



SPECIFICATIONS

- **Operating Pressure:** 6,000-60,000 PSI
- **Operating Temperature:** As low as -260°F
- **Consumption of LN2:** Approx. 5 gal/min with 3 gal/ min for nozzle
- **Maximum Pressure:** 60,000 PSI
- **Skid Dimensions:** 10L x 4D x 6H
- **Skid Weight:** 7,500 lbs.
- **Electric Supply:** 480v, 3 phase, 150kVA
- **Cutting:** Simple jet
- **Abrasive (varies with tools):** 1-2 lbs./min
- **Scouring/Cleaning:** Multijet rotating nozzle
Fixed range fan jet
Simple jet with fixed mouth
- **Decontamination:** Particle aspiration



NitroJet®

**Ultra-High Pressure Cryogenic
Cleaning, Decontaminating, and Cutting**



THE NITROJET: PIONEERING THE DESIGN AND MANUFACTURING OF THE WORLD'S MOST VERSATILE CLEANING, DECONTAMINATING, AND CUTTING EQUIPMENT

Nitrocision's patented method of cooling and pressurizing liquid nitrogen creates an ultra-high pressure jet of liquid nitrogen with a density comparable to water. By regulating the temperature and velocity, the jet of liquefied nitrogen can be used to clean surfaces, remove coatings or contamination, and cut various materials. NitroJet pressurizes liquid nitrogen between 5,000 and 60,000 PSI, and to temperatures as low as -260°F. The ejection speed of the cryogenic liquid from the nozzle can reach MACH 3.

IN SUPERCRITICAL CONDITIONS, THE NITROGEN RELEASE COMBINES THREE EFFECTS:

- Temperature: It renders the material to be removed fragile, reducing surface tensions
- Blast effect of the cryogenic fluid: It expands 800x during vaporization, enhancing removal rates
- The ejection speed of the fluid: Provides the kinetic energy to lift the material from the substrate

Powered by liquid nitrogen, which is chemically inert and rapidly converts into a gas, NitroJet helps eliminate cross contamination and secondary waste streams. Additionally, NitroJet's visible spray extends only 18 inches before it is readily absorbed into the atmosphere, reducing employee injury rates well beyond water or abrasive jets. The NitroJet 6000 can be customized to fit nearly any application. It can be used in a manual hand-held mode or integrated into automated robotic systems. Furthermore, it can be used for disarming explosives, removing industrial contamination, removing coatings, concrete scabbling, and cutting a wide range of materials. Infinitely adjustable, NitroJet® technology is precise, versatile, and has a variety of applications in some of the most challenging industrial settings.



ADVANTAGES OF THE TECHNOLOGY

- Dry, inert, and non-contaminating process
- Environmentally friendly
- No discharge produced
- No chemical or solvent rinses or washes needed
- No secondary waste to be treated
- Controllable coatings removal
- Selective and precise treatment
- Substrate not affected
- No high heat concentration/temperature on materials
- Reduced maintenance downtime
- Flexible tooling
- No equipment dismantling required
- Industrially safe
- Fully mobile system
- Can be deployed with a vacuum capture system

APPLICATIONS

- Nuclear decontamination
- Concrete scabbling
- Epoxy stripping
- Pyrocarbonate stripping on graphite or inconel
- Asbestos decontamination
- Demetalization (calamine, oxides, ceramics)
- Selective concrete demolition
- Cleaning heat exchangers
- Cleaning of tools stained with polymer encrustation
- Cutting of composite materials
- Cutting of rubber

INDUSTRIES

- Nuclear
- Marine
- Plastics and rubber processing
- Petrochemical and chemical
- Aerospace
- Automotive
- Military
- Food

