

SPX DuCoNite®

NEW

Chemical Duty Hose Pumps

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Providing

**Ultimate
Corrosion
Protection**



SPX DuCoNite® with hi-tech surface treatment. Handling even more liquids.

Customers around the world rely on low maintenance SPX hose pumps to meter the most aggressive caustic and corrosive chemicals imaginable. SPX hose pumps are ideal for such applications because the fluid touches nothing but the inside of the hose element; there are no wetted seals or ball checks to clog or replace. Because these applications often take the pump into the nastiest of atmospheres, Watson-Marlow Bredel has developed the SPX **DuCoNite®** pump, bringing ultimate corrosion resistance to the pump itself, protecting it from chemical spills and corrosive atmospheres. **DuCoNite®** protection - one more way Watson-Marlow Bredel Pumps deliver . . . *Value for life*



WATER TREATMENT AND
WASTEWATER INDUSTRY



FOOD INDUSTRY



CHEMICAL INDUSTRY

The DuCoNite® Advantage

SPX hose pumps require minimal maintenance; to completely rebuild an SPX simply change the hose element. When protecting the pump is still a concern, the SPX **DuCoNite®** pump gives you the added advantage:

- “Beyond the hose” protection against common water and waste water treatment chemicals
- Paint-free pump housing perfect for wash-down in the food industry
- Available in SPX10, SPX15, SPX25, and SPX32 pumps for metering and transfer



ENGINEERED SIMPLICITY

The pumping action results from alternately compressing and relaxing a machined hose pump element between the pump housing and the compressing shoes. The fluid ahead of the shoe is pushed towards the discharge, while the rebounding pump element behind the shoe draws more fluid in. Due to 100% compression at all times, the pump does not slip, providing very high metering accuracy and pressure performance. The absence of pump seals, seats or valves, means that abrasive slurries are no problem. Because the liquid only makes contact with the inner wall of the hose pump element, the pump is perfect for aggressive products.

THE PERFECT PUMP FOR:

- Corrosives
- Abrasives
- Shear sensitive liquids
- High viscosity liquids
- High density liquids
- Large solids
- Metering ($\pm 1\%$ accuracy)

FEATURES:

- Self priming
- Dry running
- Reversible
- No metal to metal product contact
- Liquid contained within the hose pump element
- Easy maintenance, low cost, short down time

**WATSON
MARLOW** PUMPS
Bredel

DuCoNite® Chemical Duty Protection

Developed and tested by Watson-Marlow Bredel in conjunction with expert metallurgists, **DuCoNite®** is a three step metallic surface treatment process with proven excellent chemical resistance to a myriad of chemicals, including many of the common aggressive fluids pumped by hose pumps around the globe:

Chemical	Concentration	Fluid Temp	Resistance
Sodium Hypochlorite	up to 18%	70-122 F	A
Sodium Bisulfite	38%	70-122 F	A
Ferric Chloride	up to 50%	70-122 F	A
Ferrous Chloride	35%	70-122 F	A
Alum	50%	70-122 F	A
Hydrofluosilicic Acid	18-24%	70-122 F	B
Sodium Hydroxide	20-50%	70-122 F	A
Potassium Permanganate	50%	70-122 F	A
Aqueous Ammonia	20%	70-122 F	B
Sulfuric Acid	93-97%	70-122 F	A
Citric Acid	50%	70-122 F	A
Zincorthophosphate	25%	70-122 F	A
Phosphoric Acid	50%	70-122 F	A
Nitric Acid	25%	70-122 F	A

For additional chemical compatibility information, contact Watson-Marlow Bredel.

SPX DuCoNite® - An Engineered Solution

In the past, hose pump corrosion protection was achieved by applying a thick coating of epoxy or fluoropolymer (Halar) to inside of the pump. To effectively protect the pump against chemical attack, coating manufacturers recommend a thick application layer, which causes two problems; Pump components now require special machining to maintain proper critical tolerances, adding cost to an already expensive solution. Some manufacturers try to avoid this machining step by applying the coating thinner than recommended, creating inferior corrosion protection. Further, thick coatings inside a hose pump are prone to cracking and chipping which is not ideal when handling aggressive chemicals! With the all-new SPX **DuCoNite®** pump, Watson-Marlow Bredel offers an engineered chemical duty protection system that exceeds the performance of a basic coating:

- Chemical Duty **DuCoNite®** metallic surface treatment of the cast iron pump housing, cover, rotor and bearing housing
- Clear PVC sight window, PVC drain plug and vent port with no metallic threads
- All titanium internal hardware
- Epoxy pressing shoes with titanium bolt threads and shims (SPX25 and SPX32)
- Viton bearing hosing seal
- EPDM cover, port, and window seals
- 316SS external hardware, flanges, brackets, hose clamps and support frame
- Wetted flange inserts of 316 Stainless Steel, Polypropylene or PVC
- Optional hose leak/high lubricant level sensor
- The SPX **DuCoNite®** Pump is a standard Watson-Marlow Bredel product with spare parts readily available

Watson-Marlow Bredel ...
Value for life

Watson-Marlow Bredel Pumps

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