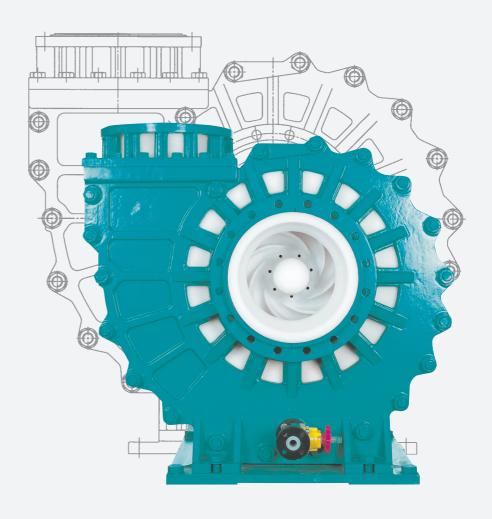
# Process Pump of Plastic Material Type Series SP







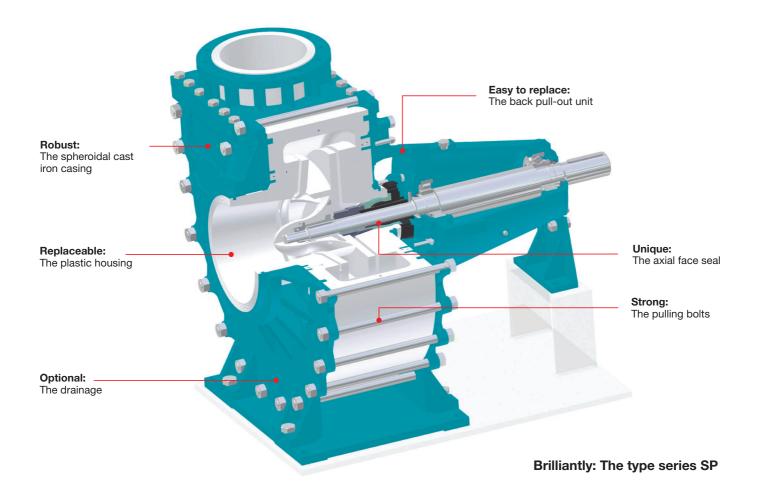


# **Process Pump of Plastic Material Type Series SP**

### **Large Flowrates**

When the maximum flow capability of standard chemical pumps has been reached, the SP heavy - duty process pump takes over. The SP is proven in handling aggressive and corrosive fluids at flowrates between 500 & 3000 m<sup>3</sup>/hr. The pump is pressure rated to PN10 (10 bar).

Throughout the world SP pumps operate at the heart of large process plants, e.g. in chlorine electrolysis transfer and flue gas cleaning.





#### Design

The casing of the SP is cast iron and the internals are solid UHMW-PE, which is suitable for fluid temperatures up to 90 °C. The pump casing absorbs the internal and external forces.

The pumps back pull-out unit can be removed for maintenance or repair without affecting the pipework or motor. The thick walled plastic internals can easily be replaced.

#### **Performance**

Very high flowrates and the optimum efficiencies are achieved by using closed metal impellers with front vanes and back vanes (Type E). WERNERT recommend 1.4464 material when pumping slurrys and 1.4517 material when handling liquids with a high chlorine content.

For fluids with pH values less than 4 we recommend closed plastic impellers manufactured for UHMW-PE with front vanes and back vanes (Type K).

#### **Shaft Sealing**

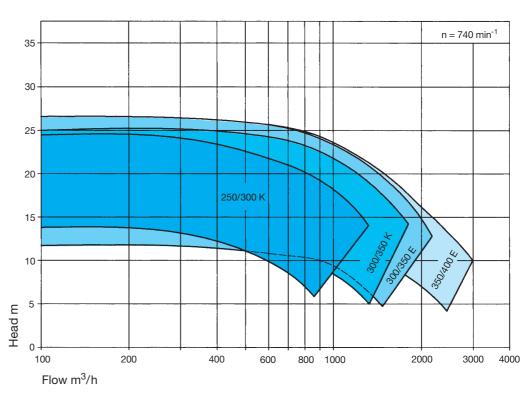
The WERNERT bellows type axial face seal is a unique simple design that has proved to be extremely reliable. It can be equipped with a quench and/or continuous flushing if required.

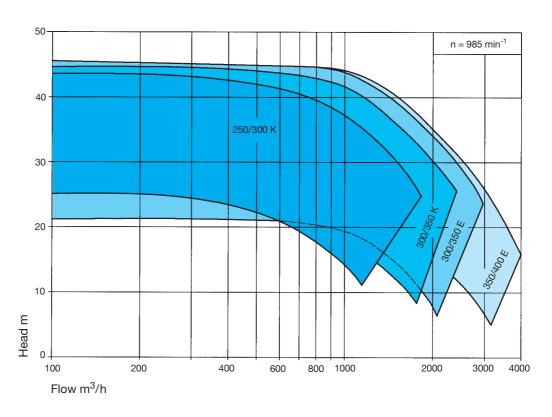
Various single and double mechanical seals, produced by leading manufacturers, are available for special applications.



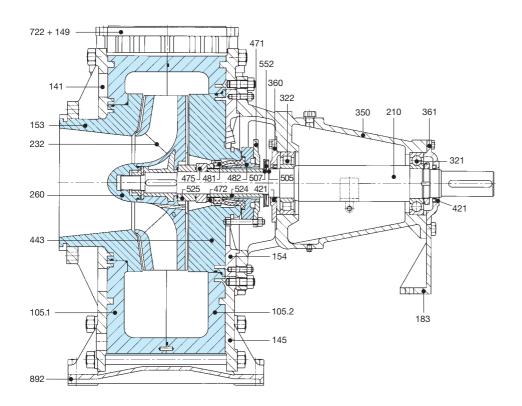


Special applications on request. We reserve the right to make technical modifications.





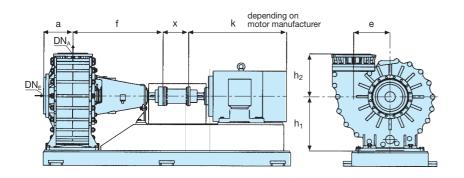




The type illustrated is a SP 300/350 K with closed plastic impeller. Only order spares according to the relevant parts list!

Part-No.	Designation				
105.1	Casing half				
105.2	Casing half				
141	Outer pump mantle				
145	Adaptor				
149	Diffuser				
153	Suction nozzle				
154	Intermediate plate				
183	Support foot				
210	Shaft				
232	Clockwise impeller				
260	Impeller hub cap				
321	Radial ball bearing				
322	Radial rollerbearing				
350	Bearing housing				
360	Bearing cover				
361	Bearing end cover				
421	Radial shaft seal ring				
443	Seal insert				
471	Seal cover				
472	Stationary seal ring				
475	Rotating seal ring				
481	Bellows				
482	Bellows seat				
505	Loose collar				
507	Thrower				
524	Shaft wearing sleeve				
525	Spacer sleeve				
552	Spanner				
722	Taper piece, flanged				
892	Pump foot plate				

## **Dimensions table**



		PN 1								
	Typ SP	$DN_E$	$DN_{A}$	а	е	f	$h_1$	$h_2$	Χ	
	250/300 K	300	250	324	350	1007	530	509	250	
	300/350 K	350	300	345	430	1057	650	509	300	
	300/350 E	350	300	345	430	1057	650	509	300	
	350/400 E	400*	350*	345	430	1057	650	509	300	
1	* Flanges PN 10 ** alternatively PN 10									

