

# Nelson Steel

Consulting & Technology Group

A DIVISION OF  
**SAMUEL MANU-TECH INC.**

**Innovator in Pickling Technology**



## COMPANY PROFILE

Nelson Steel was incorporated in 1973 and in 1985 became a division of Samuel Manu-Tech Inc., a publicly traded company that produces and distributes a wide range of steel related products and services from locations in Canada, the U.S. and Mexico.

Nelson Steel has designed and built over 65 complete processing sections including revamps and retrofits for a variety of pickling lines worldwide.

Nelson Steel also owns and operates 10 push-pull pickling lines, 7 in Canada and 3 in the U.S. with a total annual capacity of 3.5 million tons.

Our unique position as operators and designers/manufacturers makes us an ideal choice as a supplier of steel pickling equipment and expertise.



One of Nelson Steel's most recent pickling lines, operating in Canada with a capacity of 450,000 T/A, has some of the most modern features in steel pickling technology.

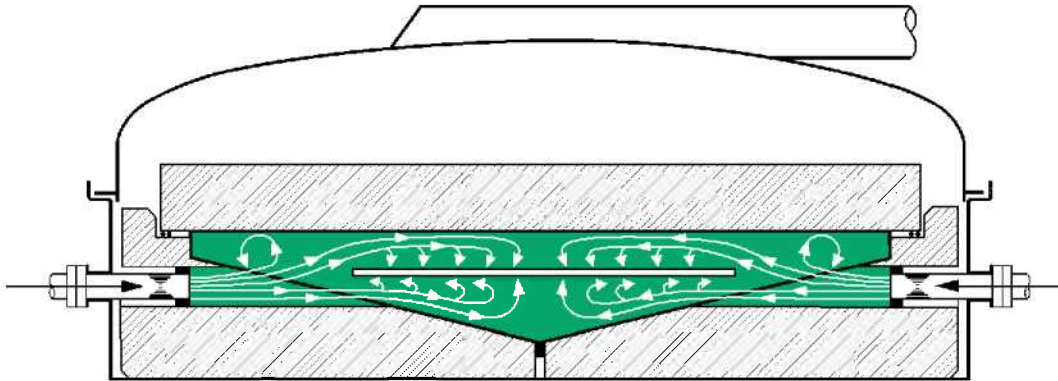
## PROCESS SECTION



OVERALL VIEW OF PROCESS SECTION

- |                             |  |  |
|-----------------------------|--|--|
| 1 Fume Scrubber             | 3 Turbo-Tunnel <sup>®</sup> Pickling Tanks | 5 Stain-Free <sup>®</sup> Rinse System |
| 2 Acid Recirculating System | 4 Waste Water Treatment System             | 6 Air Blow Off System                  |

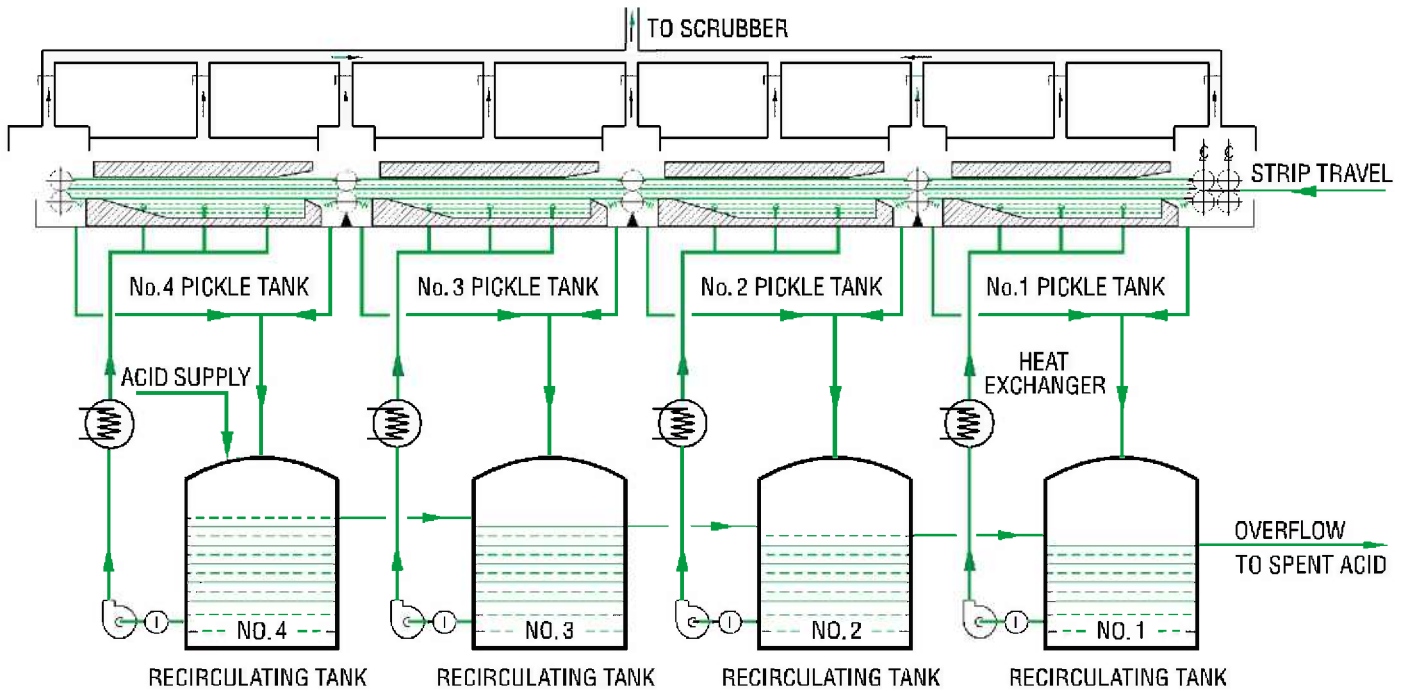
# PICKLING TANK TECHNOLOGY – TURBO-TUNNEL™



Nelson Steel's patented Turbo-Tunnel™ is one of the most efficient turbulent pickling systems available. Turbulence is highest at strip edges where the mill scale is the heaviest.

The Turbo-Tunnel™ system eliminates air space above the acid bath, thus reducing evaporation, heat loss and acid consumption.

## ACID SYSTEM



## TYPICAL ACID RECIRCULATING FLOW SCHEMATIC

