



Planning for Expansion

The Client: Silver Crest Homes

The Challenge: Costly Repairs and Downtime

The Solution: Energy Efficient Air Compressors



THE CLIENT

Silver Crest Homes, started by a group of retailers focused on delivering the highest possible quality in a home, designs and constructs manufactured homes in Corona, CA. They've been in business for more than 45 years and are one of the leading brand names amongst retailers in the region.

THE CHALLENGE

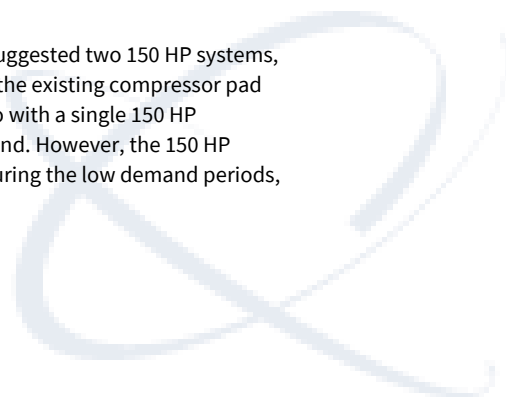
Silver Crest Homes had three old air compressors running at all times at a combined 120 HP, making downtime and repairs costs high. All compressors were fixed speed, and two were in modulation, which led to excessive load and unload events. The company was also dealing with regular repair issues across all compressors. When one compressor was down, they turned an additional QSB-25 on for support. When more than one compressor was down, production suffered.

Atlas Copco performed an audit and suggested two 150 HP systems, but this would create a space issue at the existing compressor pad area. They convinced Silver Crest to go with a single 150 HP compressor system with plans to expand. However, the 150 HP compressor would run at a low rpm during the low demand periods, which was not ideal.



Quincy's Proven reliability and energy efficiency helped solve Silver Crest Homes need for additional capacity!

Ashley Oberkirch



THE SOLUTION

This is where Quincy Compressor came in. We wanted to help Silver Crest Homes improve their reliability and energy efficiency by introducing energy-efficient air compressors. We performed leak detection and identified 293 CFM of artificial demand amongst accessible leaks in hoses, piping and machinery fittings. Based on production pressure, we calculated that leaks were causing an annual energy consumption of \$21,675.

We also performed an EQ analysis on the existing system. The results were a system demand low of 215 CFM and high of 420 CFM. The desired expansion called for an additional capacity of 125 CFM.

This opportunity required a strong stance against the competition's proposed system of a single 150 HP compressor. Our solution was to introduce two QGV-75s networked as primary production supply, with a third QGV-75 installed for redundancy. The overall energy consumption of the existing compressors was \$28,846 annually. An EQ Simulation with two networked QGV-75s offered an estimated annual energy savings of \$4,088.



We ordered, delivered and installed the equipment by November 2021. We provided a lead/lag solution with twin QGV-75s, which will provide adequate CFM with the expansion in mind. It will also reduce overall energy, installation and purchase cost compared to Atlas Copco.

We proposed a QGV-125 system as the primary with an additional QGV-125 for back up. The variable speed air dryer was sized for an outdoor, high heat environment with expansion demand in mind. The storage capacity is rated for five-gallon/CFM, and the flow controller compensates for artificial demand.

We helped Silver Crest Homes realize that their demand varies throughout the different production phases and that their low, average and peak CFM ranges justified the need for a VFD compressor. We conveyed that the existing storage was inadequately sized for production demand CFM. We also helped Silver Crest size the new compressors according to current demand and prepare for planned expansion in the next two years. Thanks to our experience and engineering expertise, the customer is now interested in coming to us for service and committed to purchasing the third compressor in 2022.

UNDENIABLY THE WORLD'S FINEST

Quincy Compressor specializes in compressed air technology, offering top-notch products and services since 1920. Serving the industry for nearly 100 years, Quincy is on the cutting edge, engineering quality and reliability into every offering. Award-winning accomplishments have allowed Quincy to build solid relationships with its customers and achieve compressed air systems best practices. Quincy's flagship products include the QSI and QGV rotary screw compressors, the reciprocating QR-25, QT and Climate Control packages along with its innovative Royal Blue Warranty, widely recognized as among the industry's strongest warranty program.



701 North Dobson Avenue
Bay Minette, AL 36507

251.937.5900

quincycompressor.com