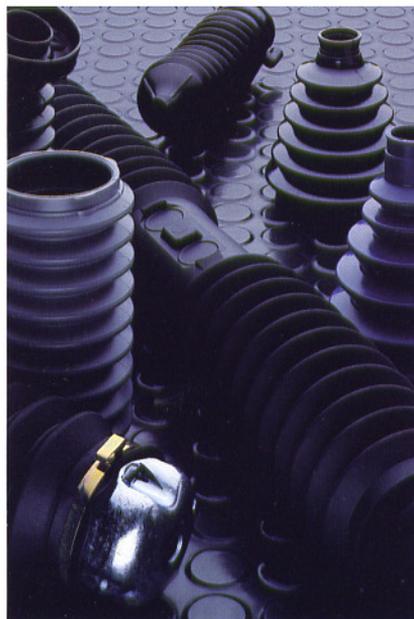


## O-RINGS

Compression and injection molded O-rings, produced from fourteen polymer families including silicones, fluoroelastomers and acrylates, provide physical, mechanical and chemical properties for virtually any application requirement. See the WPI O-ring Handbook for more information.

The best manufacturing method for each project is selected from a range of new, proprietary, compression molding techniques and state-of-the-art injection molding processes. Computer controlled molding produces products with superior properties.



## COMPOSITE GASKETS

Composite gaskets reduce leakage, minimize torque-induced stress and compensate for looser mating-surface tolerances. At the same time, they increase assembly speed and offer automation opportunities. Materials vary by application but normally consist of elastomeric sealing elements molded onto both sides of rigid, reinforced thermoplastic carriers.

## BOOTS

Thermoset injection molding and thermoplastic blow molding provide boots and other complex hollow shapes with highly accurate inside and outside dimensions. Functional product testing assures superior performance and durability.

A wide range of materials are available, including neoprene, silicone, Vamac<sup>®</sup> Rubber, Hytel<sup>®</sup>, Santoprene<sup>®</sup> and Geolast<sup>®</sup> thermoplastics, as well as proprietary WPI compounds.

Typical applications include boots for CV joints, rack and pinion steering assemblies, engine air intakes, shift levers, struts and shocks.

Vamac and Hytel are registered trademarks of E.I. Du Pont de Nemours, Inc. Santoprene and Geolast are registered trademarks of Monsanto Chemical Company.

## ENGINEERED SEALS

Equipment that includes some of the largest compression molding presses in the industry allows production of custom engineered seals in a wide variety of sizes. A range of thermoset materials may be specified to meet nearly any application requirement.

Prototype capabilities as well as functional testing provide necessary preproduction data.

Product and mold design and engineering services assure efficient translation of concepts into functional products.



## V-SEALS

In rotary shaft sealing applications, V-seals minimize power loss and design complexity while simplifying bearing replacement. These economical seals are ideal for protecting or totally eliminating more sensitive metal-clad seals and spring loaded radial seals. See the WPI V-Seal Handbook for more information.

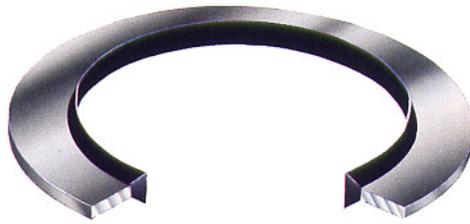


## DIAPHRAGMS

Diaphragms, custom produced in virtually any shape or size from ¼" to 20", are ideal for eliminating blow-by leakage, maintaining undegraded pressure differentials and preventing intercontamination of dissimilar fluids. In precision instruments or actuators, they are highly sensitive to minute pressure changes due to their excellent repeatability and negligible hysteresis and breakaway friction.

A variety of base fabrics and impregnated elastomers may be combined to provide resistance to corrosive fluids at pressures from vacuum to 2,000 psi, at temperatures from -120°F to +600°F.

Parts die-cut from double elastomer-coated aluminum can be produced when fabric-based diaphragms do not meet application requirements.



One-piece Dyna-Seal® fastener seals provide dependable sealing around bolts, rivets, plugs and union joints under gas or liquid pressure.

## BONDED METAL/RUBBER/ PLASTIC PRODUCTS

A wide selection of natural and synthetic elastomers, bonded to aluminum, brass, bronze, steel, stainless steel and other metals, provide high quality poppets, face seals and other custom composite parts. Proprietary bonding methods and equipment, plus extensive experience specifying materials and adhesives, assure dimensional accuracy as well as firm bonds.



## BLAK MAX™ ROD SEALS

Blak Max rod seals provide a broad sealing column for maximum lip interference and for secure low pressure sealability. Each seal consists of a symmetrical U-cup that locks in a nitrile O-ring expander.



## PISTON SEALS & WEAR RINGS

WPI's Chem-Cast™ piston seals and wear rings provide flawless sealing at temperatures over 300°F and pressures exceeding 50,000 psi. At the same time, they eliminate hydraulic piston drift, cold flow and metal-to-metal contact. Each seal consists of a self-lubricating, reinforced, heat-stabilized thermoplastic OD sealing ring and an oval elastomeric back-up ring. Wear rings increase cylinder effectiveness and compensate for misalignment while supporting, guiding and reducing friction.



## PISTON CUPS AND U-CUPS

WPI piston cups feature tough yet flexible lips to assure sealability at varying pressures. U-cups are available for both large hydraulic presses and low pressure hydraulic and pneumatic rod and piston assemblies.



## SHAFT SEALS

Rotary shaft seals range from basic non-sprung grease seals to intricate multi-component unitized sprung lip seals. Careful design and material specification based on application demands assure long, leak-free sealing of lubricants in hydraulic equipment and other mechanical devices.

