

The Future For Chemical Milling And The Environment

Spraylat International Ltd's Managing Director Andrew Keir discusses Protectapeel Hydromask - the environmentally friendly and safer maskants for the chemical milling industry.

WHY WAS PROTECTAPEEL HYDROMASK NEEDED?

Five years ago we spotted an opportunity and gap in the market to develop an environmentally friendly product that is safe yet provides excellent etch properties. At the time the liquid maskant market was dominated by solvent-based or two-pack (2K) products that were either dangerous to use, would damage the planet or pose a potential health risk to the operators, many of the two-packs are formulated with isocyanates.



WERE THERE ANY PROBLEMS?

The development work and testing required to produce a full range of water-based maskants has taken us some time, in fact, far longer than expected! We knew that we had to move away from the old technology and produce either a water-borne material or maybe an Ultra Violet (UV) product that cured instantly. Whilst Protectapeel Hydromask is safe, kind to the planet and provides excellent etch properties the slower drying time made our system unattractive to the chemical millers. That was until we linked up with Process Technology who had just secured a patent for their new microwave technology.

HOW HAVE PROCESS TECHNOLOGY HELPED?

Process Technology now produce a range of bespoke microwave dryers, suitable for metal parts that reduce drying time by 80% and use 80% less energy than gas fired or electrical ovens. The microwave dries the maskant in less than 10 minutes, and unlike ovens, which are constantly consuming energy, the microwave only uses power whilst the object is in the dryer. Now chemical milling companies around the world can use Protectapeel Hydromask to dramatically enhance their environmental credentials, improve the safety of their plant and employees and reduce processing time.

HOW DOES PROTECTAPEEL HYDROMASK WORK?

Protectapeel is a liquid applied, temporary maskant that is easily applied by spray, dip or roller and are suitable for most metals including titanium and aluminium. Once dry the maskant forms a skin tight bond with the surface, providing protection from most etchants. Protectapeel Hydromask allows detailed and specific areas to be chemically milled immediately and precisely, when required Protectapeel maskants are simply removed by hand peeling, revealing precisely etched surfaces.



Protection From A Range Of Etchants



Ensuring Precisely Etched Surfaces