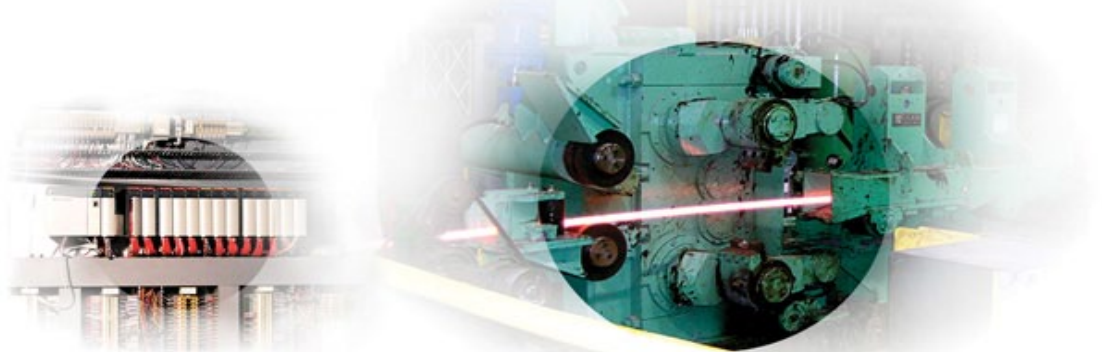


# FLYING DIVIDING SHEAR EQUIPMENT SUPPLY



## PROCESS

Flying dividing shear performs head crop, divide cut, sample cut, last cut optimization, cobble cut. Direct drive system, pinch roll for accurate last cut. Speed trap – no need to interface to delivery stand. Product sizes 1 to 3 inch round. Product speed 200 to 800 fpm.

## SCOPE

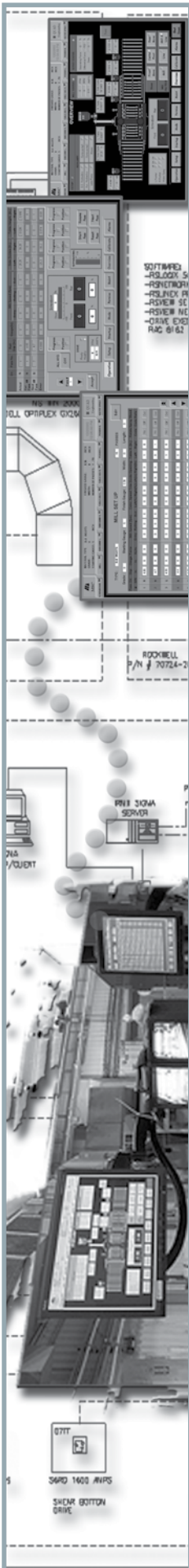
Design, supply, install and commission drives, sensors and PLC system. Incorporate operator set-up and controls in existing Wonderware HMI system.

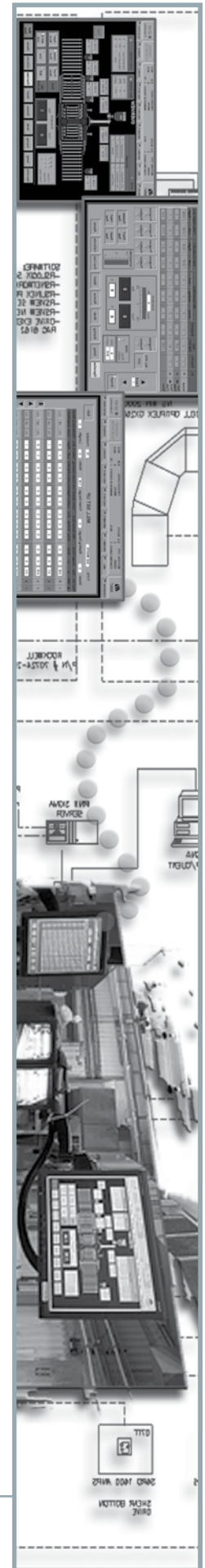
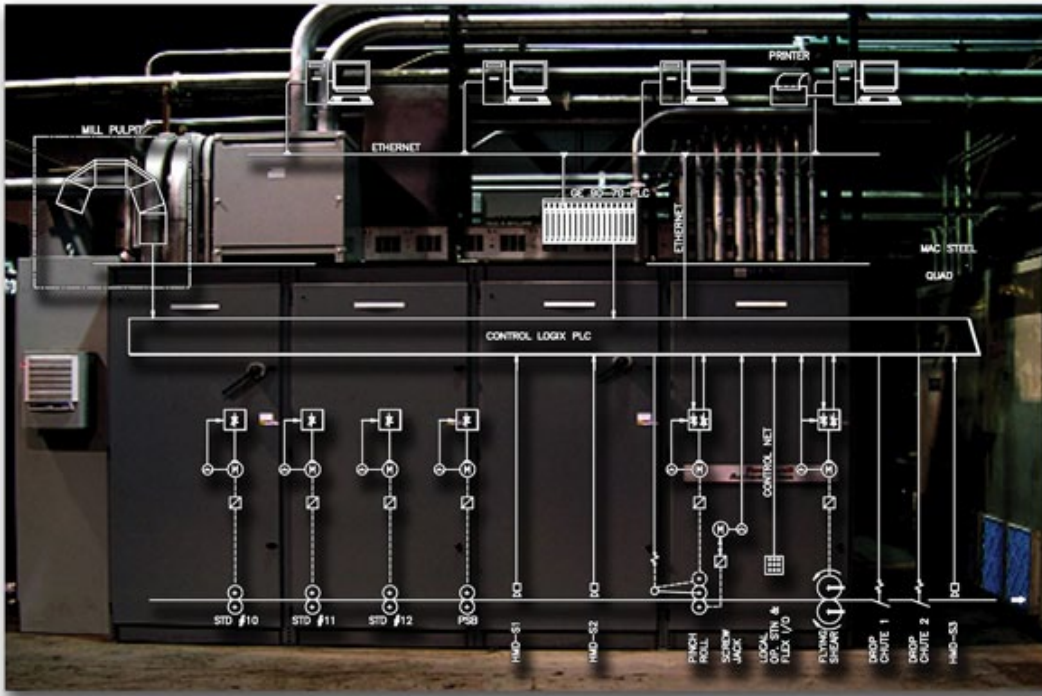
## APPROACH

Develop low cost PLC based bar tracking system and use motion control module for shear cut cycle control. Low inertia motor with high DI/DT.

## BENEFITS

Advanced low cost cut to length system, standard off the shelf components, easy to maintain.





## TECHNICAL DETAILS

**PLC** Rockwell Automation, AB ControlLogix with advanced motion control, modular, high performance PLC, with multi-user troubleshooting

**Networks:** ControlNet to interface with remote I/O and DC drives, Ethernet for interface with HMI

**Features:** Speed trap, head crop tracking, divide cut tracking, sample cut, pinch-roll tension control and speed matching, last cut optimization, shear reaction time compensation, pinch-roll reaction time compensation, blade speed match as function of product speed and dimensions, phantom billet

**DC DRIVES** Reliance FlexPak

**Qty** 2

**Sizes:** 50, 550 hp

**Features:** Regen, ControlNet communication

**HMI** Wonderware In-Touch version 8.0

**Hardware:** PC's, Pentium 4, two 17" screens

**Network:** Ethernet

**Features:** User friendly, integrated to existing Mill HMI with shear set-up: head crop length, divide cut length, number of cuts, last cut length, lead speed for head crop, divide cut and cobble cut, phantom billet speed, alarms

