
 27/11–29/11/18

4
Pump Summit
4.1
Industrial pumps

- 4.1.1 Pumps and pumping systems
- 4.1.2 Centrifugal pumps
 - 4.1.2.1 Axial pumps
 - 4.1.2.2 Diagonal pumps
 - 4.1.2.3 Propeller pumps
 - 4.1.2.4 Semi-Axial pumps
 - 4.1.2.5 Canned pumps
 - 4.1.2.6 Vortex rotor pumps
- 4.1.3 Displacement pumps
 - 4.1.3.1 Piston pumps
 - 4.1.3.2 Thick material pumps
 - 4.1.3.3 Diaphragm pumps
 - 4.1.3.4 Piston diaphragm pumps
 - 4.1.3.5 Rotary displacement pumps
 - 4.1.3.6 Peristaltic pumps
 - 4.1.3.7 Screw pumps
 - 4.1.3.8 Twin screw pumps
 - 4.1.3.9 Displacement pumps
- 4.1.4 Vortex pumps
 - 4.1.4.1 Sewage pumps
 - 4.1.4.2 Chemical pumps
 - 4.1.4.3 Gas pumps
 - 4.1.4.4 Food pumps
 - 4.1.4.5 Slurry pumps
 - 4.1.4.6 Water pumps
- 4.1.5 Special types of pumps
 - 4.1.5.1 Jet pumps
 - 4.1.5.2 Vacuum pumps
 - 4.1.5.3 Propellant pumps
 - 4.1.5.4 Blocking vane pumps
 - 4.1.5.5 Molecular pumps
 - 4.1.5.6 Further pumps and pump components
- 4.1.6 Pumps according to application
 - 4.1.6.1 Construction pumps
 - 4.1.6.2 Dosing pumps
 - 4.1.6.3 Line pumps
 - 4.1.6.4 Drainage pumps
 - 4.1.6.5 Cellar drainage pumps
 - 4.1.6.6 Submersible pumps
 - 4.1.6.7 Submerged pumps
- 4.1.7 Pumps according to specification
 - 4.1.7.1 Seal-free pumps
 - 4.1.7.2 Stainless steel pumps
 - 4.1.7.3 Hygienic pumps

4.2
Fasteners

- 4.2.1 Piping
- 4.2.2 Couplings

4.3
Seals and Sealing Systems (Pumps & Fittings)

- 4.3.1 Seals
- 4.3.2 Mechanical seals
- 4.3.3 Pump seals
- 4.3.4 Hydrodynamic seals
- 4.3.5 Hermetic and magnetic sealing systems
- 4.3.6 Valve technology and actuator technology

4.4
Test, measurement and control technology for pumping systems

- 4.4.1 Test and analysis equipment
 - 4.4.1.1 Leak-detection
 - 4.4.1.2 Flowmeters
- 4.4.2 Drive technology for pumping systems
- 4.4.3 Control and control of devices and instruments
- 4.4.4 Measuring technology and tools
- 4.4.5 Dosing & Weighing

4.5
Services for the industry

- 4.5.1 Pump manufacturer
- 4.5.2 Pump Distributors
- 4.5.3 Pump suppliers
- 4.5.4 Pumps storage holder
- 4.5.5 Maintenance
 - 4.5.5.1 Pump repair
 - 4.5.5.2 Condition monitoring
 - 4.5.5.3 Maintenance and cleaning
- 4.5.6 Service providers for process automation systems
- 4.5.7 Testing and quality control
- 4.5.8 Pumps & Fittings Consulting
- 4.5.9 Software

4.6
Products for the pump industry

- 4.6.1 Castings
 - 4.6.1.1 Centrifugal casting
 - 4.6.1.2 Molding
 - 4.6.1.3 Investment casting
 - 4.6.1.4 Shell Mold Casting
- 4.6.2 Forgings
 - 4.6.2.1 Pump shafts
- 4.6.3 Components
 - 4.6.3.1 Impellers
 - 4.6.3.2 Idlers
 - 4.6.3.3 Transmission
 - 4.6.3.4 Plain bearing
 - 4.6.3.5 Pump housing (open / closed)
 - 4.6.3.6 Grand follower
 - 4.6.3.7 Pump cover
 - 4.6.3.8 Cutting
- 4.6.4 Materials and alloys
 - 4.6.4.1 Duplex
 - 4.6.4.2 Lean Duplex
 - 4.6.4.3 Super Duplex
 - 4.6.4.4 Ni-based materials
 - 4.6.4.5 Laboratory Services
 - 4.6.4.6 Advice on materials

4.7
Associations Publishers and Media (Pumps)

- 4.7.1 Associations
- 4.7.2 Magazines and websites