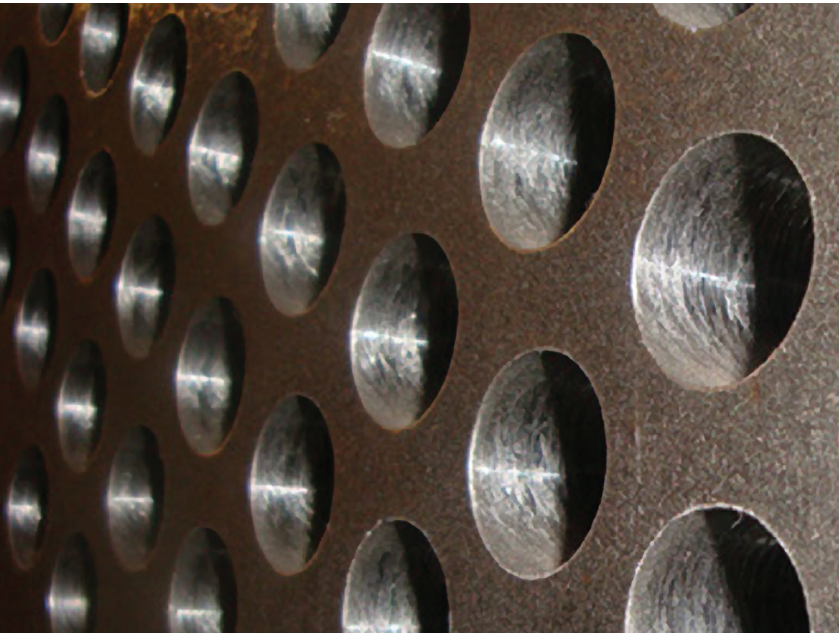


# Canadian Fabricator Finds Cost Savings Of 42% Compared To Kraiss



## QUICK SUMMARY

### The Challenge

- Producing quality products in a timely manner.
- Reduce costs by at least 20% and increase productivity.
- Quantitative trial to prove the results.

### The Solution

- Production trial at the fabricator's plant to document the tool life and production time of Elliott's 24 Series against Kraiss's expanders.

### The Results

- 3-4 times better tool life from the 24 Series expander.
- Less operator time spent replacing worn or broken tooling.
- Total savings of 42%, which equates to around \$49,000 per year.

## The Challenge

A leading Canadian fabricator provides a full range of shell and tube heat exchangers and aftermarket maintenance support services for heat transfer products.

A large part of the company's business includes manufacturing and servicing heat transfer vessels. Producing a quality product in a timely manner for customers is one of the company's primary objectives.

The company was content with the quality and performance of the Kraiss brand

expanders they are currently using. The Plant Manager is always actively seeking out ways to increase productivity and reduce costs without sacrificing quality. He was looking for at least a 20% savings in order to move forward with a change in tube expander providers.

He met with an Elliott Tool Area Sales Manager to share the company's needs. It became very apparent that Elliott's 24 Series Condenser Expanders could save some considerable time and money.

The Plant Manager had heard many product claims before from sales people saying how great their product performs. He was a bit skeptical, but agreed to a production trial to see if the results of the product are what Elliott is claiming.

## The Solution

The production trial was on a shell and tube, U-tube heat exchanger with 3/4" X 14 BWG minimum wall carbon steel tubes. The tube sheet was 6" thick and approximately 4'



	Expanders	Mandrels	Roll Sets
<b>Elliott 24 Series</b>	1	1	1
<b>Krais Model</b>	1	3-4	3-4

in diameter, with 2,326 holes for the 1,163 U-tubes.

A 24 Series Condenser Expander, part number 24232, was utilized for this trial.

The Plant Manager and his team focused on tool life while monitoring this production trial. The one Elliott 24 Series expander expanded 1,137 tube ends before needing a replacement mandrel and roll set. The remainder of the 1,189 tubes were then expanded with the replacement rolls and

mandrel. Upon inspection at the end of the job, the Elliott 24 Series expander showed no signs of fatigue and could have been utilized for further expansions.

The day and night shift operators and the production manager independently confirmed the Krais expander model would require 3 - 4 replacement roll sets and mandrels to complete this same job.

### The Results

Totaling the savings coming from using fewer tools, mandrels and roll sets and from using less operator time replacing worn parts, the manufacturer's savings totaled 42% – in dollars that's over \$49,000! The Elliott 24 Series greatly exceeded the 20% savings needed to justify switching to Elliott as their tube expander supplier.

*“The Elliott 24 Series expanders greatly exceeded the cost savings we needed to justify switching to Elliott as our tube expander supplier.”*  
- Plant Manager