

MATERIAL LISTING & EXPECTED LIFE OF CONSUMABLES

All metal parts in contact with the product being processed are 316 / 316L Stainless Steel, F51 Duplex Stainless Steel or equivalent. These are the industry standards for the construction of equipment used in the manufacture of food, drug and medical related products.

All Jets (orifice) are made from 316L Stainless Steel.

All High-Pressure Seals are made from F51 Duplex Stainless Steel, PEEK450G (polyetheretherketone), GLFPTFE and EPDM O-Ring.

All sliding seals are GLFPTFE.

All rubber O rings are EPDM chosen for use with steam (*FDA on request).

^{*}Properties and chemical resistance information are detailed below.

| Part Number | Consumable Item | Material | Recommended Change (Cycles) | Machine Type |
|-------------|---|---|--------------------------------|-------------------------------|
| BOF00073 | 40KPSI One Shot Cup O-Ring | EPDM 70 Shore | 500 | One Shot |
| DRG01221 | 40KPSI HP Cylinder | F51 Duplex St / St | 50,000 | One Shot |
| DRG01110 | 40KPSI One Shot Target | 316L St / St EPDM 70 Shore | 30,000 | One Shot |
| DRG01742 | 40KPSI One Shot O-Ring Kit | EPDM 70 Shore | Change During Every Service | One Shot |
| DRG02701 | 40KPSI HP Seal | F51 Duplex St / St PEEK450G GFPTFE | 10,000 | One Shot / Continuous Flow |
| BOF03002 | 0.18mm Orifice Jet | 316L St / St | 50,000 | One Shot / Continuous Flow |
| DRG02855 | 40KPSI Inlet Valve (Long Life) | F51 Duplex St / St PEEK450G EPDM 70 Shore | 20,000 (Re-Lap) | Continuous Flow |
| BOF00073 | 40KPSI Inlet Valve O-Ring (Long Life) | EPDM 70 Shore | 50,000 | Continuous Flow |
| DRG02862 | 40KPSI Inlet Valve Peek Ring | PEEK450G | 50,000 | Continuous Flow |



| Part Number | Consumable Item | Material | Recommended Change (Cycles) | Machine Type |
|-------------|---|--|--------------------------------|-----------------------------------|
| BOF01599 | 40KPSI Inlet Valve Spiro lox Ring (Long Life) | 316 St / St | 100,000 | Continuous Flow |
| BOF00073 | 40KPSI Inlet Valve O-Ring | EPDM 70 Shore | 2,500 | Continuous Flow |
| DRG02781 | Target (Carbide) | 316L St / St Carbide EPDM 70 Shore | 100,000 | Continuous Flow |
| DRG02950 | Solid Target | 316L St / St EPDM 70 Shore | 30,000 | B/C Continuous Flow |
| DRG02687 | 40KPSI HP Cylinder | F51 Duplex St / St | 50,000 | Continuous Flow |
| DRG01744 | 40KPSI TS O-Ring Kit | EPDM 70 Shore | Change During Every Service | Continuous Flow |
| DRG02920 | 40KPSI TS O-Ring Kit | EPDM 70 Shore | Change During Every Service | Continuous Flow SN1030 Onwards |

Due to our policy of continuous development, we reserve the right to change technical specifications without notice.

PEEK SPECIFICATIONS

PEEK is extremely resistant to a very wide range of organic and inorganic liquids and exhibits good retention of mechanical properties after long term exposure. Its only common solvent is concentrated sulphuric acid. (See table).

At high temperature PEEK is affect to some extent by strong acids and alkalis, including sulphuric acid, sodium hydroxide and ammonia. Organic reagents which have a significant effect at high temperature on weight, dimensions and mechanical properties are methyl ethyl ketone and nitrobenzene. The effect of strong alkalis is more pronounced on PEEK GF30 than on virgin PEEK. PEEK-BG on its turn is more chemically resistant than either PEEK or PEEK GF30.

Exceptional hydrolysis resistance is also one of the key features of PEEK. The material will even withstand exposure to pressurised hot water and steam up to temperatures as high as 250°C. A 200-day exposure to boiling water for instance will leave PEEK completely unaffected. In respect of sterilisation resistance, PEEK outperforms the amorphous high-performance plastics PEI, PES and PSU, three materials renowned for their excellent hydrolysis resistance.