

Production Jumps 44% on Trumpf 4050 Laser @ Russel Metals Regina

As a result of the technical support P.E.P. provided Regina the profitability on the Trumpf 4050 laser will most likely:

1. INCREASE the 4050 one year ROI by \$ 300,000.00
2. INCREASE the 4050 five year ROI by \$1,500,000.00
3. Generate more business now that production is up by 44%

The technical support staff boosted the lasers productivity by analyzing the posted code for the error produced when cutting the nest at the right. After diagnosing the problem they explained to the laser programmer and operator the proper posting and pierce sequencing procedures for cutting ½ inch and thicker materials.

The Rest of the Story!

The problem came up at Regina on the 2nd shift after normal working hours. Although it was after hours for the P.E.P. support staff as well, they took the call and diagnosed the problem so that the laser could continue throughout the 2nd and 3rd shift.



The error 22 indicates over heating. The error was brought on by the pierce cycle sequence and wattage used to pre-pierce the hole intensive nest with the 4050 laser. The P.E.P. support team had Regina change the piercing cycle sequence explaining how the 4050 has pre-piercing control that detects for the pierce depth and automatically cools the material with a special nitrogen cycle eliminating the need to pre-pierce. As a result of this change recommended by the P.E.P. Technical Support Staff, Regina has now eliminate all pre-piercing and they anticipate saving between 30 and 40 minutes per nest that is cut on the 4050 Trumpf laser.

The ROI savings noted in the top of this document are a result of the technical support Regina received, and it is over and above the P.E.P. material and machine savings Regina has already achieved using P.E.P.

MOST IMPORTANT ASPECTS OF THE CALL:

- 1) The knowledge of the P.E.P. support staff was the difference in recognizing the long term productivity savings and the need to change their procedures.
- 2) The P.E.P. support staff took the Regina second shift support call after hours and was able to resolve the error and keep the laser running throughout the second and third shift that night.
- 3) Most customers do not think they have the time to test whether they are running their lasers as fast as they can, in this situation Regina saved 44% of their laser machine time. Weekly, this means they can do 6 ½ days of cutting in less than 4 days, saving more than 2 ½ days each week.

Nest Data

Material: ½” mild steel

Plate Dimensions: 80x96

Pierces: 498

Head Raises: 41 (less than 10%)

Total Processing Time / Cost before pre-pierce was turned off: **1 hr. 30 min. @ machine rate = \$XXX.**

Total Processing Time after pre-piercing was turned off: **50 min. @ machine rate = \$xxx.**