



CASE STUDY

Reference #63

Customer: POSCO THAINOX

Segment(s): Solutions – Roll Grinders (Steel Industry)

Project: Herkules WS450 Complete Retrofit

Summary...

Complete mechanical rebuilding and electrical CNC retrofit including new roll measuring system.

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Retrofit of a Herkules WS450 Roll Grinder full CNC with SINUMERIK 840Dsl including complete mechanical rebuilding and new roll measuring system.

The Customer

POSCO-Thainox Public Company Limited is the only manufacturer & distributor of premium cold-rolled stainless steel sheets & coils in Thailand. Their steel supplies the busy local manufacturing industries in need of Austenitic and Ferritic Stainless Steel. This steel is used in Automotive & Transportation, Food Processing and Medical Equipment, Building & Construction and Heavy Industry.

The Challenge

When extending their production capacity, POSCO-Thainox had to also extend their capability of servicing their busy cold mills, hence they were looking for increasing the capacity of their roll shops. Given the trusted relationship with our Thailand office, we were requested to source a second hand roll grinder. The challenge was to complete this project that included complete mechanical rebuild & electrical retrofit in the shortest possible time, within the agreed budget whilst achieving the maximum performance as required for the high end products.

Why CNC Design?



Having extensive experience and an active network in this industry, CNC Design Thailand had identified a suitable machine in Europe. This was a Herkules WS450, suited for grinding the rolls of POSCO-Thainox. The roll grinder was shipped to our Thailand factory in Bangkok and the work began.

The Retrofit



To achieve the high accuracy required for the stainless steel cold mill, the machine had to undergo a complete mechanical rebuild & electrical retrofit including:

- Complete machine strip down
- Slideway grinding & scraping
- Wheel carriage overhaul
- SINUMERIK 840Dsl
- New S120 AC Drives + Servo & Main Motors
- New hydraulic & lubrication system
- Coolant system overhaul
- New electrical cabinet & operator station
- Full machine electrical rewiring

The Result



Completed on time, in budget and achieving the grinding performances of a brand new machine, featuring CNC Design software for roll grinders, this is just one of the many successful projects done by CNC Design in this demanding industry....