



POWER CONDITIONING SYSTEM FOR **ONTARIO BUSINESSES**

FROM POWER
DISTORTION TO PEAK
PERFORMANCE



How does Poor Power Quality affect your Operation?

Power quality issues—both from the grid and within your facility—can be costly and disruptive. Voltage fluctuations, unbalanced current, harmonics, and poor power factor accelerate wear on your distribution system and equipment, while also exposing you to utility penalties.

Active harmonic filtering eliminates harmful distortion to protect sensitive equipment and extend asset life. Power factor correction improves efficiency, reduces reactive power charges, and unlocks additional system capacity.

4 Benefits of Power Conditioning

Clean power, protected assets,
and lower demand charges.



**Guaranteed Energy Savings
Through Reduction of kVA,
kW & kWh**



**Total Harmonic
Distortion Reduction**



**Transformer Overheating
Minimization**



**Power Factor Penalties
Elimination**

PCS case study

An extrusion facility with plants in the US and Canada faced persistent power quality challenges from poor power factor and high harmonic distortion. Their variable speed drives and motor loads generated harmonic currents causing heat buildup, nuisance tripping, and premature wear across their distribution network while reactive power demand inflated utility bills through power factor penalties.

Our solution deployed precision-tuned passive harmonic LC filters to bring THDi to compliant levels, eliminating thermal stress on electrical infrastructure. Integrated Power Conditioning system improved power factor to near unity and freed up system capacity across both facilities.



\$137,646
Estimated annual savings



0.99
Improved Power Factor



~3 yrs
*Payback

*Considering losses associated with prevented outages

Power Conditioning Project Timeline:

Step 1

Provide Bills

Step 2

Preliminary Numbers

Step 3

Power Quality Audit

Step 4

Proposal With Guaranteed Savings

Step 5

Power Quality Audit Pre-Approval

Step 6

Start Saving and Receive Incentives

Ready to Unlock Incentives?

Book a no-obligation consultation with Circuit Energy's engineering team and discover your savings potential

[Schedule Consultation](#)