

New CPE – innovative pump for water applications

As a global leader in pump and agitator design and manufacture, Sulzer is recognized for delivering the excellent product quality and performance reliability required for a wide range of applications in the water industry. When planning new water treatment plants or upgrading existing ones, operating costs are as important as investment costs. Sulzer's new CPE ANSI pumps are specifically designed to exceed the strictest energy regulations for the water industry as well as the requirements of ASME B73.1. With revolutionary hydraulics and high efficiency, they offer the lowest life cycle costs.

Maximum efficiency

- The highest efficiency on the ANSI process pump market
- Exceeding U.S. Department of Energy (DOE) requirements for Pump Energy Index (PEI)
- Highest efficiency across the whole pump range, exceeding clearly the benchmark Pump Energy Index PEI 1.0

Design

The innovative design means higher efficiency that translates into lower energy consumption. Coupled with this, high standardization, easy installation and robust construction also equate to lower maintenance and operating costs.

Drinking water certified

CPE fits perfectly for all water applications, also fulfilling the highest standards related to drinking water applications. The CPE pump has NSF61 and NSF372 drinking water certification. The drinking water certificate is valid for Duplex stainless steel (ASTM A890 3A) CPE pumps equipped with an NSF-certified mechanical seal.



Main water applications

CPE pumps can meet the process requirements in a variety of water applications:

- Water treatment (inlet, flocculation and sedimentation, DAF, filtration, backwash, outlet)
- Water supply, distribution and boosting
- Desalination

CPE pump is NSF-certified for:

- Pump sizes up to 32-8
- Duplex material construction
- NSF-certified mechanical seal
- Standard threaded impeller fastening without additional impeller locking screw



Materials

Stainless steel design			Carbon, low-alloy cast steel, cast iron design		
Duplex steel	ASTM A890 3A (CD6MN) ASTM A890 5A (CE3MN)	41 4T	Ductile iron	ASTM A395 60-40-18	5H
Austenitic stainless steel	ASTM A743 (CN-7M)	43			
Martensitic	ASTM A747 (CB7Cu-2 H900)	4E			

Operating data

	60 Hz	50 Hz
Capacities	up to 7'000 USgpm	up to 1'650 m ³ /h
Heads	up to 900 ft.	up to 275 m
Pressures	up to 400 psi	up to 27.5 bar
Temperatures	up to 500°F	up to 260°C
Maximum speed of rotation	up to 3'600 rpm	up to 3'600 rpm

Highest efficiency across the whole pump range

Energy efficiency is a hot topic in all industries. Authorities worldwide are preparing regulations for that. The U.S. Department of Energy (DOE) has specified the Pump Energy Index (PEI) for clean water pumps, with the target of reducing energy consumption. From 2020, only pumps in the range of 1-200 HP, which satisfy the PEI requirements, may be sold.

PEI, the Pump Energy Index for clean water pumps, was set up to be ≤ 1.0 . The standard will remove the worst performing 25% of the pumps from the market. The CPE pump range is truly ahead of the game.

The CPE process pump range not only meets the criteria, but breaks all records by even reaching the PEI 0.77 values.

