

Die-Hard Results Report

Die-Hard™ Cableless Tube Cleaner Enables Carrier Commercial Service To Quickly and Effectively Clean Chiller Tubes



“The Die-Hard cleaned the tubes right the first time. The Die-Hard saved me four days of unnecessary cleaning!”

-Norm Chenoweth, Service Coordinator

Project Objectives

As the world leader in air conditioning, heating, and refrigeration systems, Carrier Corp., through its Carrier Commercial Service division, offers preventative maintenance to help ensure that the efficiency and reliability of its customers' equipment is maintained.

One such service that Carrier performs is tube cleaning. Carrier often performs tube cleaning on chillers that provide chilled water and air conditioning to operating sites such as schools and other municipal buildings, central district energy plants, universities, hotels, hospitals and other institutions.

As the Service Coordinator for Carrier Commercial Service in Columbus, Ohio, Norm Chenoweth is always searching for methods to improve tube cleaning for his customers. Providing clean tubes at a low cost is an important part of satisfying Carrier's customers.

It is essential that tubes are clean so that Carrier's customers may benefit from increased heat transfer rates, which can contribute to lower utility costs.

Norm heard about a new auto-feed, cableless tube cleaner, manufactured by Elliott Tool Technologies, and figured that he would give the new cleaner a try.

The Solution



Norm rented the Die-Hard, Elliott's Cableless Tube Cleaner, and was pleased to learn that both clean tubes and cost savings were possible.

Norm finished the tube cleaning job in only two days – a job that had typically taken him six days to complete the year before! The Die-Hard saved Norm four days worth of work, which ultimately means significant labor savings and a satisfied customer that can get its chiller back up and running, minimizing downtime.

The Die-Hard's four-way pulsating cleaning action cleans the tubes right the first time so that Norm and his operators did not have to clean the tubes twice to get them ready for the Eddy Current Test.

The Die-Hard Cableless Tube Cleaner also includes these important features:

- Automatic feeding unit: Roughly the same automatic feeding speed as other tube cleaners.
- No cable! The cleaning brush gets its power from water pressure, not a spinning cable.
- Rugged engineering and construction for higher uptime and lower repair costs.

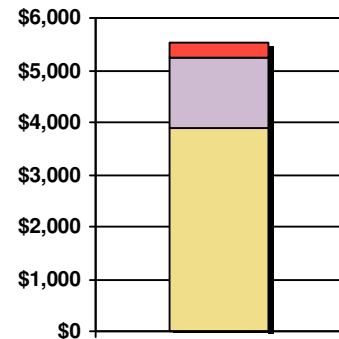
After trying the Die-Hard, Norm was very impressed that a tube cleaner could provide cost and time savings.

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The Results

Carrier Commercial Service realized both impressive cleaning results and dollar savings with the Die-Hard. Elliott estimates that many HVAC contractors could save more than \$5,500 annually by using the Die-Hard.

Estimated Annual Savings



■ Labor ■ Consumables ■ Repair

Norm is very pleased with his Die-Hard tube cleaning results and the time and money that he has saved Carrier and its customer.

Contact Us

To learn if you can expect similar results from the Die-Hard™ Cableless Tube Cleaner contact your local support or Elliott Tool Technologies.

www.elliott-tool.com/die-hard.htm

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Learn more about Carrier Commercial Service:

www.commercial.carrier.com

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