

AIR-COOLED SCREW CHILLER RETROFIT | INDUSTRIAL

DUCOMMUN LABARGE TECHNOLOGIES





"

...You took us seriously and had a bulletproof solution that made it easy to sleep at night. The team that worked on our retro-fit were a professional, respectful group that did a good job keeping us connected to where we were in the project..."

BUSINESS CHALLENGE

Working with Tony Charais (Operations Manager) at *Ducommun* Labarge Technologies, they reported two existing 100-ton Trane chillers with reciprocating compressors were unreliable. Eleven recent compressor failures and skyrocketing repair costs were getting out of hand.

However, replacing the units entirely would require major upgrades to meet code, including moving air-cooled package units on the roof that would be both cost-prohibitive and difficult due to structural limitations of the location.

SOLUTION

Our team designed a retrofit solution within their budget that addressed the specific issues they were facing. This included:

- Upgraded Chillers with New Screw Compressors
- New Electronic Expansion Valves
- VFDs on Each Chiller
- New Condensers
- New 15-inch Touch Screen Control Panel

After removing the old equipment, installing the new components, and fully testing the system, Ducommun was able to see dramatic results even with a retrofit solution on a limited budget.

RESULTS

Performance analysis yielded reporting of **20db noise reduction** from the VFDs and an approximate **35% energy savings** since running the new compressors.

BENEFITS

- Same or better quality as original equipment manufacturers (OEM)
- Reduces future repair costs
- Upgraded digital controls provides the ability to integrate with modern control systems
- Extended warranty

-20db noise reduction and 35% energy savings