



PORT PLASTICS

Semiconductor



BRIDGING THE GAP BETWEEN SEMICONDUCTOR & PLASTICS

It is critical to understand where machined plastics are used within the overall Semiconductor Industry from a top level perspective. However, in order to determine the optimum material to select for an application, market segmentation is needed. Think in terms of the automotive market, plastic materials used for interior applications have different requirements than materials used for under the hood or exterior weather able materials. Though not as relatable, the Semiconductor industry has obvious segmentations for plastic materials as well. It is important to segment markets into areas which deal with similar requirements in order to manage portfolios associated with that specific segment. In this way, trends can be understood for overall segments and value added portfolios can be developed for engineers to select from based on their applications unique needs. A Wet Process tool designer does not have the same concerns for material selection as a Back End Test socket designer and those concerns are changing with the market.

That said, from Port Plastics perspective, there are six distinct segments from which we need to offer the market a portfolio of cutting edge plastic portfolios:

WET PROCESS Materials for both structural & components that need to withstand aggressive chemistries, while delivering purity, weld-ability, dimensional stability and flame resistance.

CMP A market of its own, CMP applications have unique requirements given the extreme nature of the applications

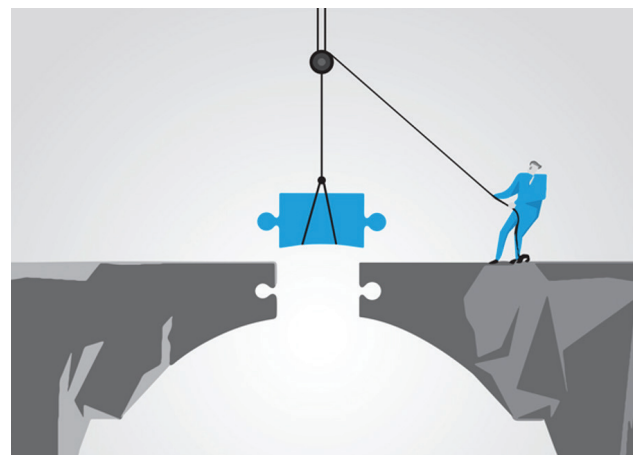
IN CHAMBER These applications often need to withstand plasma, harsh environments, clean cycles all within a vacuum chamber. Ionic purity, resistance to fluorine, oxygen and fluorinated plasmas is commonly required

DRY ENVIRONMENT These materials need to perform a specific function within a dry environment such as Electro Static Discharge (ESd) or insulation.

INFRASTRUCTURE Clean rooms, process tool skins, windows... these materials are used throughout the Semiconductor industry especially in clean room structures often designed to protect the fab from smoke and fire damage.

BACK END TEST No segment is more effected by the constant miniaturization than Back End Test, drilling smaller and smaller holes yet requiring increasing dimensional stability creates a challenge to say the least.

PORTPLASTICS UNDERSTANDS THE UNIQUE NEEDS AND DIRECTION OF THE SEMICONDUCTOR INDUSTRY IN TERMS OF MACHINABLE PLASTICS, WE "BRIDGE THE GAP" BY PROVIDING UNMATCHED INDUSTRY KNOWLEDGE TO OUR CUSTOMERS.



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