KCP&L Business Energy Efficiency Rebates

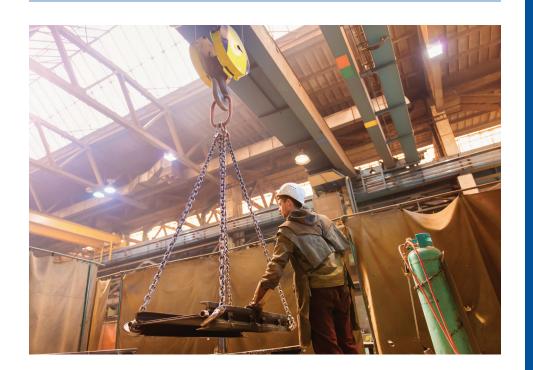
Laclede Chain Manufacturing Company LLC

KCP&L rebates allowed chain manufacturer to upgrade equipment for half the cost.

OVERVIEW

Laclede Chain, a manufacturer of industrial chains and tire traction chains, was looking to reduce its energy use and lower overall costs. The Missouri manufacturer produces various kinds of welded chain, from overhead lifting chains to transportation tie down chains, and offers a full line of chain hooks, fittings and other accessories. The company also manufactures chains for passenger cars, light trucks, SUVs, commercial trucks, buses, tractors and off-road vehicles.

In other words, Laclede Chain uses a lot of energy, and costs add up fast.





STATS

Facility type:

Manufacturing

Facility size:

12,000 sq. ft.

Energy-saving measures:

Air compressor and dryer replacements

Estimated annual electric savings:

\$24,650

Annual energy savings:

256,510 kWh

Total project cost:

\$182,500

Project payback:

3.7 years

"The entire process went very smoothly and met all of our expectations. KCP&L worked very well with our contractor and equipment supplier, making the decision and cost justification simple."

TIM CATLETT

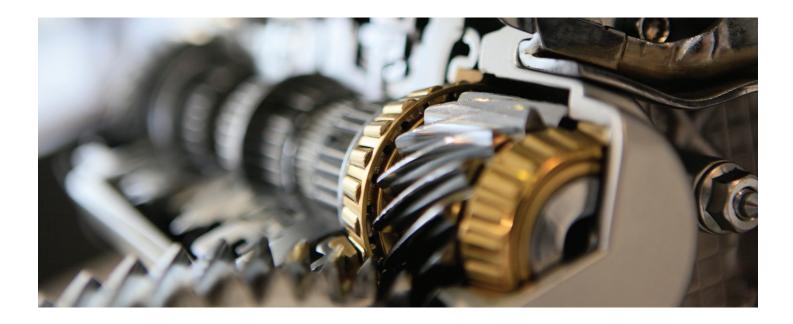
Director of Materials







Laclede Chain Manufacturing Company LLC



Challenges

The manufacturer wanted to not only reduce energy use and costs, but also equipment cost, operating cost, maintenance cost and depreciation. The need to replace inefficient equipment coupled with the available rebates made justifying the additional cost of the project easy.

Results

Laclede Chain had quite the retrofit. Old modulating compressors were replaced with VFD drives, lowering plant pressure from 125 to 100 PSI. There was also a demand to change the technology in dryers, due to compressed air plant equipment needs. So the manufacturer went from non-cycling dryers to cycling dryers.

The entire project cost came out to \$182,500, which was offset by the amount of the rebate received from KCP&L. Thanks to this generous rebate, Laclede Chain should be able to pay the project off in 3.7 years.

It wasn't just financial savings that Laclede Chain enjoyed. The manufacturer also saved 256,510 kWh, which is equivalent to the greenhouse gas emissions from 432,044 miles driven by an average passenger vehicle and the $\mathrm{CO_2}$ emissions from 192,365 pounds of coal burned, according to U.S. Environmental Protection Agency calculations.

Overall, Laclede Chain was pleased with the results. Tim Catlett, the company's Director of Materials, said "We have seen less energy consumption and better control of our air pressure with the new system. We have more confidence in the new equipment compared to the older equipment. We saw immediate savings and our equipment will last another 15–20 years."

Laclede Chain has also participated in the Demand Response Incentive for the past two years. Participating allows Laclede Chain to save even more during the summer months by curtailing energy use during peak demand events. For their commitment to operating efficiently during these events, Laclede Chain receives incentives from KCP&L.



