

CONCO *Industrial Services*





Service is Our Strength

One call to Conco, and you'll notice our dedication to unparalleled responsiveness. We understand how you need us to work in the field, so we bring a no-nonsense accountability to every project – working independently and efficiently to ensure meticulous results. Count on us to keep safety first and foremost in every aspect of the job, and consistently deliver a quality of service that fortifies your future. Call us today at 1-800-569-5523.



Conco Industrial Services

Experience You Can Count On

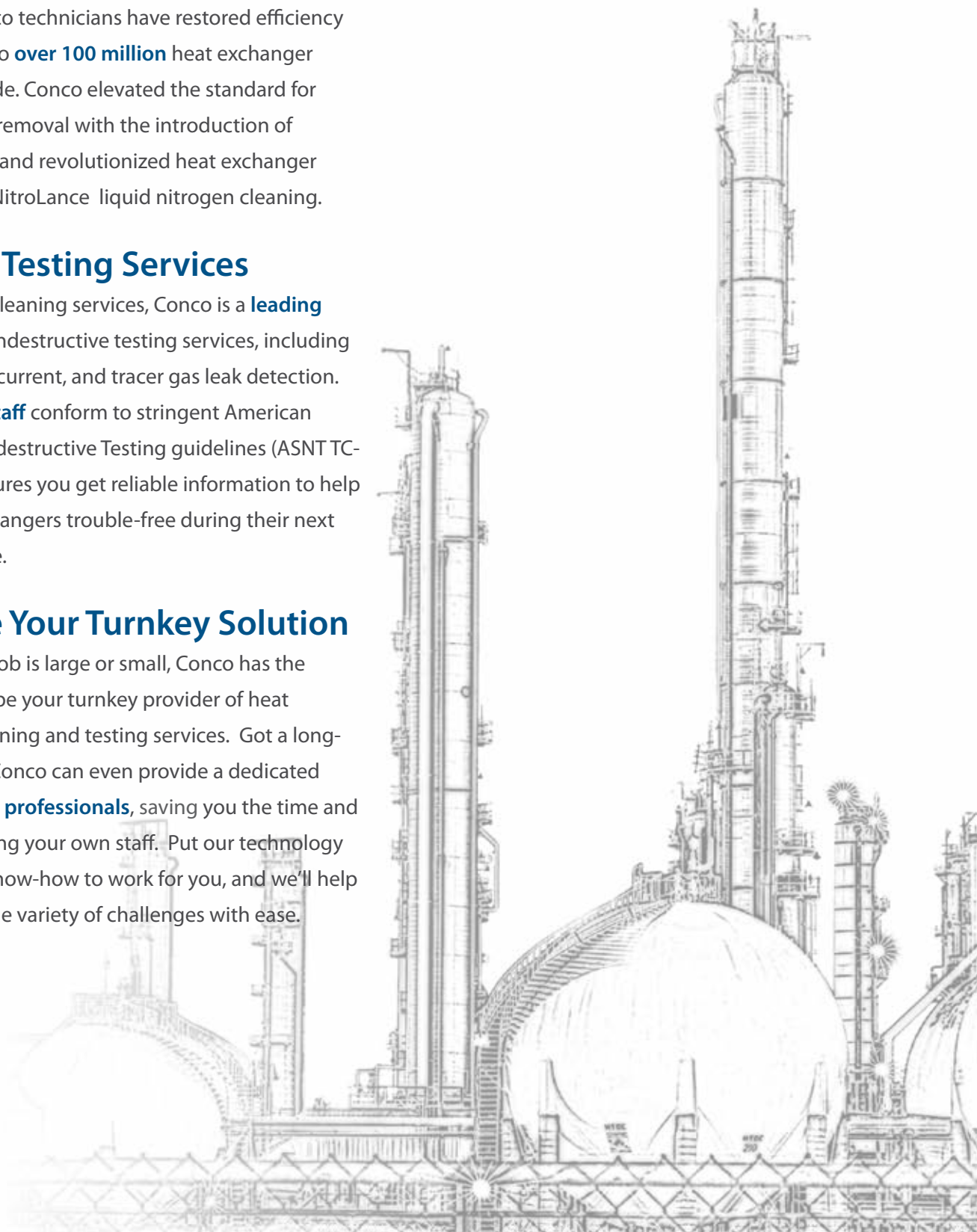
Since 1923, Conco has been innovating industrial heat exchanger tube cleaning and testing services. From power generation to polymers, alumina to refineries, Conco technicians have restored efficiency and reliability to **over 100 million** heat exchanger tubes worldwide. Conco elevated the standard for tough deposit removal with the introduction of the HydroDrill, and revolutionized heat exchanger cleaning with NitroLance liquid nitrogen cleaning.

Certified Testing Services

In addition to cleaning services, Conco is a **leading provider** of nondestructive testing services, including IRIS, RFT, eddy current, and tracer gas leak detection. Our **certified staff** conform to stringent American Society of Nondestructive Testing guidelines (ASNT TC-1A), which ensures you get reliable information to help keep your exchangers trouble-free during their next operating cycle.

Let Us Be Your Turnkey Solution

Whether your job is large or small, Conco has the capabilities to be your turnkey provider of heat exchanger cleaning and testing services. Got a long-term project? Conco can even provide a dedicated crew of **service professionals**, saving you the time and expense of hiring your own staff. Put our technology and industry know-how to work for you, and we'll help you solve a wide variety of challenges with ease.





NitroLance

Industries / Applications

Refineries - furnaces, fire heaters, sulfur recovery units.

Alumina /Aluminum - heaters, vapor lines, digesters, bauxite, aluminum oxide.

Petrochemical - heat exchangers, reactors, coke deposits, polymer removal, nickel catalyst.

Sugar Mills - horizontal and vertical evaporators, calendria units.

Catalyst Handling - catalyst cleaning / removal.

Pharmaceutical / Chemical - heat exchanger chemical deposits.

Specialty Chemical - plumerized carbons.



NitroLance

Zero Waste, No Cross Contamination

NitroLance uses zero-waste liquid nitrogen to remove tough deposits without the need for water or dangerous chemicals. Because liquid nitrogen dissipates to atmosphere, **no secondary waste** is created during cleaning, **saving our customers** thousands of dollars in cleanup and disposal costs. Liquid nitrogen is an **ideal tool** for removing deposits that can't be removed with water due to risk of adverse reaction or cross-contamination.

Turning Downtime Into Uptime

Many applications that take weeks can now be cleaned in days with NitroLance. Liquid nitrogen is **ideally suited** for adverse tube cleaning environments, yielding quicker turnarounds for critical path components. In addition to being fast, NitroLance customers have reported **performance** improvements in heat transfer by up to 20% on units cleaned with this technology. NitroLance also provides **optimal cleanliness** for vessels being examined with IRIS, RFT or eddy current testing.

Safe, Proven, Effective

NitroLance is a **safe alternative** to high-pressure water jetting. Where high-pressure water can be hazardous at distances greater than six feet, the liquid nitrogen jet from NitroLance extends only a few inches. The technology is so safe, it's currently being **used by NASA** to clean portions of the Space Shuttle.



.320" Iron Pyrite Deposit

NitroLance Clean





HydroDrill

Industries / Applications

Refineries - configurable for horizontal and vertical exchangers.

Petrochemical - HDPP, HDPE.

Alumina - Bauxite, oxides.

Power Generation - condensers, heaters, coolers.

Sugar Mills - evaporators, calendria units.



HydroDrill

Conco HydroDrill: Built For Tough Deposits

Conco HydroDrilling services provide a **high-quality** heat exchanger cleaning that is **faster** and **less costly** than other methods for cleaning the inside of tubes. Through a water flushing and rotary drilling action, the Conco HydroDrill **removes difficult deposits** from the inside of heat exchanger tubes, chemical reactors, condensers, re-boilers and absorbers. The revolutionary HydroDrill high-torque cleaning system removes obstructions and blockages from **any type of tube** ranging from 3/8" to 6" in diameter and up to 60' in length. When combined with Conco SureShot tube cleaning, completely blocked tubes can be restored to 100% of the original tube ID in one pass. The HydroDrill is fast, typically cleaning 20-foot long tubes in 30 to 90 seconds each. Experienced HydroDrilling crews from Conco complete jobs safely, **on time and within budget.**

Cleaning Exchangers In Place Saves Time And Money

The HydroDrill can be configured to clean both horizontal and vertically oriented heat exchangers **without the unnecessary** cost of moving the unit to a cleaning pad.



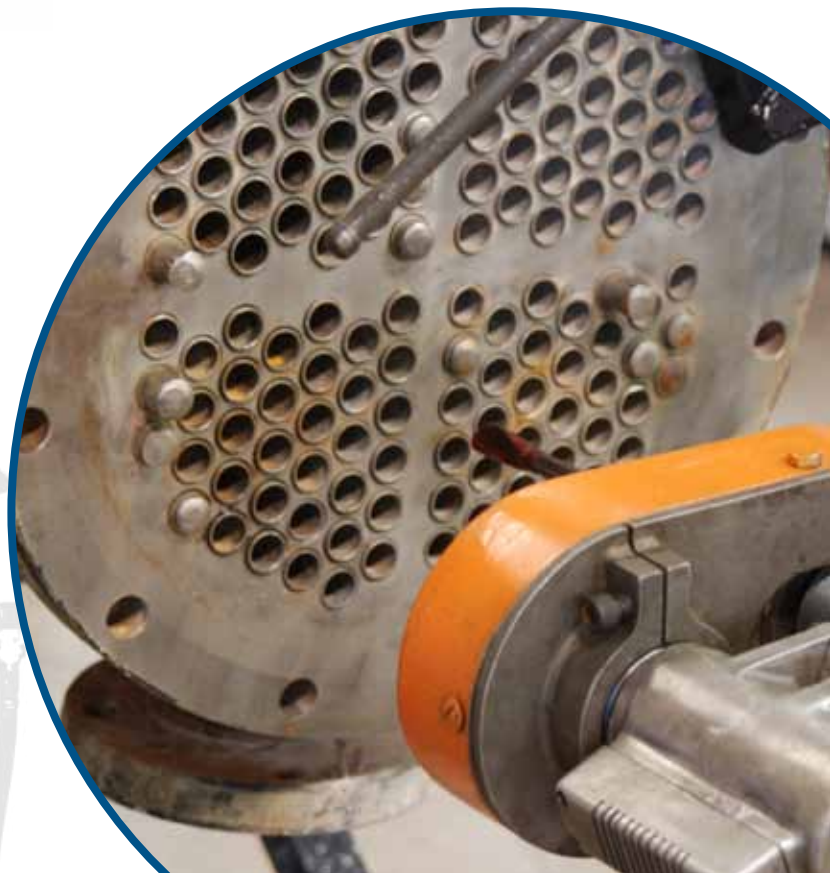
Fast, Flexible, Practical

Portability - fast and easy to move from exchanger.

Adaptability - configurable for horizontal and vertical exchangers.

Low Waste - no chemicals, uses only air and low volume water.

Lower Total Cost - compared to chemical or high pressure water jetting.





SureShot Tube Cleaning

Tube cleaning services are available 24 hours a day for emergency situations or routine maintenance.

Conco crews can clean 2,000 tubes per shift on average.

SureShot provides a superior clean suitable for nondestructive testing like IRIS, RFT and eddy current.

Conco cleaners are the most widely used brand of tube cleaner in the world.

Case Study: Conco removes calcium carbonate scale from 96,234 heat exchanger tubes with patented Calbuster technology.

Problem: A Texas nuclear power plant had severe calcium carbonate scaling ranging in thickness from .019 inches to .031 inches within their 96,234 titanium condenser tubes.

Solution: Using the Conco SureShot system and patented Calbuster cleaner, technicians were able to remove over 5,000 pounds of calcium quickly and safely. The plant realized immediate improvements in unit heat transfer, megawatt output and fuel consumption saving millions of dollars annually.



Calcium scale removed with Conco Calbuster

SureShot Tube Cleaning Services

Gun Down Tough Deposits With Conco SureShot Tube Cleaning Services

No one understands tube fouling better than Conco. We've engineered the SureShot tube cleaning system to clean a wide range of deposits, including waterborne, manganese, iron, corrosion product, sediment, crystalline, and biofouling. This system has been **effectively used worldwide** to clean over 100 million heat exchanger tubes quickly, safely and effectively. The SureShot system uses safe, 200 PSI water pressure to propel Conco tube cleaners through fouled heat exchanger tubes, removing deposits, corrosion product and obstructions in a single shot! SureShot can be used alone or in conjunction with almost any type of cleaning method you choose.

How Does It Work?

At the heart of the SureShot system is the Conco tube cleaner. Manufactured exclusively by Conco, our tube cleaners are made with quality materials and quality checked every step of the way. Conco cleaners are **built to perform** better than any other tube cleaner on the market today. Each Conco tube cleaner is **specifically sized** for your exact tube dimensions ensuring safe, effective tube cleaning.



All Fouling Is Not Created Equal

Because tube fouling can be soft, hard or somewhere in between, Conco has developed a full line of cleaners uniquely suited to the job at hand. Conco cleaners, unlike some cheap imitations, are **designed to fit** specific tube dimensions, and not a "range" of tube sizes which can damage tubes.



FinTech ACC

Introducing FinTech Air-Cooled Condenser Cleaning

Designed to clean any fin-fan, air-cooled condenser, Conco FinTech ACC cleaning services have been successfully used on fins fouled with dust, dirt, debris, pollen, leaves, insects, and even bird and bat carcasses. This service has been used in hundreds of power plants, petrochemical plants and process industry plants worldwide.

Faster, Cleaner, Safer

Fouled surfaces of air-cooled condensers can cause performance issues, especially when ambient temperatures start to rise. Until now, cleaning air-cooled units meant tedious work at dangerous heights using fire hoses, hand lances or chemicals. Fire hoses and hand lances can damage delicate fins, while chemicals present environmental cleanup concerns.

Faster Cleaning - driven at optimum speed, the nozzles clean 325 square feet per hour.

Greater Effectiveness - more effective than hand water lance, foam wash or fire hose.

No Waiting - fast production rates, no wait time for heat exchanger cooling.

Safer Solution - no personnel on scaffolds or exposed to hot, humid conditions during operations.

Efficient - cleaning can be performed on-line.



FinTech ACC

A Dimensional Clean

At the heart of the FinTech system, is a computer-controlled 12-nozzle water jet assembly. The assembly travels on tracks at a constant speed and fixed height, ensuring a consistent clean from start to finish. Water nozzles on the assembly are configured to match fin geometry, ensuring that they clean all the way through, not just on the fin surface. The frame and tracks of the system are adjustable for virtually all sizes and layouts of fin-fan exchangers, including flat coolers, vertical coolers, "A" frame and "V" frame configurations. The system is suitable for use on all materials, including steel, aluminum, brass and copper.



Nondestructive Examination

Leak Detection Services

In-leakage negatively impacts plant performance, while tube leaks can cause unplanned outages costing thousands in maintenance and lost productivity. Using advanced tracer gas leak detection technology, Conco technicians can quickly locate sources of leaks within your plant. Conco has been an innovator and leading provider of leak detection services for over 30 years, and offers both helium and SF₆ tracer gas technology.

Different Tubes Require Different Tests

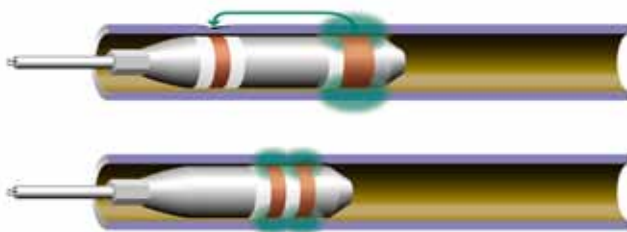
Heat exchangers come in a variety of sizes, shapes and materials. Tube materials can include carbon steel, stainless, admiralty brass and Cu-Ni alloys, and no single nondestructive technique can test them all. It's crucial to select a testing company that has the capabilities and experience to provide a variety of testing techniques for your different tube materials. Also, understanding site-specific conditions and their effects on tube material such as wall thinning, chemical attack and pitting is fundamental in selecting the right test for the job.

Tube Inspection: IRIS Rotary Ultrasonic Testing

Conco utilizes the latest generation IRIS 9000 ultrasonic imaging equipment with field-proven reliability. The IRIS 9000 is specifically designed to provide the most accurate inspections for air-cooled and liquid cooled heat exchanger tubes. Conco IRIS testing can accurately measure internal and external corrosion and pitting.

Tube Inspection: Eddy Current And RFT

Conco eddy current testing services specialize in finding tube defects in a variety of nonferrous materials including stainless, titanium, brass and Cu-Ni alloys. Eddy Current Testing can find defects ranging from pitting, cracking, corrosion, erosion, grooving and dents that cause tube failures. After testing, we provide a detailed tube-by-tube analysis and full-color tubesheet map, giving you a detailed assessment of your heat exchanger tubing.



Tracer gas tube leak detection



Multifrequency nondestructive examination

Nondestructive Examination

Wide Range of Testing Services

Conco NDE services provides inspection of both ferromagnetic and non-ferromagnetic tubing using IRIS, eddy current and remote field eddy current testing (RFT). Our technicians follow stringent American Society of Nondestructive Testing (ASNT) guidelines, which means you'll be getting reliable test results, tube after tube.



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