



Quality NDE

Non Destructive Testing Equipment

[WWW.QNDE.CA](http://WWW.QNDE.CA)

1-800-361-3630

# Our Custom Equipment

## Custom Liquid Penetrant Lines

At Quality NDE, we can custom design and fabricate any LPI line based on your specific needs and requirements.



- QNDE 1633-6
- QNDE WWC-6
- QNDE WW-9
- QNDE PE-8
- QNDE PE-12

# QNDE 1633-6

Six-Station Water Washable Liquid  
Penetrant Line



# QNDE 1633-6

**Station 1:** Penetrant dip tank with hinged lid,

**Station 2:** Dwell/Drain.

**Station 3:** Rinse tank with rigid back and right wall.





# QNDE 1633-6

**Station 4:** Dryer with insulated walls. Electronic adjustable calibrated temperature control. Delivered with calibration certificate. 240 VAC, 15Amp.

**Station 5:** Developer.



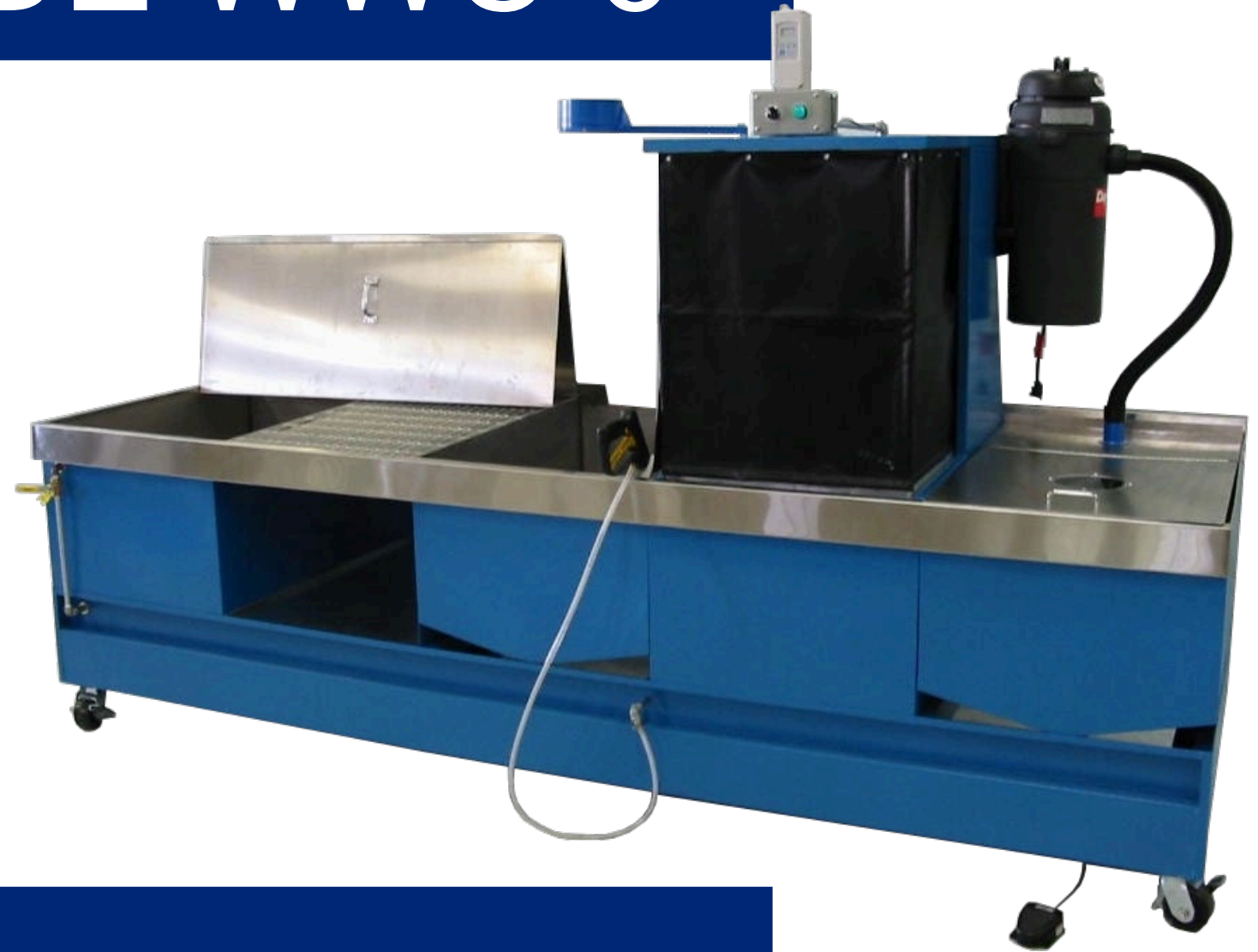
**Station 6:** Standalone inspection table with cantilever roof, with curtains, fan, white overhead light and articulated support for handheld UV lamp. Black polypropylene top. 120VAC, 15Amp. +24" overhead, top at 84".

**Control Panel:** Illuminated ON/ OFF button. Adjustable calibrated temperature control for dryer. Illuminated ON/OFF button for dust collector.

# QNDE WWC-6

This QNDE WWC-6 is similar to the QNDE 1633-6 in that it is a six-station water-washable liquid penetrant line – the compact version.

This line is made for small batches and low-volume inspection for small to medium sized parts.



# QNDE WWC-6

Working height at 38".

**Stations 1 and 2:** Penetrant dip tank and drain.

**Station 3:** Rinse tank with hand hose and spray nozzle. 16" backing and sides with a 12-7/8"x27-5/8"x16", 10gal (37.9L) capacity. 1" drain underneath.



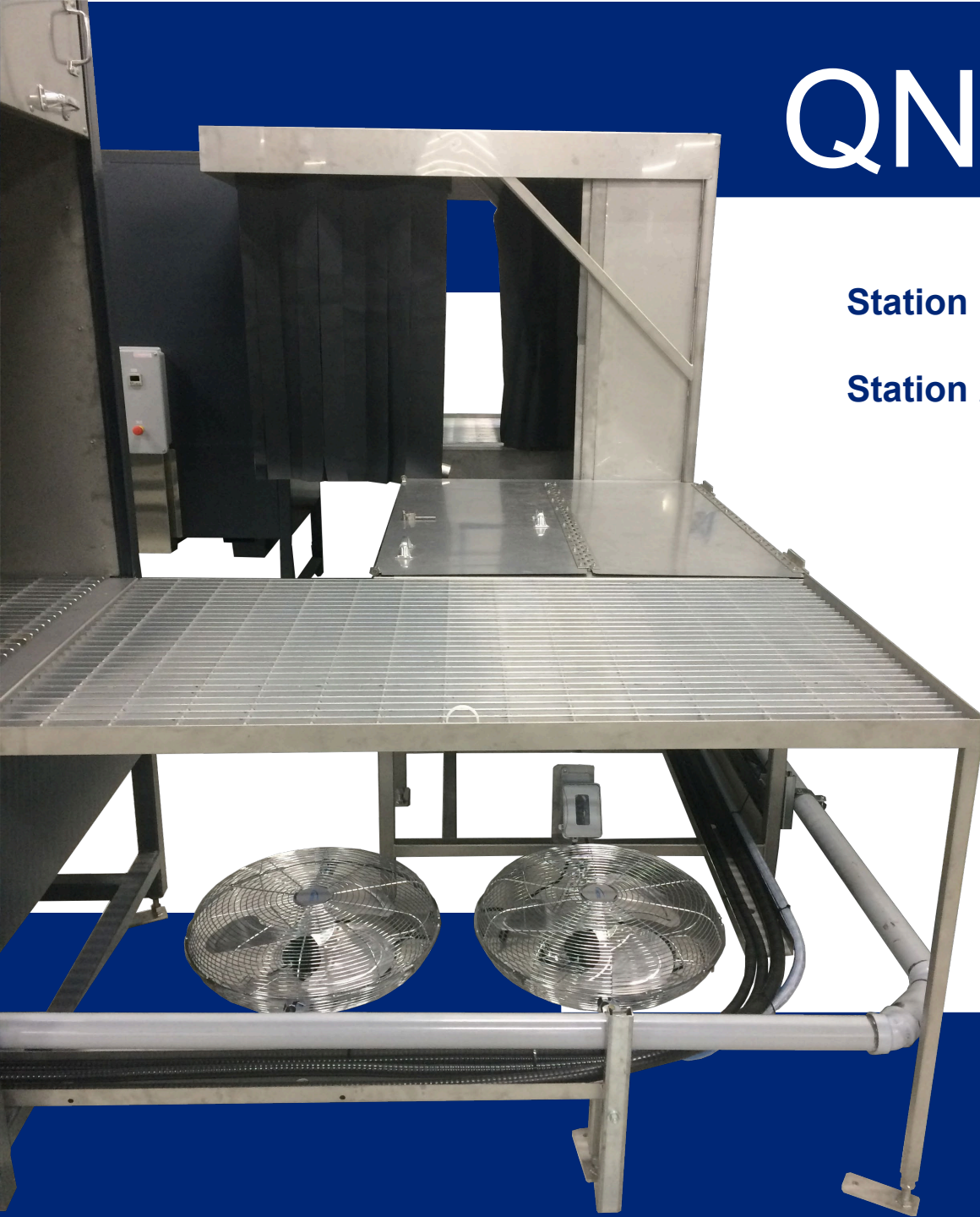
**Station 4:** Electronically heated, thermostat controlled dryer. Black front curtain, fire resistant and penetrant resistant. Made of 304 stainless.

**Station 5:** Developer tank. Made of 304 stainless. Aluminium grille to support parts inside. Includes stainless top lid with window.

**Station 6:** Standalone inspection table with curtains, cantilever roof, fan, white overhead light and portable UV LED UV lamp on articulated support, black polypropylene top. +24" overhead - top at 84".



# QNDE WW-9



**Station 1:** Penetrant dip tank with hinged lid.

**Station 2:** Dwell with hinged lid.

**Station 3:** Rinse tank with rigid backsplash, cantilever roof with overhead LED UV lights, mixing valve with temperature gauge, pressure regulator with pressure gauge, hose and spray nozzle. With + 24" overhead.

**Station 4:** Drain.

Designed with safety in mind, the nine-station QNDE WW-9 by Quality NDE has cantilever roofed stations that are free of frontal posts so that the user can easily move parts in and out of each station.



Also shown: Magnum LED UV light on articulated support.



# QNDE WW-9

**Station 5:** Tunnel type dryer meeting ASTM C1055 so no external surfaces shall be hot (including doors). Available in 240VAC or 575VAC. Electronic adjustable calibrated temperature control with overload protection. Delivered with calibration certificate.

**Station 6:** Cooling station.

**Station 7:** Swirl cloud developer, tunnel type with automated controls, HEPA certified dust collector. 120VAC.

**Station 8:** Transfer station.

**Station 9:** Inspection table with curtains, cantilever roof with fan and white LED overhead light. Articulated support for handheld UV lamp, black polypropylene top. 120VAC.



# QNDE PE-8

This eight-station, modular compact liquid penetrant line by Quality NDE is designed for small batches and low volume inspection of small to medium sized parts.

**Stations 1 and 2:** Level 3 and level 4 penetrant dip tanks with dwell grilles and hinged top lids.

**Station 3:** Rinse tank with rigid backsplash, hose, and spray nozzle.

**Station 4:** Emulsifier dip tank.



**Station 5:** Final rinse tank with rigid backsplash, hose, and spray nozzle.

**Station 6:** Dryer tank with electronic adjustable calibrated temperature control with overload protection.

**Station 7:** Swirl cloud developer tank type with footswitch activation and HEPA- certified dust collector.

**Station 8:** Inspection table with curtains, LED overhead light, and a black polypropylene top.

# QNDE PE-12

Quality NDE's standard, twelve-station post-emulsifiable liquid penetrant line can be shipped in a fraction of the time, as well as a fraction of the price of a custom system.

It is standard to have aluminium grilles for stations 1 through 11 on this line.





# QNDE PE-12

The QNDE PE-12 is made of stainless steel throughout.

**Station 1:** Penetrant dip tank with hinged lid.

**Station 2:** Dwell with hinged lid.

**Station 3:** Pre-Rinse tank with rigid backsplash, 12" side splash guards, mixing valve with temperature gauge, pressure regulator with pressure gauge, hose and spray nozzle.

**Station 4:** Drain.

**Station 5:** Emulsifier dip tank with air agitation and hinged lid.

**Station 6:** Rinse tank with rigid backsplash, cantilever roof with overhead LED UV lights, mixing valve with temperature gauge, pressure regulator with pressure gauge, hose and spray nozzle. Inside: +24" overhead – top at 84".

**Station 7:** Drain.



# QNDE PE-12

**Station 8:** Tunnel-type dryer meeting ASTM C1055 so no external surfaces shall be hot (including doors). Electronic adjustable calibrated temperature control. Available in 240VAC, 460VAC, or 575VAC.

**Station 9:** Cooling.



**Station 10:** Tunnel-type swirl cloud developer with automated controls, HEPA certified dust collector. 120VAC.

**Station 11:** Transfer station.

**Station 12:** Inspection table with curtains, cantilever roof with fan, white overhead light, articulated support for handheld UV lamp, black polypropylene top. 120VAC.

# LPI Line Options

## Water Washable Filtration System

2 drums in series for  
100ppm output

3 drums in series for  
50ppm output

4 drums in series for  
30ppm output

Chemical resistant pump.  
110L waste water tank.

Automatic ON/OFF float activation system.

All plumbing.  
Carbon activated filters (55 gallon).

Electrical, 115V, 60HZ, 10 Amp.

Each drum will capture  
approximately 10 gallons of Water  
Wash penetrant or 5 gallons of PE  
penetrant.





# LPI Line Options

Water washable or post emulsifiable.

Choose between a fully automated or manual line.

Compact and/or modular lines available.

Lid for penetrant tank.

Corner station (90°) if needed.



# LPI Line Options



Dynamic cloud developer upgrade kit

OR

Swirl cloud developer upgrade kit.

- Includes manifold, ON/OFF footswitch, air regulator with gauge, and HEPA certified dust collector.

Dynamic cloud developer upgrade kit with foot pedal activated pressure tank, injector kit, air regulator and pressure gauge, and HEPA dust collector. 120VAC, 15Amp.



# LPI Line Options



## Rinse station options:

Back wall with anti-splash grille.

Rigid sliding walls or curtains.

Mixing valve with temperature gauge, pressure regulator with pressure gauge.

Black polypropylene top or stainless rollers with sealed bearings.

Polyurethane covered rollers.

Cantilever-roofed; free of frontal posts so user can safely and easily move parts in and out of each station.

Articulated support for handheld lamp.

Portable LED UV lamp with ASTM E3022 and RRES 90061 certificates.

Rinse station with HEPA-certified mist collector.

Downdraft rinse table or turn table.



# LPI Line Options

## Inspection station options:

Articulated support for handheld lamp.

Downdraft inspection table.

HEPA-certified dust collector.

Portable LED UV lamp with ASTM E3022 and RRES 90061 certificates.

Galvanized steel rollers with sealed bearings.

Polyurethane covered rollers for scratch-free parts.

Cantilever-roofed stations free of frontal posts so that the user can safely and easily move parts in and out of each station.



# LPI Line Options

## Inspection booth options:

Cantilever roof, curtains, fan, and white LED overhead light are all optional.

Articulated support for handheld UV lamp.

Inspection table shelves: top back wall shelf; bottom shelf and drawer.





# LPI Line Options

4x1800W  
submersible PZT  
transducers.

Industrial 40kHz and  
programmable TCR  
generator.

Rectangular wire  
basket made of 316  
stainless.

CSA  
Certification.

Pre-Rinse  
immersion  
tank with air  
agitation.

Final Rinse immersion tank  
with agitation.

Heating: selectable target temperature  
0 to 80 Celsius. 340VAC, 34Amp.

QNDE Ultrasonic  
Cleaning System







## Quote request form Modular LPI System

Tel.: 450-691-9090 or  
1-800-361-3630  
[www.qnde.ca](http://www.qnde.ca)

**Custom modular system can be designed to your specific testing needs.**

**Please complete the below form and return to Quality NDE at [info@qnde.ca](mailto:info@qnde.ca) or fax to (450) 691-6101. This done, an application specialist with in-depth knowledge of liquid penetrant systems will contact you to further discuss and/or quote.**

Company name: \_\_\_\_\_

Contact name: \_\_\_\_\_

Phone number: \_\_\_\_\_

Address: \_\_\_\_\_

What's the part size and geometry? \_\_\_\_\_

(Include drawing or picture if possible)? \_\_\_\_\_

What is the part weight? \_\_\_\_\_

What level of penetrant will be used? \_\_\_\_\_

Type of application? \_\_\_\_\_

☐ Electrostatic

☐ Spray

☐ Dip

What process for inspection is required \_\_\_\_\_

☐ Water wash

☐ Lipophilic

☐ Hydrophobic

☐ Wet developer

☐ Dry developer

What is the required processing rate (parts per hours)? \_\_\_\_\_

What is the allowable floor space available (provide expected equipment layout if possible)? \_\_\_\_\_

What accessories do you need to be quoted with the system? EX: Part fixtures, baskets, curtains, UV light, accessories? \_\_\_\_\_

How are the effluents being handled (Carbon filtering, coalescer, nanofiltration, other)? \_\_\_\_\_

What is the budget for the project? \_\_\_\_\_

When do you need this system? \_\_\_\_\_