

# SEMICONDUCTOR

Semiconductor manufacturing involves harsh chemicals, exacting high purity requirements and resistance to electrical shock, as well as cost effectiveness.

## APPLICATIONS

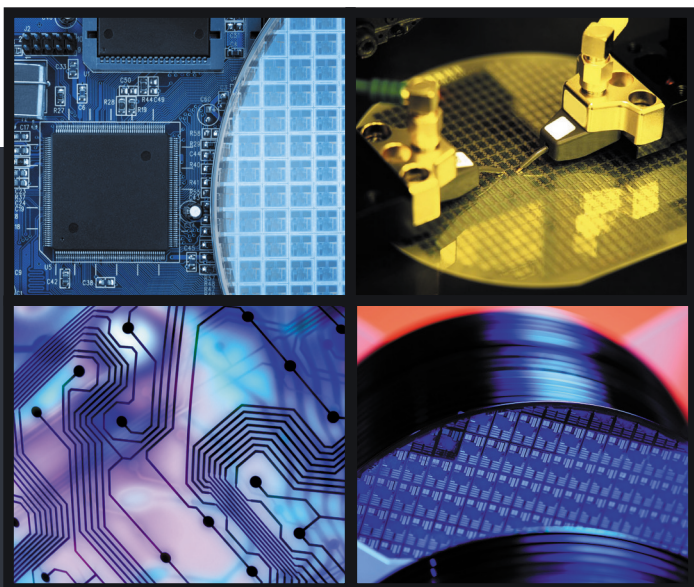
- Tanks (water, chemical, fuel)
- Semiconductor device test sockets
- Circuit boards
- High temperature components
- Integrated circuit chip carriers
- High-purity piping systems
- Semiconductor trays and boxes
- Electrical insulators
- Chemical tanks
- Piping components such as valves, fittings, pipe and tubing, filtration elements
- Wafer handling parts
- Wet benches and work stations
- Microelectronics
- Flexible tubing
- Components used to control static electricity
- Ultrapure water systems
- Vacuum wand tips
- Waste transfer lines

## ADVANTAGES MAY INCLUDE

- Lightweight
- Abrasion resistant in polishing slurries
- Resistant to corrosive acids
- Inert to common process chemicals
- Low outgassing characteristics
- Minimal contamination to flow
- Perform well in extreme heat; nonflammable
- Static dissipative properties
- Sophisticated joining equipment minimizes or eliminates possible joint contamination
- Cost effective
- Electrical insulating properties
- Low particle generation in bearing and wear applications

## MATERIALS

- Acetal (POM)
- Chlorinated Polyvinyl Chloride (CPVC)
- Ethylene-Chlorotrifluoroethylene (ECTFE)
- Ethylene-Tetrafluoroethylene (ETFE)
- Fluorinated Ethylene Propylene (FEP)
- Perfluoroalkoxy (PFA)
- Polyamide-Imide (PAI)
- Polycarbonate (PC)
- Polyetheretherketone (PEEK)
- Polyetherimide (PEI)
- Polyethylene Terephthalate (PET)
- Polyphenylene Ether (PPE)
- Polyphenylene Sulfide (PPS)
- Polypropylene (PP)
- Polysulfone (PSU)
- Polytetrafluoroethylene (PTFE)
- Polyvinyl Chloride (PVC)
- Polyvinylidene Fluoride (PVDF)
- Polyimide (PI)



## DID YOU KNOW?

The precision of new silicon chips is beyond belief. Imagine dropping a ball through a straw only a few microns larger than the ball without touching the sides of the straw — from the height of a 40 story building!