



# Special Materials For Aggressive Chemicals

**seepex** specializes in a wide range of options and materials to handle particularly aggressive chemicals. **seepex** metering and dosing pumps are



**seepex metering pump for aggressive liquids. Pump body construction is HDPE.**

normally constructed of stainless steel. They are also available with plastic (HDPE) bodies. These pumps have NPT connections. Metal-flanged connections are also available. They can then be coated, internally and externally, with Halar®. This material from Ausimont has the same chemical resistance as Teflon®, and is very tough, resisting abrasion and impacts.

These aggressive chemical pumps are available with a variety of rotating parts. Titanium, most widely used, is a versatile metal with good corrosion- and abrasion- resistance. The most common application for titanium is handling sodium and calcium hypochlorite. **seepex** has over ten years of experience with these aggressive compounds, commonly used for sterilization of drinking and swimming pool water.

**seepex** pumps are also available with duplex stainless steel and Hastelloy C4 metal internals. The duplex steel is excellent for brine or bleaching applications. It has been used extensively in the power generation, petroleum and paper industries. Hastelloy is resistant to a wide range of oxidizing chemicals, including hydrochloric and sulfuric acid.

**seepex** also offers pumps with rotating internals constructed of Kynar®. This PVDF material from Elf Atochem is very resistant to a variety of chemicals but can be damaged by



**Flanged pumps can be coated with Halar®. Castings are either grey iron or stainless steel.**

chemicals that have no lubricating properties. The lower melting point of Kynar® makes it more vulnerable to damage from dry running or non-lubricating liquids than pumps with metal rotors. Kynar® cannot be used on hypochlorite or most acids or even water, at speeds below 100 RPM,



**Halar®coated BN pump**

because of its low melting point, even though it is often listed as “compatible” with many of these chemicals.

Pumps with metal shafts can be supplied with a variety of internal seals, as well as packing, single external seals and double internal seals. While seal selection is, generally, a matter of customer discretion, **seepex** recommends only solid silicon carbide or ceramic faces for use with sodium hypochlorite.

Selection of the correct combination of materials is critical to any successful pump installation. **seepex** offers sample discs of elastomers, metals and plastic, at no charge, so that customers can satisfy themselves that they are getting the correct material selection.

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