

Liquiflo **POLY-GUARD™** SERIES Polymer-Lined Stainless Steel Gear Pump

The **Ultimate Solution** for Pumping **Corrosive Chemicals**

Combines the chemical resistance of Fluoro-Polymer with the strength of Stainless Steel

THE TOUGHEST EXTERIOR

An extremely durable 300-Series Stainless Steel body clearly sets the Poly-Guard™ apart from all other plastic pumps. Its strong and chemically resistant body truly makes the Poly-Guard™ the perfect match for harsh industrial environments.

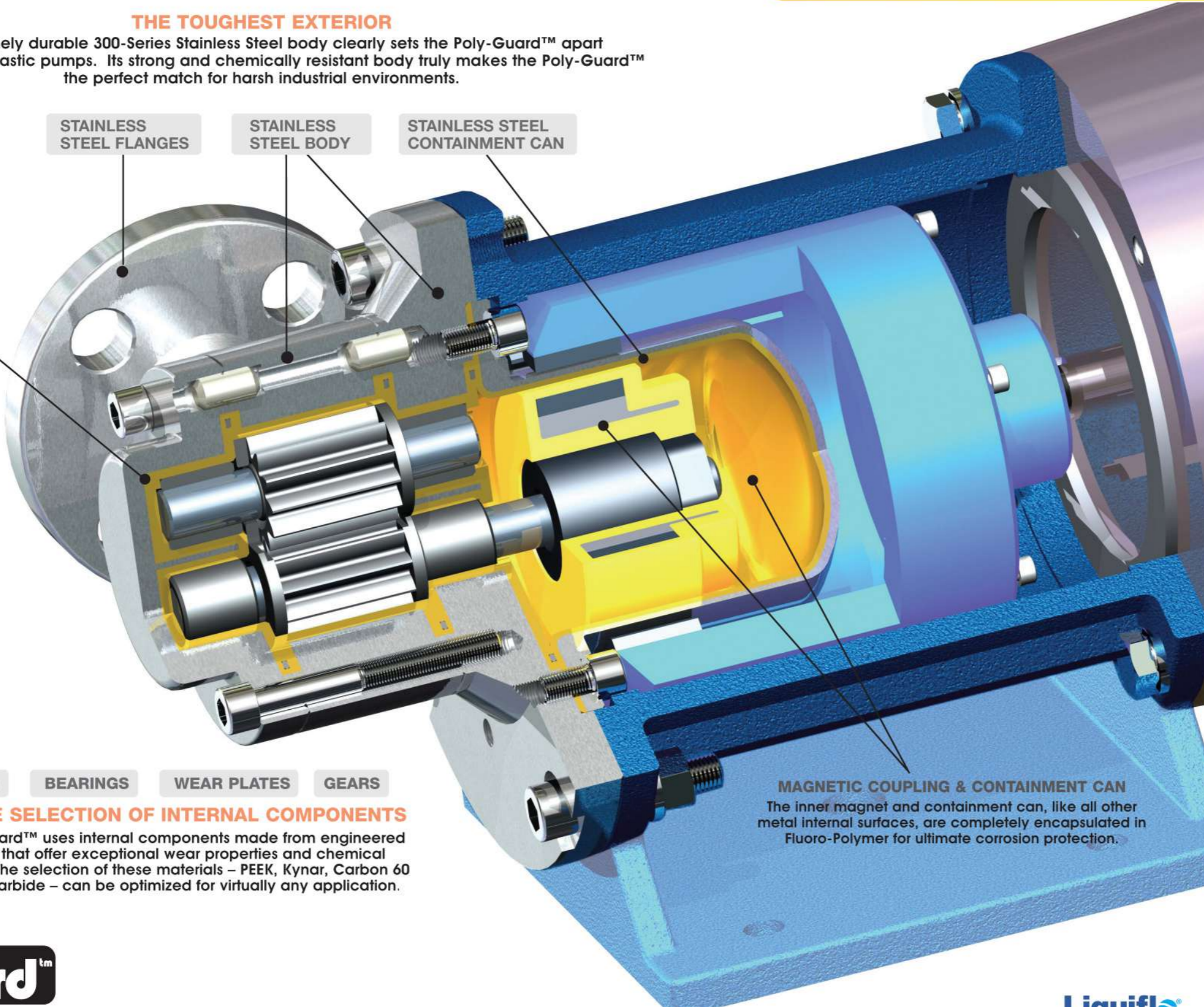
STAINLESS STEEL FLANGES STAINLESS STEEL BODY STAINLESS STEEL CONTAINMENT CAN

THE MOST CHEMICALLY RESISTANT INTERIOR

Fluoro-Polymer Plastic Lining resists the most corrosive chemicals

All inside surfaces contain a molded layer of Fluoro-Polymer – the most chemically resistant of all plastics. This layer (shown in gold) is molded, mechanically fastened and chemically bonded to the Stainless Steel outer casing; then precision-machined to close tolerances.

This combination of the toughest exterior and the most chemically resistant interior is the ultimate solution for your most difficult pumping applications.



THE FLUORO-POLYMER LINER

The interior walls of the Stainless Steel housing are encased with perfluoroalkoxy plastic, which is a type of Fluoro-Polymer commonly known by its acronym, PFA. PFA was chosen because it's the most chemically resistant of all moldable plastics. In the Poly-Guard™ design, the PFA is supported by the Stainless Steel housing; therefore, no additional reinforcements (such as fiber fillers which are necessary to strengthen an all plastic pump) are needed. In fiber reinforced plastic pumps, these fillers can significantly reduce the chemical resistance of the plastic and potentially allow wicking of the chemical along the fiber matrix.

INTERNAL COMPONENTS

The Poly-Guard™ pump is offered with a wide selection of materials for its internal components. With Liquiflo's many years of experience in pumping extremely difficult chemicals, we can maximize the performance and reliability of the Poly-Guard™ for virtually any application. In several applications, by optimizing component selection, Liquiflo has exceeded 40,000 hours of MTBR (mean time between replacement).

SHAFTS Self-Sintered Silicon Carbide (SiC) for extreme wear resistance and chemical resistance.

BEARINGS Silicon Carbide Bearings for extreme life and wear resistance, or Carbon 60 Bearings for flexibility and dry-running capability.

GEARS Choice of PEEK or Kynar Gears to optimize performance for chemical applications.



CONTAINMENT CAN

The standard containment can material is PTFE-Lined Stainless Steel, which provides both extreme chemical resistance and high-pressure capability.

SHAFTS BEARINGS WEAR PLATES GEARS

FLEXIBLE SELECTION OF INTERNAL COMPONENTS

The Poly-Guard™ uses internal components made from engineered materials that offer exceptional wear properties and chemical resistance. The selection of these materials – PEEK, Kynar, Carbon 60 or Silicon Carbide – can be optimized for virtually any application.

MAGNETIC COUPLING & CONTAINMENT CAN

The inner magnet and containment can, like all other metal internal surfaces, are completely encapsulated in Fluoro-Polymer for ultimate corrosion protection.

REPAIR KITS

These pumps are extremely simple to repair and maintain. Either individual parts or complete repair kits that contain all internal components are available to economically rebuild the pump to like-new condition.

