



JOHNSON PUMP
AN SPX BRAND

TopClean CS

Hygienic centrifugal pumps





TopClean CS



TopClean CS pumps have been designed mainly for hygienic applications within dairy, chocolate, food, brewery, biotechnology and pharmaceutical industries.

The high performance combined with low NPSH values gives both low life cycle cost and ideal solutions even for tricky applications.

High quality standard and modular construction gives a robust, reliable pump for a wide variety of industries and applications.

The ease of cleaning makes the pumps suitable for all kind of applications within the hygienic process industry but also for other segments such as chemicals.

CS range includes pumps that are certified according to 3.1B, FDA, 3A and EHEDG.



Processes and Products

Food

- **Dairies**
Skimmed milk, milk, butter milk, cheese milk, raw milk, cream, animal fats
- **Beverages**
Fruit juices, soft drinks, must, wine, beer, spirits, liqueur, sugar and syrup solutions, water, concentrates, malt, yeast
- **Foodstuffs**
Animal and vegetable oils and fats, soups, sauces, flavouring, brine, blood, water
- **Chocolate and sweets**
Milk products, oils and fats, sugar and syrups, flavouring, liqueur, spirits
- **Sugar**
Syrups, sugar solutions, invert sugar
- **CIP & SIP**
Sodium hydroxide, nitric acid, hot and cold water, other specific cleaning liquids

Pharmaceutical and Biotechnology

- Ultra filtration
- Reactors
- Tablets and coating
- Process filtration
- Special processes
- Vaccines
- Antibiotics

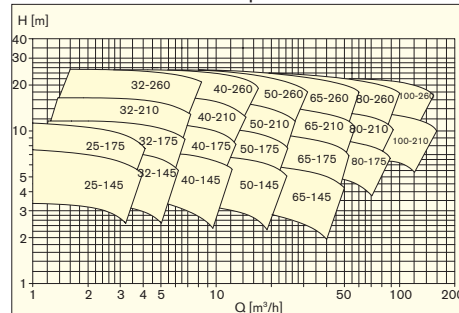
Typical pharmaceutical processes and products

- Sugar solutions, syrups
- Alcohols, solvents, acids
- Water; distilled, de-ionized industrial, emulsions, waste, salt
- Nutrient solutions, cellular suspensions, mixtures
- Extracts, enzymes, brine

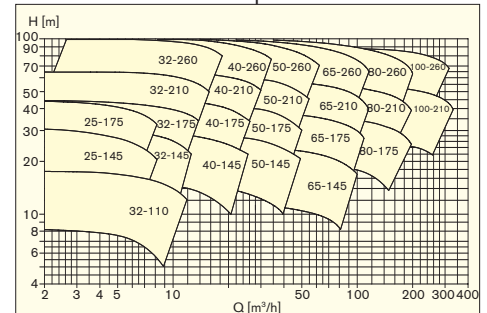


General performance

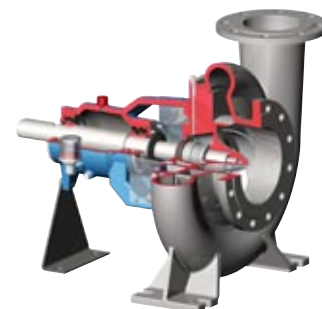
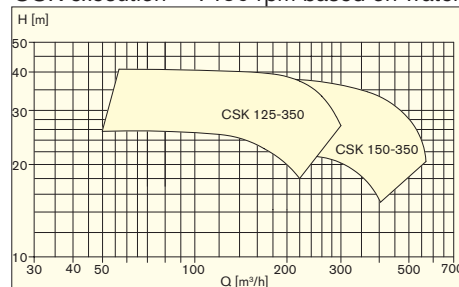
CS execution – 1450 rpm based on water



CS execution – 2900 rpm based on water



CSK execution – 1450 rpm based on water



Features and Benefits

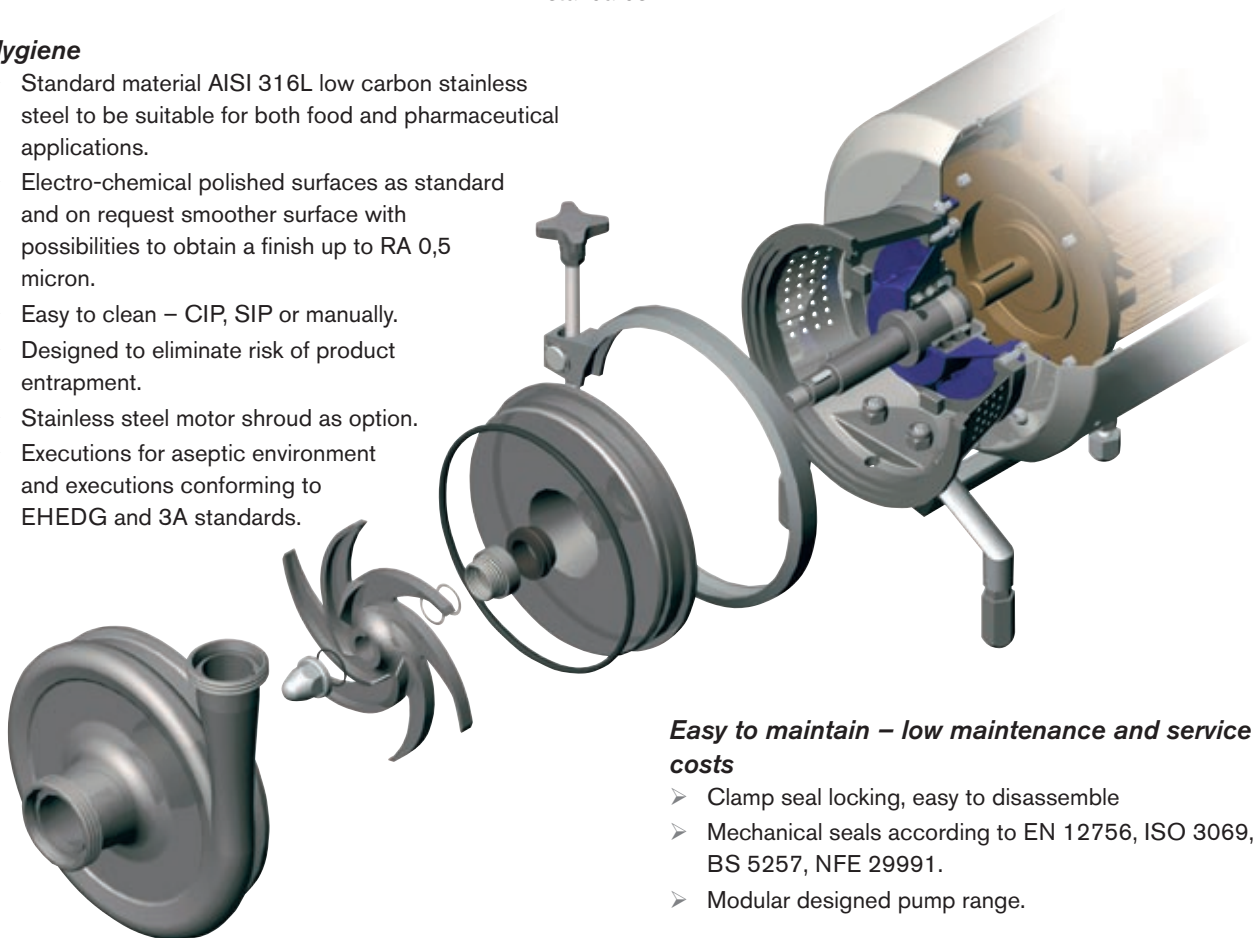


Trouble free operation and high performance

- Casings – Strong, robust and engineered with a material thickness of minimum 6 mm; investment casting.
- Open non-clogging impeller – Manufactured and balanced to close tolerances. Designed for high performance, high efficiency, low NPSH_{req} and a minimum of axial thrust on motor bearing.
- Wide range of mechanical seal options.
- Quick inspection and maintenance due to the clamp seal locking of the casing.
- Motors in compliance with international standards as IEC.
- Hygienic connections according to virtually all international standards.

Hygiene

- Standard material AISI 316L low carbon stainless steel to be suitable for both food and pharmaceutical applications.
- Electro-chemical polished surfaces as standard and on request smoother surface with possibilities to obtain a finish up to RA 0,5 micron.
- Easy to clean – CIP, SIP or manually.
- Designed to eliminate risk of product entrapment.
- Stainless steel motor shroud as option.
- Executions for aseptic environment and executions conforming to EHEDG and 3A standards.



Easy to maintain – low maintenance and service costs

- Clamp seal locking, easy to disassemble
- Mechanical seals according to EN 12756, ISO 3069, BS 5257, NFE 29991.
- Modular designed pump range.

Other options

- Wide range of mechanical seals – Single unbalanced, balanced, with quench or forced re-circulation, double mechanical seals for high pressure flushing and external mechanical seals.
- Heated casings or casing covers, casing drainage, inducers, stainless steel trolleys.
- Polished stainless steel motor shroud to protect the motor from water and dust.
- Explosion proof motors.
- Alternative materials on request; Sanicro 28/ Duplex Saf 2507 and Hastelloy C276.
- Extra support via additional bearing cases for certain sizes.



TopClean also includes a Hygienic, Self-priming Liquid Ring Pump, the AS-series. You are welcome to order the TopClean AS brochure or contact your Johnson Pump distributor for more information.