

# Water Jet Solutions for Paint Booth Cleaning



*The Leader in High-Pressure  
Water Jet Technology*

# NLB: *the start of a great finish*

Today's automotive finishes are formulated to last for years. That's great for cars and trucks, but a real problem for those who need to clean paint booth grates, skids and carriers. Fortunately, there's an easy solution.

NLB high-pressure water jets have been removing the toughest build-up for over 25 years. Hundreds of vehicle plants around the world rely on them to eliminate flaking paint and contamination while reducing labor and maintenance. Without the hazards and regulatory concerns common with chemicals and solvents.

NLB's proven plunger pumps deliver pressures from 10,000 to 40,000 psi (700 to 2,800 bar), with a wide range of flows and horsepower. Connect one to an NLB lance, SPIN JET® or other high-pressure accessory, and you'll have a powerful cleaning tool that you can count on for many years. You can even run multiple accessories from a single pump.

Flexibility is another advantage. NLB water jets can be used manually or in automated systems. Pumps can be electric or diesel, permanent or mobile. Our trained application engineers can help you match the proper pump and accessories to your application.

For today's tough finishes — such as E-coat, primers, high solids, isocyanates, enamels, and clearcoats — a clean paint booth is a critical first step in minimizing defects and warranty claims. Fortunately, nothing cleans paint booths and carriers like NLB water jetting. See for yourself: call us for a free demonstration in your plant.



## *Among our customers*



DAIMLERCHRYSLER



**HONDA**  
Honda of America Mfg., Inc.



# CARRIER CLEANING

The versatility of water jetting makes it ideal for cleaning skids and carriers. NLB can provide either high-pressure (up to 20,000 psi, or 1,400 bar) or ultra-high pressure (up to 40,000 psi, or 2,800 bar) systems. These are applied in two basic ways, each fast, thorough and dependable.

## Automated Systems

For maximum efficiency, NLB can supply automated systems featuring patented SPIN JET®s, pumps, controls, and related equipment. Water jets are mounted in a sound-attenuated enclosure, and directed at skids or carriers as needed. Cleaning times can be adjusted to meet customer requirements.

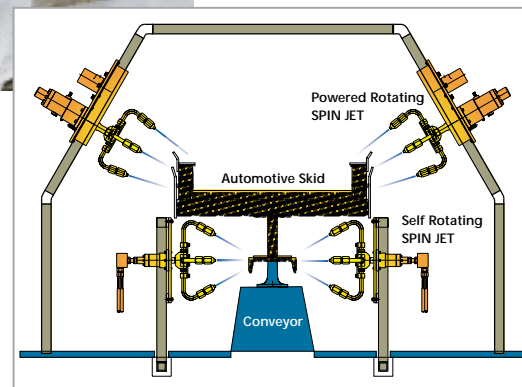
SPIN JET®s or SPIN-NOZZLE®s can also be robotically mounted, making them exceptionally powerful, efficient cleaning tools. Robotic water jetting increases flexibility, allowing you to shift from cleaning an entire carrier to touching up critical areas (e.g., mounting details or bar codes) with a simple programming change. With this labor-saving process, you never have to take carriers out of production.

## Manual

With a hand-held lance and rotating head, an operator can direct powerful water jets anywhere they're needed. Skids and carriers can be stripped of paint and dirt in-line or off-line.



*Rotating SPIN JET®s save labor by cleaning automatically. They are often mounted in a self-contained system.*



*Ultra-high pressure rotating nozzle, directed by a robot, follows a programmed path.*



*An operator with a hand lance (ultra-high pressure shown) makes short work of build-up on an automotive carrier.*

# CHAIN AND CONVEYOR

NLB water jets quickly clean overhead and floor chains, manually or automatically. Inside a customized cleaning cabinet, SPIN JET® or SPIN-NOZZLE® heads direct high-pressure water jets at all chain surfaces.

- *Helps reduce dirt in paint*
- *Removes loose, flaking particles*
- *Continuous cleaning allows dogs and latches to move freely*
- *Automatic system reduces labor*
- *Elimination of paint build-up reduces horsepower overload during conveyor restarts*



*Cutaway view of cleaning cabinet shows how rotating water jets provide thorough cleaning coverage.*

# HOOKS AND FIXTURES

Water jetting systems from NLB also provide quick, effective solutions to hook and fixture cleaning problems. Unlike other methods, which require considerable heat or caustic chemicals, water jetting is very respectful of the environment. It's also very adaptive to your existing paint line, as it can be performed on-line or off-line.



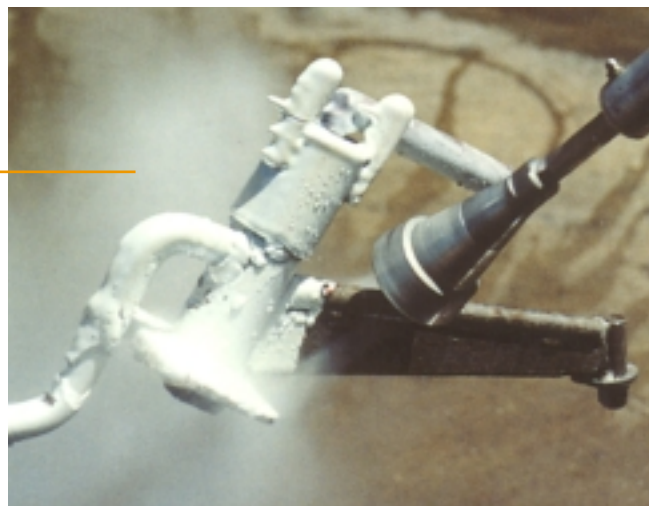
*Even substantial paint build-up on hooks presents no problem for NLB water jets.*

# BODY WASH

NLB's rotating SPIN JET® heads are also used in body wash systems, to remove welding residue, dust, drawing compounds, and other contamination before phosphate application.

Body washing with high-pressure water jetting can reduce warranty claims and ELPO rework due to dirt in paint. It also keeps systems cleaner, and reduces maintenance and filter changes in the first phosphate stage.

*No manual method is more efficient than ultra-high pressure water jetting.*





# SPIN JET® GRATE CLEANERS

When NLB introduced the SPIN JET® in 1977, most plants were manually removing paint booth grates for chemical stripping or incineration. The SPIN JET® eliminated the strain of lifting as well as the hazard and expense of chemicals... not to mention the risk of tripping over a grate warped by burning.

Thousands of operating hours over the past two decades have led to many enhancements in SPIN JET® technology. But the primary benefits have not changed; they include:

- *Labor savings*
- *Lower operating costs*
- *Minimizes energy costs*
- *Environmentally friendly*
- *Can be used on all types of paints*
- *No need for extra sets of grates*
- *Easy to use, and to maintain*

Mounted in a unit resembling a lawn mower, a SPIN JET® cleans the top and sides of a grate simultaneously. An operator simply maneuvers it over the grate while rotating spray arms direct high-pressure water jets at all surfaces to be cleaned. The results are dramatic (see photo), and so are the savings.

A number of portable models are available, with air-powered or self-rotating seals, to clean paths of different widths. Choose from high-pressure or ultra-high pressure... even an exceptionally lightweight aluminum model. Spray arms are adjustable, to assure that spray patterns maximize productivity. SPIN JET®s can also be mounted in automated or semi-automated cleaning systems (see inside).



*Portable SPIN JET® units are easy to maneuver.*



*Typical paint booth grate before and after SPIN JET® cleaning.*

# NLB PUMPS

When you choose NLB, you get the complete support you need to maintain automotive quality — beginning with rugged, dependable water jet pumps.

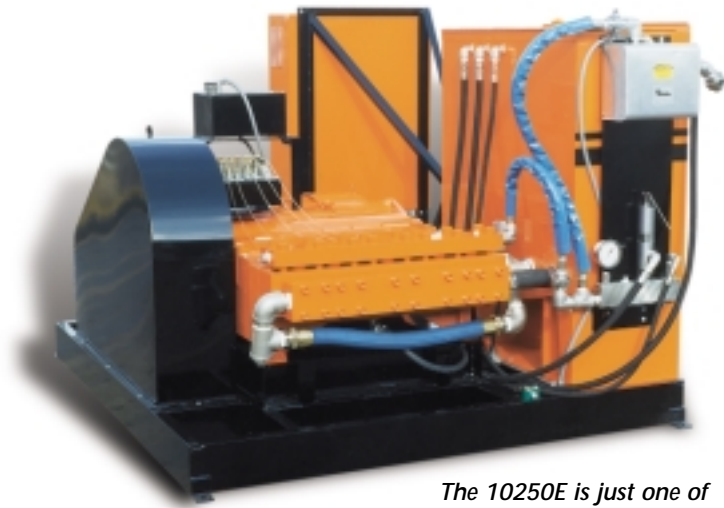
Whatever pressure you need, from 2,000 to 40,000 psi (140 to 2,800 bar), NLB has a pump that delivers it. Most are available with electric or diesel power, mounted on skids or trailers to go where you need them. Features include:

- *Slow-running to minimize wear and maintenance*
- *Hardened stainless steel valves for long life*
- *Non-corrosive water tanks (stainless steel or polypropylene)*
- *Self-adjusting packing assemblies for uniform pressure.*

## NLB SUPPORT

While NLB pumps have a well-deserved reputation for minimizing downtime, it's comforting to know that qualified service is available if you need it. This includes:

- *the largest spare parts inventory in the industry (most parts can be delivered within 24 hours)*
- *toll-free parts ordering*
- *continuous training for maintenance and safety*
- *maintenance videos for the most popular pumps*
- *comprehensive technical manuals*



*The 10250E is just one of dozens of NLB pump models.*



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