



MDI Systems "Slide-a-Drive"™ technology allowed Geneva Steel to fit sixteen VFD systems, each with 5% line reactors, and a two-foot I/O cabinet within an 18-foot span along the north (right) wall of this control center.

Maximizing space minimizes cost for Geneva Steel

MDI Systems' custom manufactured "Slide-a-Drives"™ allow Geneva Steel to install enough VFD systems, in a very limited space, to gain energy savings and precision process control.

Craig Hartman (Director of Energy) and Doug Stewart (Electrical Engineer) knew that retrofitting the plasma-cupola process with variable frequency drive (VFD) systems would improve Geneva Steel's steelmaking capabilities. But they also knew there simply wasn't enough room.

Sixteen, 25 through 60 horsepower VFD build ups and an I/O cabinet were needed, which was 235% more equipment than the eighteen feet of available space could accommodate.

"If we had only used the number of VFD build ups the room allowed, then we wouldn't have been able to save energy or improve precision," said Stewart.

"And the cost of constructing a second building was enormous," added Craig Hartman.

Then, Hartman and Stewart sat

down with a team of engineers from Energy Management Corp., the local supplier of *MDI Systems* VFD packages.

"When they (Geneva Steel) explained the situation to us, we knew it was a perfect application for the *MDI Systems* VFD Power Center, with the 'Slide-a-Drive' option," stated Steve Rossiter, President of Energy Management Corp.

Geneva Steel Overview

Geneva Steel was the U.S. government's largest wartime construction project during World War II, established to produce steel needed to help build ships for the war. Today, it produces two million tons of hot-rolled steel plate, coil, sheet, and pipe a year.

As a large steel mill, Geneva Steel places a high demand upon

QUICK LOOK

COMPANY HIGHLIGHTED

⇒ Geneva Steel

INDUSTRY

⇒ Steelmaking and refining

VFD APPLICATIONS

⇒ rolling mill, in-line casting, cooling towers

APPLICATION CHALLENGE

⇒ Fit enough VFD systems in limited space available to achieve energy savings and precision process control for plasma-cupola process.

MDI SYSTEMS SOLUTION

⇒ Install VFD Power Centers with "Slide-a-Drive"™ option. Components mounted on sliding panels to maximize space without sacrificing performance or capability.

RESULTS

⇒ Installed 16 VFD systems (455 total HP) and I/O cabinet in 18-foot span; 235% more allowed in same space, and with same features, compared to conventional build up; still met Geneva Steel's