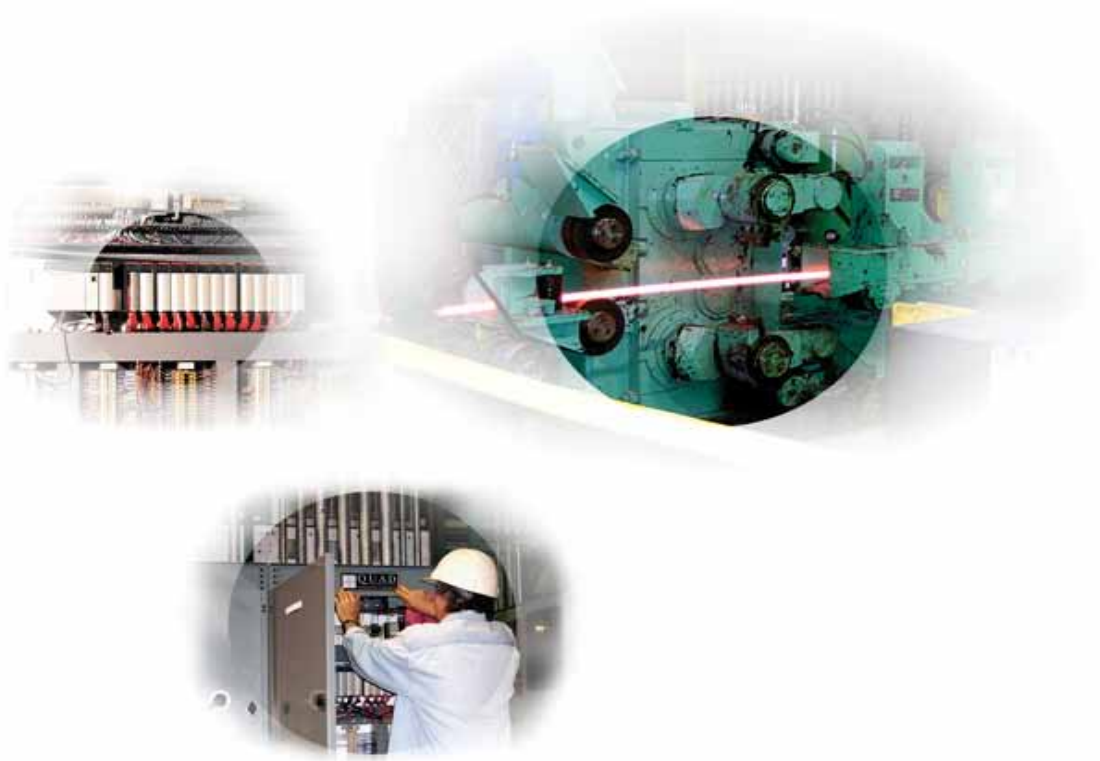


FLYING DIVIDING SHEAR

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

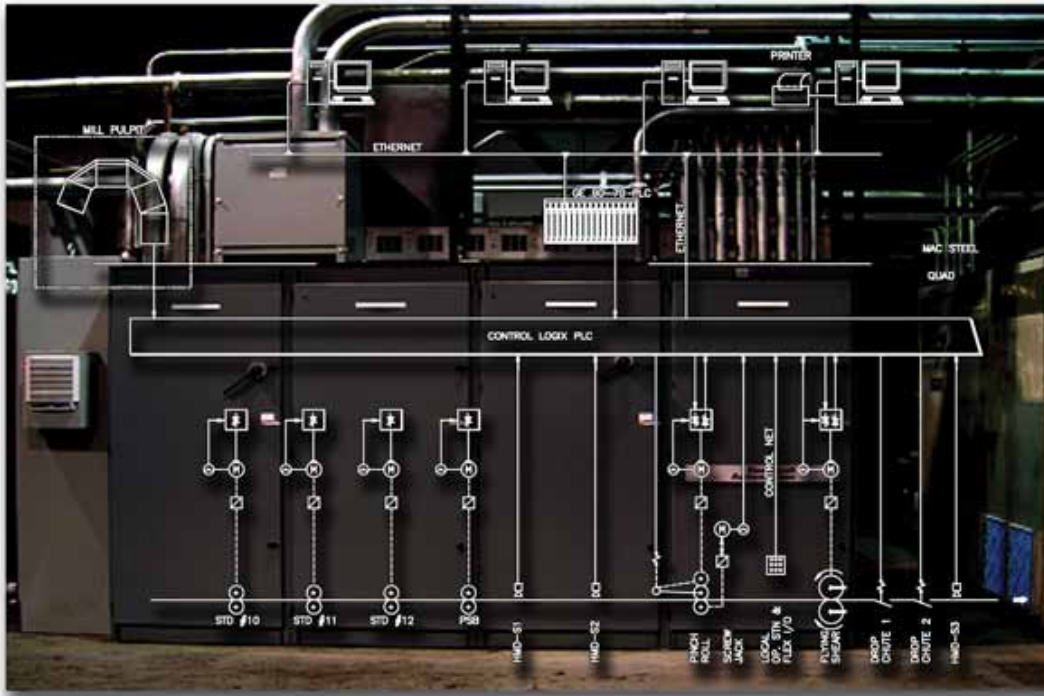
Design, supply, install and commission drives, sensors and PLC system. Incorporate operator set-up and controls in existing Wonderware HMI system

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