

# Reducing the cost of the daily grind!



**The requirement to reduce energy consumption across industry is a world-wide remit.** New Form Tools, a Canadian manufacturer of metal cutting solutions to the Tube & Pipe, Roll Form and Coil Processing industries, has an internal target of reducing the energy consumption of their grinders by 5%. The particular grinders New Form Tools use cannot utilise variable speed drives as the motors must run at fixed speed, this led them to contact Fairford to see if their energy saving soft starters could help achieve their targets.

New Form Tools use Blanchard grinders in their process. These grinders are designed to run with heavy loads on the spindle however New Form Tools process only uses about 20-30% of the rated horse power. This light load state causes the motor to use more energy than is required, due to excess losses, specifically excitation losses.

Fairford's **intelligent Energy Recovery System (iERS)** will monitor the loading on the motor and reduce the voltage and current supplied which reduces the power consumed and improves the part load power factor by reducing the inherent losses.



A synergy unit was installed on their Blanchard #2 grinder as an initial test with the target of saving 5% of the energy. A SGY-203 was installed on the 75HP motor, the installation was fast and easy utilising the 2.5" touch screen and automatic set up. Initial

results showed the energy consumption was reduced by **13-15%**, well above the requested saving level! In addition to this energy saving, the starting current was reduced causing less stress on the electrical supply and the mechanical components reducing wear and tear and down time increasing production efficiencies.



As a result of the initial successful trial New Form Tools have planned to outfit the remaining 9 grinders with synergy and the iERS feature.

*"We are pleased with our results with this product, it is helping us reduce energy costs, we anticipate that with more testing and installation of several more soft starts we can achieve this power saving plan"* – Jim Jantzi, President New Form Tools

For more information please contact Fairford or check out our YouTube channel.