

“Save Energy & Maintenance Fee’s on YOUR Stamping equipment”

Project scope: (Case Study S04101)

- Powerboss installation on a 600 ton Stamping Press equipped with a 75hp / 480v motor on it’s platen assembly.

Application details:

- Most press applications offer a significant off-load % within their operational cycle time. It is this off-load time that Powerboss can be very effective in saving electrical consumption.
- Press main platen motors are oversized to address varying die sizes to be stamped and the flywheel offers significant stored energy that Powerboss can use in it’s ability to deliver voltage based on load.
- It is not uncommon for larger presses to have auxiliary motors that are over sized & underutilized. These motors are also candidates for energy waste.
- If the Press is manual feed, additional savings are available
- Most Presses have significant downtime for operator breaks & meals, die change-outs, routine maintenance etc.

Powerboss Stamping package:

- Soft Start functionality
 - Will reduce DOL (Cold Start) motor startup current & wattage.
- Optimization mode and stored energy function
 - Powerboss will in real-time (120 times / sec) analyze the load required and provide only that amount of energy to satisfy. Nothing more, nothing less. This ability reduces’ kWh operational usage.
 - Auto-off mode will automatically turn off motor to increase savings when time allows – ie: Breaks, Die changes etc. (time line selectable by you)
- Maintenance / soft benefits
 - Easier on motor on startup
 - Heat reduction (every 10 degree’s will double motor life)
 - No arcing (due to zero current at contact closure)
- Financially sound – Excellent Return on Investment
 - Lease and rental plans available.



Documented & metered results on this case study:

- Energy savings
 - KW Peak Demand reductions attained
 - At Start of Motor 62%
 - In cycle stroke savings 14%
 - KWh operational in cycle reductions attained
 - 23%
- Investment return (based on Michigan utility rate structure)
 - 18 month on purchase.
 - Immediate MONTH 1 on lease program
 - Energy savings paid the lease payment