



J. DOUGLAS JETER, M.S., P.E.

Products, Material Science, Workplace Safety

| | |
|-------------------------------------|---|
| Materials | Glass (sheet, tempered, bottle, tableware, fiber), coatings (hermetic, thermal barrier, semiconductor, photovoltaic, magnetic, electromagnetic shielding), abrasives (grinding wheels), sputtering targets, fiberglass composites, nuclear materials (fuel pellets), clay products (brick, tile, porcelain, tableware), concrete, cement, biomedical prosthetics, armor, iron and steel, superalloys (jet turbine blades and vanes), precious metals, refractory metals, material joining (welding, brazing, soldering, adhesives), elastomers, Plexiglass, polyester, wood (treated lumber, medium density fiberboard). |
| Product Design & Testing | Industrial equipment, press peripherals, exercise equipment, hand tools, grinding wheels glass, nuclear fuel, vacuum coating systems, coating systems, dental crowns, biomedical materials, sputtering targets, packaging. |
| General Industrial Equipment | Presses (hydraulic, mechanical, rotary, hot, vacuum hot, hot isostatic), Press peripherals (feed shuttles, take-off systems), rotary filling machines, lid spinners, drills (EDM, laser, drill press), lathes, mills, mixers (Muller, V-blender, roll tumbler), grinders (hand-held, bench, floor stand), saws (table, EDM, diamond-tipped & metal blade), polishers, furnaces (electric and gas fired kilns, hydrogen atmosphere furnaces), frit pots, extruders (piston and auger), slurry blenders, industrial dryers, sieves, grit and bead blasters, ball mills, sprayers, injection molding, spray dryers, sluggers, industrial gas cylinders, ovens, humidity chambers, autoclaves, high pressure water jetting equipment. |
| Material Handling | Overhead cranes, tipper/dumpers, vacuum lifts, conveyors, forklifts, automatic guided vehicles (AGVs). |
| Composite Fabrication | Sheet Molding Compound (SMC), gun roving sprayers, filament winders, hand lay-up, fabrics (woven and non-woven), pultrusion, glass fiber bushings, glass tanks (melters), sizing application. |
| Coatings Deposition | Vacuum chambers, reactive sputtering, electron beam deposition (E-beam), Chemical Vapor Deposition (CVD), spin coating, spray coating, glove boxes, vacuum pumps (mechanical roughing, turbo-molecular, molecular sieve gas traps), vacuum gauges, mass spectrometers, mass flow meters, vacuum desiccators. |
| Workplace Safety | OSHA General Industry Standard (29 CFR 1910), Lock Out/Tag Out, machine guarding, confined space entry, dust masks, chemical safety, plant safety rules and enforcement, mobile collection and transportation operations, extension ladders, clean room protocol and operations, ventilation hoods for dust / chemicals, laser operations (drilling, welding). |
| Nuclear Safety | Nuclear Regulatory Commission (NRC) compliance, radiation safety, criticality safety, respirators, Geiger counters, ventilation for radioactive dust removal / capture. |