



Customer Summary

Carter Day Industries
(Winnipeg Manitoba)

Re: Hardening Plant using
Cyanide Bath to harden steel

Problem

City bylaw in 2011 changed
allowable Total Cyanide
discharge from 10 ppm down
to 2 ppm.

Solution

Cyanide destruction
processing plant was installed
in 2012 with
Electrocoagulation. Plant is still
operational today producing
total cyanide discharge levels
of 0.5 ppm.

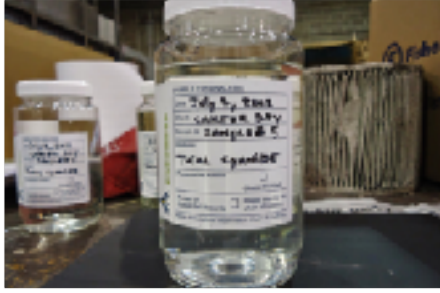
The Electro-coagulation
process allow the customer to
continue operations in
Winnipeg under the new
bylaw city requirements.



Main Highlights

- Total Cyanide Destruction below 1 ppm.
- Fully Automated operation.
- Small Full print.
- System was tailored designed.





Other Benefits

- Fully Automated.
- As long as the process applies the the correct amperage and voltage reduction of Total cyanide is guaranteed to be below 1 ppm
- Consistent results over a 12 year period.

Solution

Total cyanide is a non-permissible parameter due to its toxicity. The city of Winnipeg does not allow since 2012 discharges with more than 2 ppm Total cyanide. This presented a real challenge to this industry that still process hardness of steel through the old reliable method of molten cyanide bath. This method remains still the best in the industry today in terms of metallurgical properties for the hardness of carbon steel.

If the customer could not produce discharge levels of total cyanide below 2 ppm the company would have been forced to close down.

Our Helical Cathode Electrocoagulation Technology was able to keep this company in business. Today is the year 2024 and this process has been consistently operating as designed for 12 years.

Customer is very happy!

Customer is happy to provide feedback to anyone asking!

