

Industry Overview: Medical Device Manufacturing

Improved product quality, reduced scrap



A Faster, Better Clean.

Today's medical device manufacturers are well-familiar with micromolding of precision (high-tolerance) parts - and all the problems associated with it. From the production of catheter tips to surgical device handles to surgical stents, maintaining product quality and clean manufacturing equipment is paramount.

Keeping micro-cavities in production molds clean (as well as cleaning the small, deep, complex geometry of micro tools) is a critical concern when manufacturing very high tolerance medical device parts. In addition, cleaning the clamping devices (used during the fabrication process) and removing parting line flash (deflashing) or material burrs (deburring) from final products are equally significant manufacturing issues.

Cold Jet precision dry ice blast cleaning has been shown to cut cleaning time by up to 75% in the precision and micro mold industries, as well as significantly reducing replacement tooling costs and product scrap rates while increasing quality output.

Unlike micro-sandblasting (a common technique used for removing buildup from clamps holding parts in place during manufacture) dry ice blast cleaning does not damage or destroy the clamps - eliminating high tooling replacement costs.

APPLICATIONS

GENERAL MOLD AND TOOL CLEANING

- Liquid Injection Silicone Molds
- Thermoplastic Injection Molds
- Thermoset Injection Molds

DEFLASHING AND DEBURRING OF PARTS AND COMPONENTS

- Medical Stents and Implants
- Surgical Tools and Instruments
- Titanium, Stainless, PEEK products
- Catheter Tips
- Manifolds

KEY BENEFITS

- Improve product quality
- Process and product consistency
- Helps meet contract specifications
- Reduce downtime
- Increase productivity
- Non-abrasive
- No water or secondary waste
- Clean in-place, no disassembly required
- Decontaminate surfaces
- Environmentally responsible
- Simple operation



Discover Cold Jet.

Contact Cold Jet today to speak with an industry expert and choose the best cleaning solution for your application. Call **1.800.337.9423** or visit us online at www.coldjet.com to learn more.

Cold Jet vs traditional cleaning methods.

| CLEANING METHOD | NO SECONDARY WASTE | NON-CONDUCTIVE | NON-TOXIC* | NON-ABRASIVE |
|------------------------|--------------------|----------------|------------|--------------|
| Dry Ice Blast Cleaning | • | • | • | • |
| Micro Sand Blasting | | • | •* | |
| Water Blasting | | | •* | • |
| Hand Cleaning | • | | • | |
| Solvents/Chemicals | | | | • |

* Upon contact, traditional blasting materials become contaminated when used to clean hazardous substances and objects. These blasting materials are then classified as toxic waste and require appropriate safe disposal.