



Criteria	SOMA SINUS SODIAL® Sinus Pump	Progressive Cavity Pump (PCP)
Design	1 sinus rotor and 1 seal → less wear parts, lower spare part costs	Rotor-stator design, complex, multiple seals, long construction
Maintenance effort	Very low, maintenance within minutes, clear design	Complex rotor and stator replacement, time-consuming
Maintenance execution	Simple, possible by in-house personnel	Often requires skilled personnel and special tools
Product handling	Almost shear-free, no crushing → ideal for sensitive products	Crushing due to rotor-stator contact possible, product damage more likely
Handling of solids	Excellent up to 80 mm, without damage	Limited suitability for large solids
Pulsation	Almost pulsation-free, very uniform product flow	Pulsation depends on rotor/stator geometry, pressure fluctuations possible
Foaming	None, gentle continuous flow without shear forces	Foaming possible due to friction in rotor-stator system
Energy efficiency	Up to 50% less energy demand, especially with highly viscous media	Higher energy demand, especially with highly viscous media or high pressure
Viscosity range	Very wide, from 1 cps to 9,000,000 cps	Typically up to 200,000 cps, in special versions up to approx. 1,000,000 cps
Self-priming	Reliable, even with air inclusions	Problems with air inclusions, efficiency decreases
Design / Length	Compact SCN-D monobloc series, approx. 1 m total length	Very long construction (often > 2–3 m), high space requirement
Stainless steel execution	Standard: completely in stainless steel incl. bearing housing, no painted parts	Many painted parts, risk of paint flaking and corrosion