

GEMCO's SENSOR & PLS

(주) 광전FA

제철라인중심의 젠코 제품소개

Linear Feedback

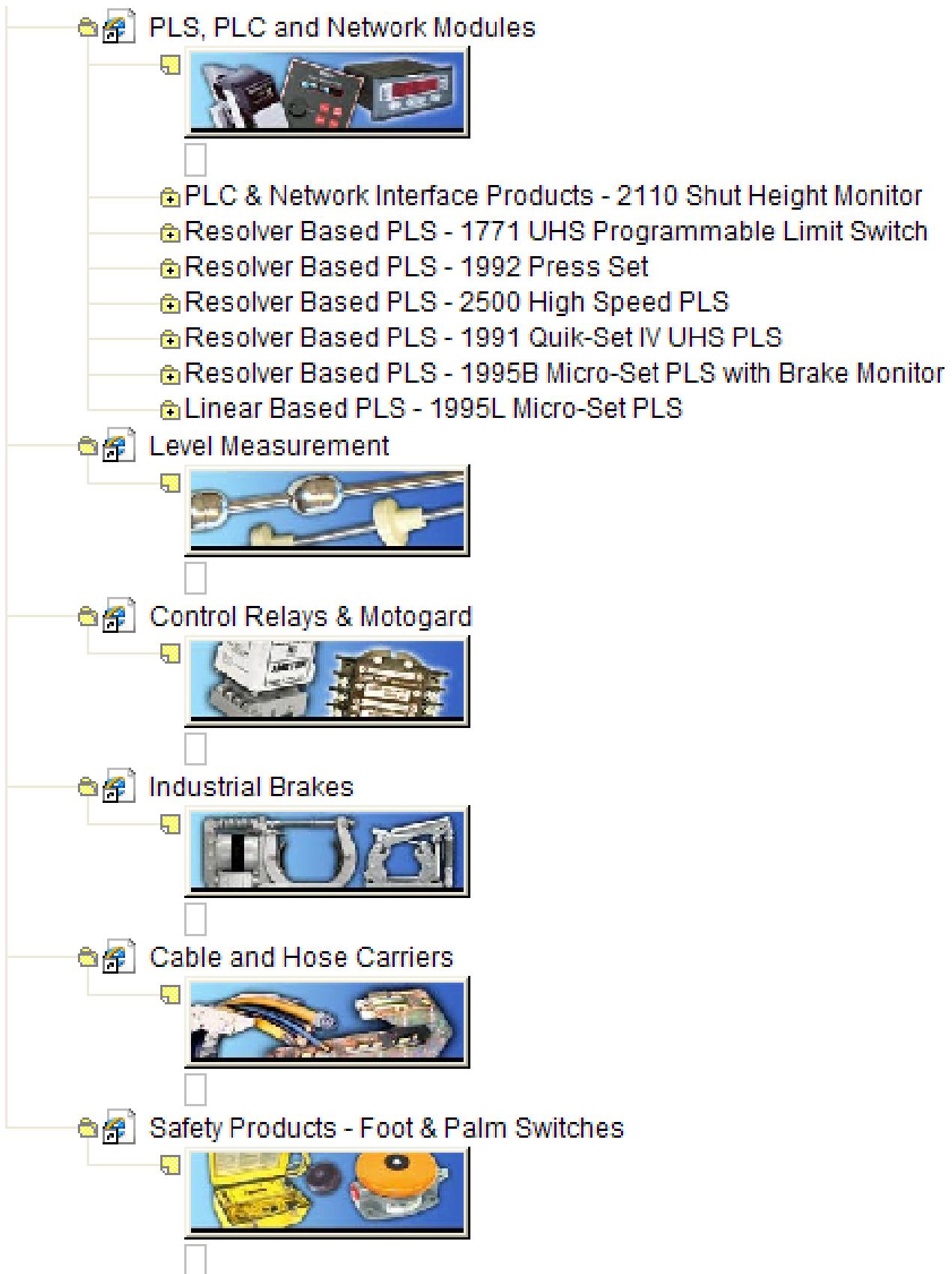


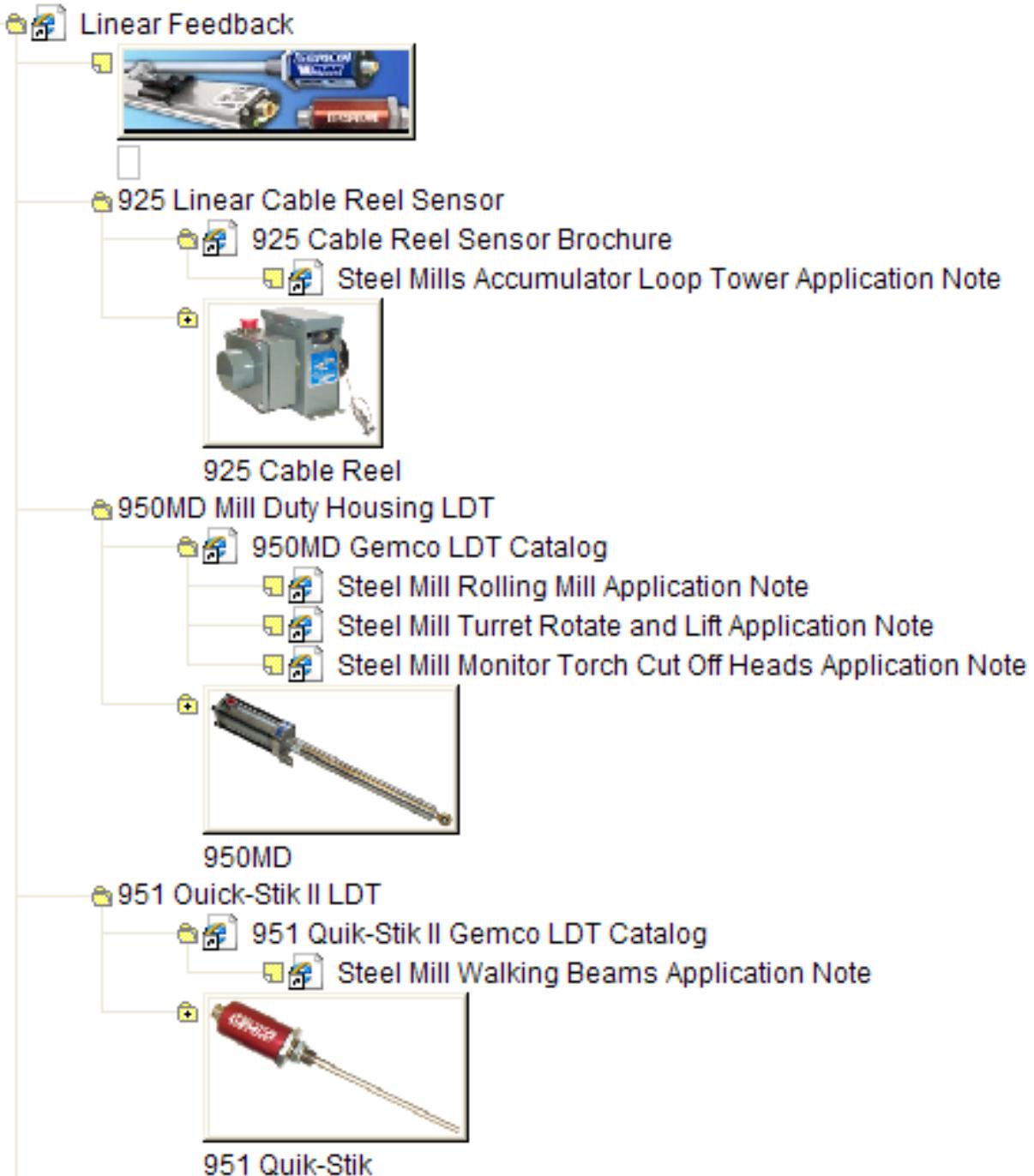
- 925 Linear Cable Reel Sensor
- 950MD Mill Duty Housing LDT
- 951 Quick-Stik II LDT
- 952 BlueOx LDT
- 953 VMAX LDT
- 955S Smart BRIK LDT

Rotary Feedback



- 1970 Drive-Chek Control
- 1980 Rotating Cam Limit Switch
- 1980R Rotating Cam Limit Switch w/resolver
- 1986MD - Mill Duty Housing
- 1986A Standard Foot Mount Resolver
- 1986B- 2.25
- 1986C - 2.06
- 1986D - 3
- 1986DN - DeviceNet Resolver
- 1986E - 100mm Face Mount Resolver
- 1986F - Standard Block Style Resolver
- 1986G - 3
- 1986GG - Multi-Turn Dual Resolver
- 1986H - Servo Mount Resolver
- 1986I - 4





952 BlueOx LDT

952 BlueOx Gemco LDT Catalog

Mill Duty Products

Steel Making

Raw Materisls to Iron

Rolling

Continuous Casting

Finishing & Coating



952 BlueOx

953 VMAX LDT

953A/D/SSI VMAX Gemco LDT Catalog

Steel Mill Sensor and Controls Solutions

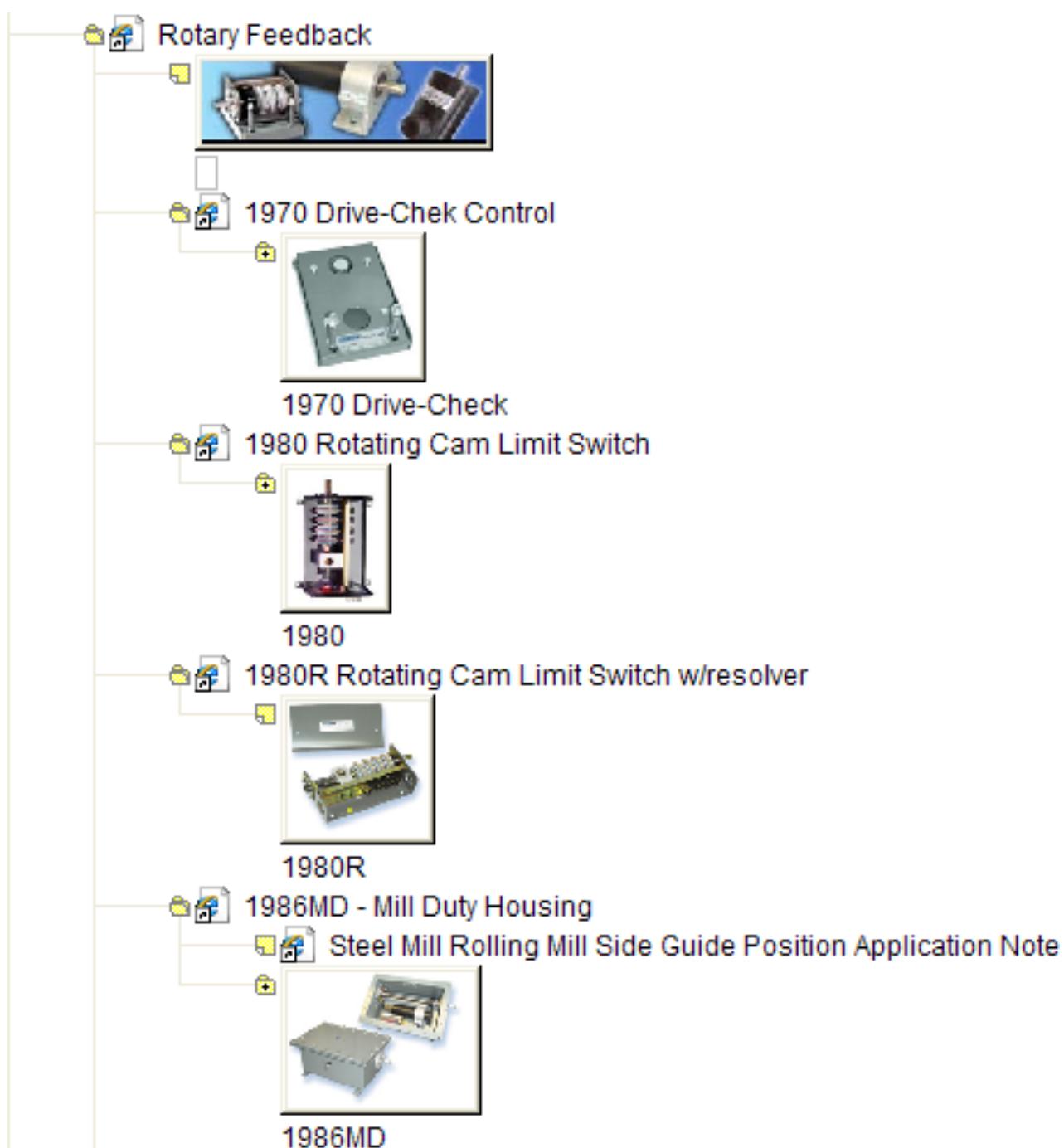


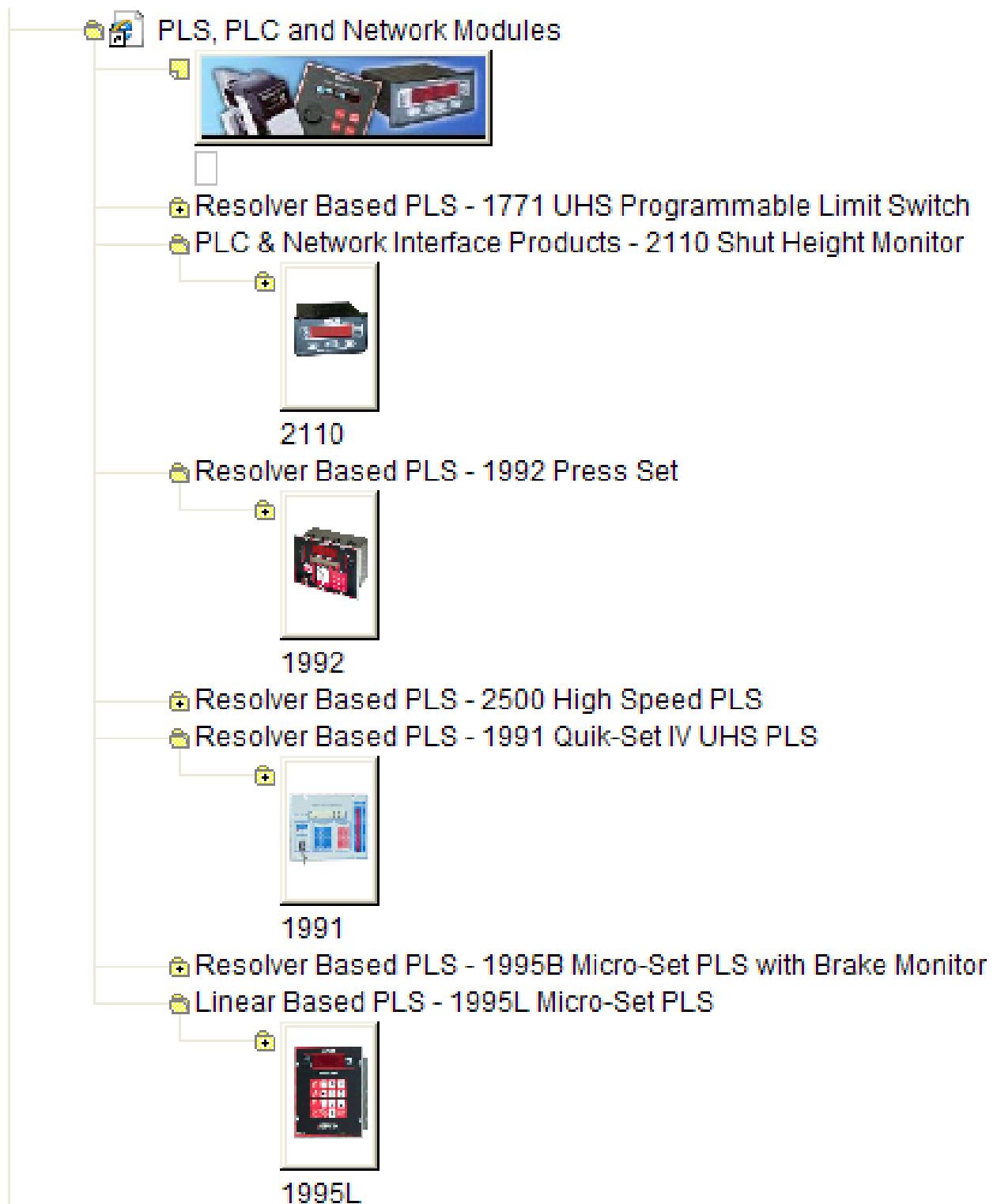
953 VMAX

955S Smart BRIK LDT

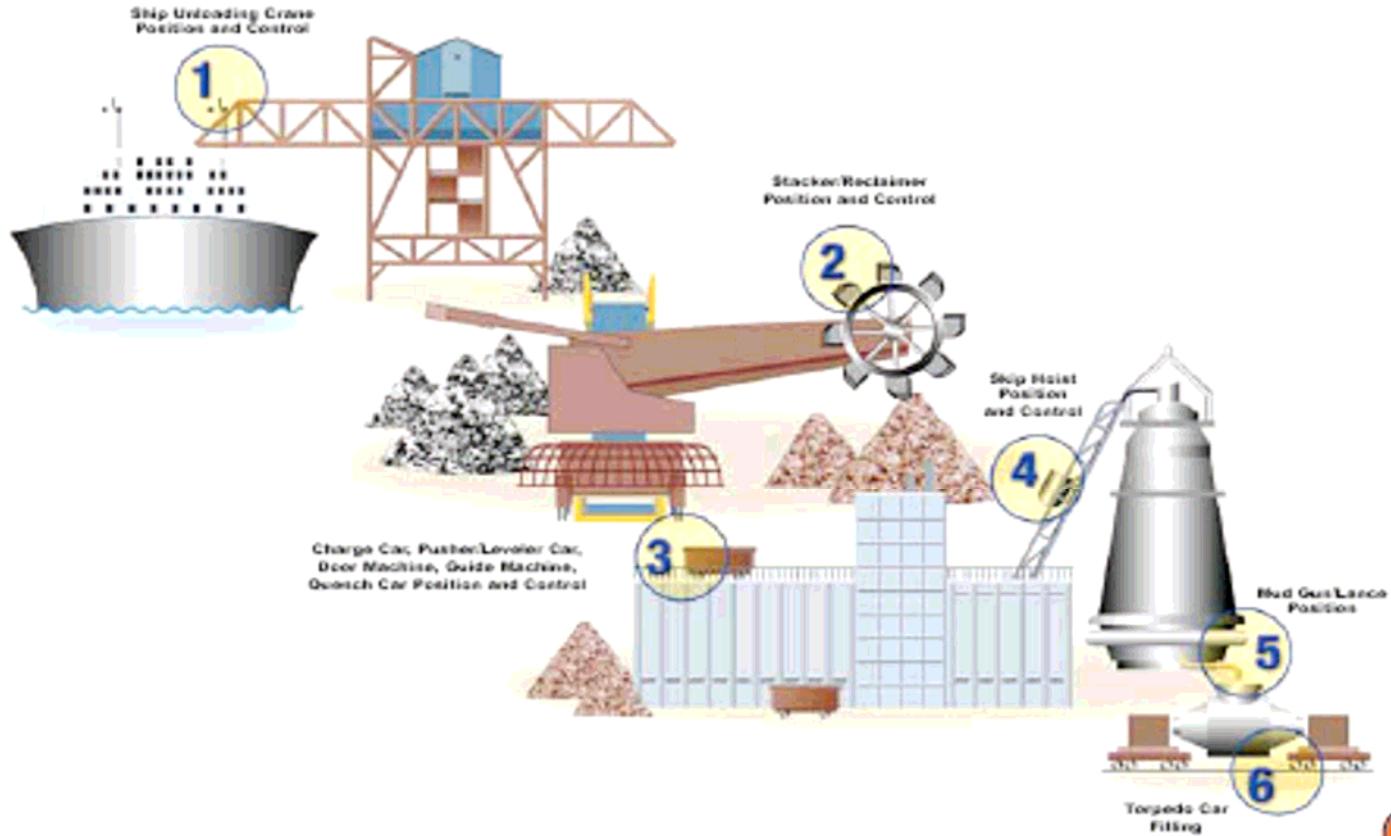


955A BRIK





raw material to iron



1 Ship Unloading Crane Position and Control

- Resolver-based, long travel and boom positioning sensors
- Thruster Brakes

2 Stacker/Reclaimer Position and Control

- Resolver-based luff and slew packages in mill-duty housings that emulate encoder outputs or provide analog outputs
- CATRAC™ carriages and CATRAC™ turntables
- Explosion proof cam switches with optional internal resolver or provisions for your rotary sensor
- Explosion proof resolvers
- Brakes

3 Charge Car, Pusher/Leveler Car, Door Machine, Guide Machine, Quench Car Position and Control

- Resolver-based pusher bar and leveler bar position sensor in mill-duty housing
- Mill-duty Linear Displacement Transducer (LDT) for door removal mechanism

4 Skip Hoist Position and Control

- Dedicated Programmable Limit Switch (PLS) controls skip car cycle
- Resolver-based stockline winch and stock rod position encoders in mill-duty housings
- Mill-duty encoder packages for chute/distributor tilt and rotation
- 1748-1771 cards for A/B PLC

5 Mud Gun/Lance Position

- Resolver-based position and mud charged measurement encoder in mill-duty housing
- Cam switches with resolvers or encoders

6 Torpedo Car Filling

- Resolver-based position encoders for hot metal and slag tilt spouts

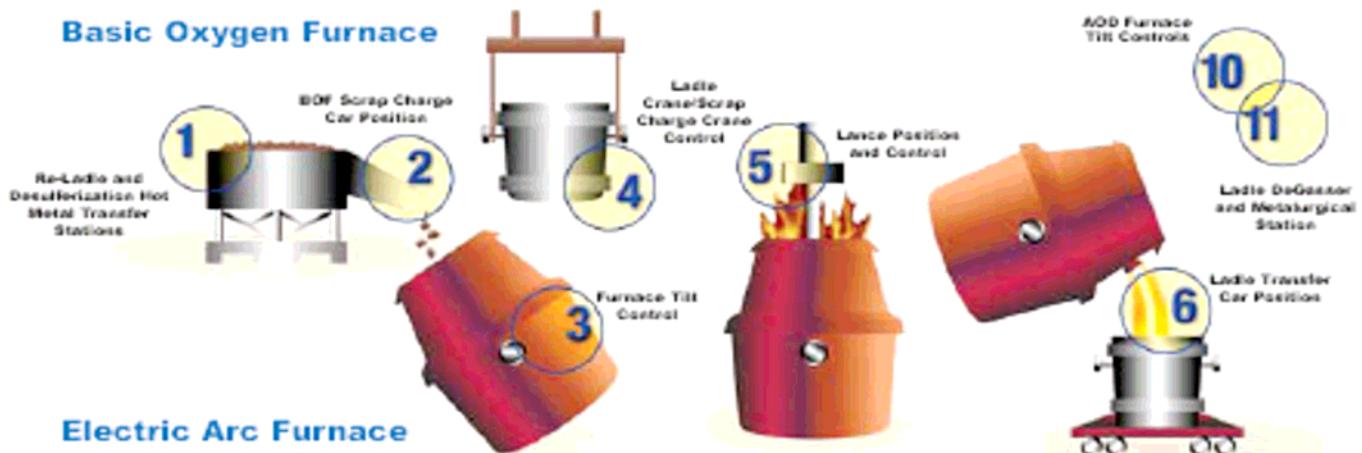
More Mill-Duty Solutions:

Control Products

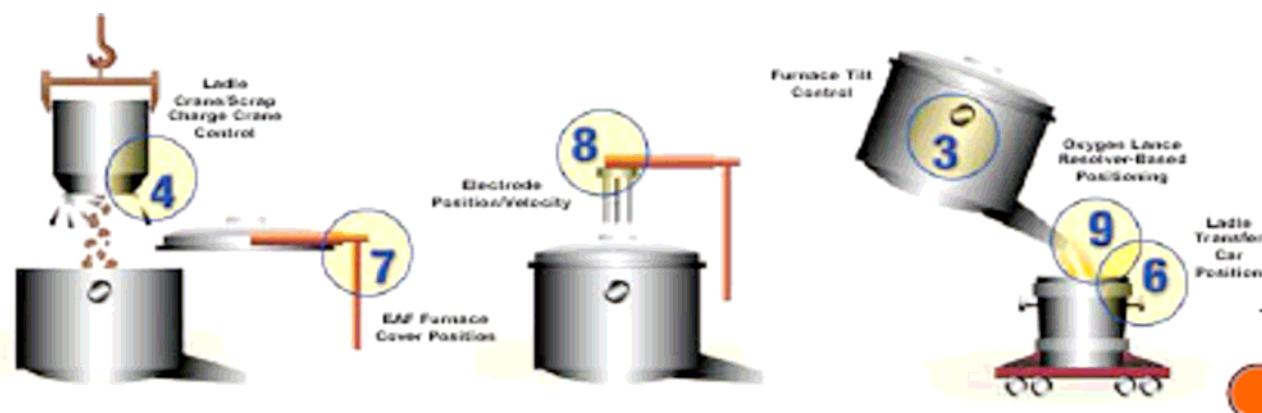
In this primary area of the mill, AMETEK Automation and Process Technologies also offers mill-duty GEMCO hydraulic, electric and electro-thrust crane brake systems, CATRAC™ cable and hose carriers, and process hoist limit controls, stock rods, temperature measurement and bell bunder blending.

steel making

Basic Oxygen Furnace



Electric Arc Furnace



1 Re-ladle and Desulfurization Hot Metal Transfer Stations

- PLS – temperature sample lance
- Series Q25 – cable drive for ladle car position and tilt slag off position
- CATRAC™

2 BOF Scrap Charge Car Position

- Resolver-based linear cable reel sensors monitor car position
- Scrap bucket tilt controls

3 Furnace Tilt Control

- Mill-duty rotating cam limit switches control position
- Resolver-based remote encoder 2120 packages or programmable limit switch systems (PLS) monitor/control position
- Mill-duty Linear Displacement Transducer (LDT) for hydraulically actuated tilt
- 1746/1771 Cards for A/B PLC
- Q25 Linear Cable Reel Sensors

4 Ladle Crane/Scrap Charge Crane Control

5 Lance Position and Control

- Mill-duty rotating cam limit switches position rotary skew monitoring
- Multi-turn resolver systems monitor vertical lance movement, insertion depth, and over-travel limits
- 1746/1771 Cards for A/B PLC
- 2120 Module
- Electro-thrust brakes

6 Ladle Transfer Car Position

- Resolver-based position cable reel sensors

7 EAF Furnace Cover Position

- Vertical position mill-duty Linear Displacement Transducer (LDT) with programmable limit switch (PLS)
- Rotational position resolver-based encoder/programmable limit switch system (PLS)

8 Electrode Position/Velocity

- Linear cable reel sensors give vertical position and velocity data
- Rotational position resolver-based encoder or programmable limit switch (PLS)
- Mill-Duty Linear Displacement Transducer (LDT) for position & velocity feedback

9 Oxygen Lance Resolver-Based Positioning

- 2500 PLS
- 2120 Module

10 AOD Furnace Tilt Controls

- Resolvers, Series 1060
- Thruster brakes

11 Ladle DeGasser and Metallurgical Station

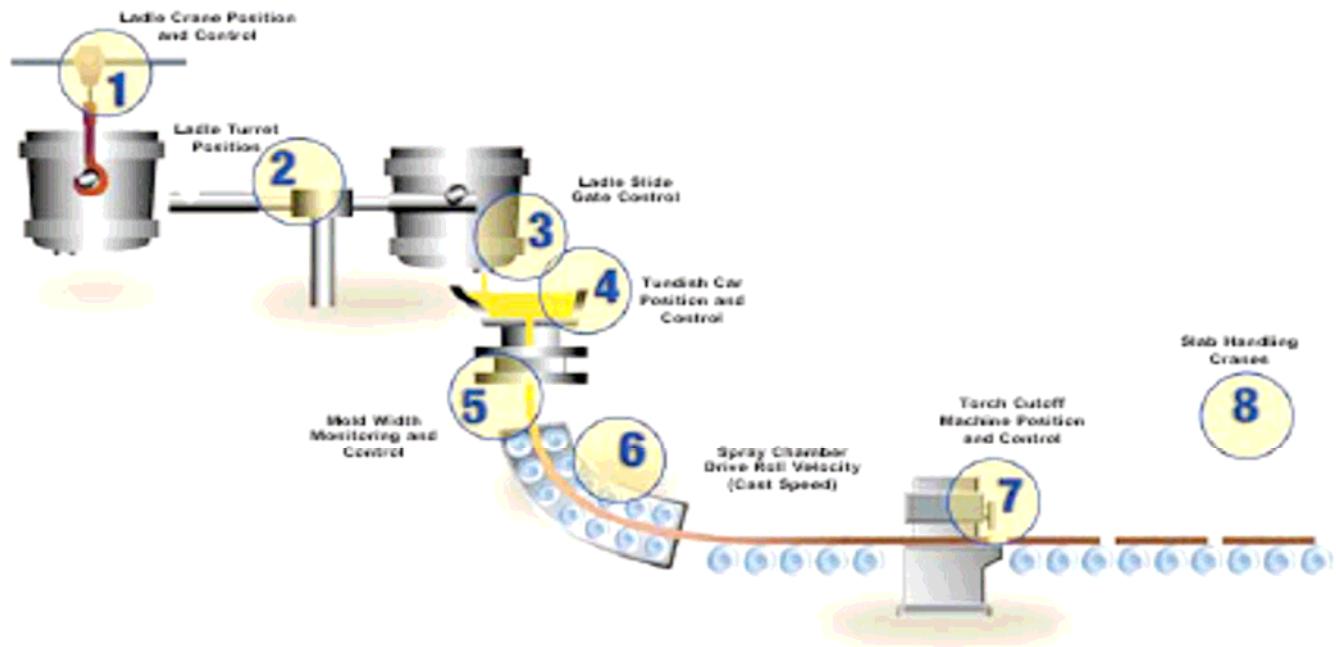
- CATRAC™ – Resolver transfer cars
- Electro-thrust brakes

More Mill-Duty Solutions

Control Products

In this area of the mill, AMETEK Automation and Process Technologies also offers mill-duty GEMCO hydraulic, electric and electro-thrust brake systems, CATRAC™ cable and hose carriers.

continuous casting



1 Ladle Crane Position and Control

- Resolver-based long travel position sensors
- Resolver-based bridge and trolley position sensors
- Brakes
- CATRAC™

2 Ladle Turret Position

- Mill-duty rotating cam limit switches position turret
- Resolver-based encoders and programmable limit switches
- Ladle lift – programmable limit switch systems (PLS) Models 1000, 2500 and 1005; Resolvers Models Q25 and 1900

3 Ladle Slide Gate Control

- Linear Displacement Transducers (LDTs) in air-cooled, mill-duty housings

4 Tundish Car Position and Control

- Linear cable reel sensor monitors horizontal position
- Linear Displacement Transducers (LDTs) in mill-duty housings monitor height
- CATRACs™
- Electro-thrust brakes

5 Mold Width Monitoring and Control

- Portable mold width calibration device provides digital indication of width dimension accurate to 0.002" (0.05 mm)
- Resolver-based width measurement encoder packages
- Linear Displacement Transducers (LDTs) for narrow face position measurement
- Water cooled, mill-duty Linear Displacement Transducer (LDT) monitors lateral strand guide position
- Geared rotary limit switches

6 Spray Chamber Drive Roll Velocity (Cast Speed)

- Oil filled (to prevent water penetration) resolver-based encoder packages with remote electronic encoder module

7 Torch Cutoff Machine Position and Control

- Q25 Cable Reel and resolver-based cutoff position sensors
- Mill-duty resolver-based torch traverse position and velocity sensors
- Resolver-based machine travel encoders measure slab length
- Air-cooled, Linear Displacement Transducers (LDTs) mounted on cutoff machine clamp mechanism give width measurements.

8 Slab Handling Cranes

- | | |
|----------------------|-------------|
| • Brakes | • Resolvers |
| • CATRAC™ | • 2120 |
| • Cable Reels | • 2500 |
| • Cam limit switches | |

More Mill-Duty Solutions

Control Products

In this area of the mill, AMETEK Automation and Process Technologies offers mill-duty GEMCO hydraulic, electric, and electro-thrust brake systems, CATRAC™ cable and hose carriers, LDTs, resolvers, interface modules and B/W point level control of cooling water systems.

rolling



1 Walking Beam Furnace

- Resolver and mill-duty Linear Displacement Transducers (LDTs) for charger, walking beam and extractor roll and traverse positions
- CATRAC™

2 Coll Box

- Linear Displacement Transducer (LDT) for top bending roll frame position
- Resolver-based PLC encoders for cradle roll frame position

3 Side Guide Position

- Resolver-based rotary position encoders monitor screw actuator position
- Mill-duty Linear Displacement Transducers (LDTs) monitor actual side guide position

4 Work Roll/Backup Roll Position

- Resolver-based PLC encoder modules monitor screw down position
- Linear Displacement Transducers (LDTs) monitor roll position
- Profile measurement LDT
- CATRAC™

5 Looper Position

- Resolver-based looper arm position sensor

6 Automated Roll Change Mechanism

- Linear Displacement Transducer (LDT) monitors roll position during change-out
- CATRAC™

7 Down Coller

- Resolver-based wrapper roll gap adjustment
- CATRAC™
- LDT with Mill-Duty Housing

More Mill-Duty Solutions

Medium/Large Section Rolling

Mill-duty Linear Displacement Transducer (LDT) monitors position of forming rolls.

Flying Shear Control

Resolver-based high speed Programmable Limit Switch (PLS) measures length and triggers shear. Similar applications also use LDTs with Quadrature or Analog output.

Control Products

In this area of the mill, AMETEK Automation and Process Technologies also offers mill-duty GEMCO hydraulic, electric, and electro-thrust brake systems, CATRAC™ cable and hose carriers, LDTs, Resolvers and B/W point level control of cooling water systems.

finishing and coating



1 Entry Coll Measurement and Position

- Resolver-based entry traverse position monitor
- Mill-duty Linear Displacement Transducer (LDT) for raiselower position
- CATRAC™

2 Accumulator/Loop Tower/Loop Car Position and Velocity

- Q25 Resolver-based linear cable reel sensor monitors position and velocity
- Multi-turn dual resolver monitors loop car position and provides +/- analog output

3 Side Trimmer/Slitter Position

- Resolver-based encoder system monitors trimmer/slitter gap and position
- Mill-duty Linear Displacement Transducer (LDT) monitors actual blade position
- CATRAC™

4 Scrap Chopper Position and Control

- Resolver-based position control
- Resolver-based Programmable Limit Switch (PLS) system cycles chopper for even blade wear
- CATRAC™

5 Air Knife Position

- Resolver- and Linear Displacement Transducer (LDT)-based air knife 3 and 4 axis positioning
- Model Q55S or Q58 ELOK

6 Shear Measurement and Control

- Resolver-based high speed Programmable Limit Switch (PLS) system measures length and triggers shear

7 Exit Coll Position

- Resolver-based coil car positioning
- Linear Displacement Transducer (LDT) monitors raiselower position
- CATRAC™

More Mill-Duty Solutions

Control Products

In this area of the mill, AMETEK Automation and Process Technologies also offers mill-duty GEMCO hydraulic, electric, and electro-thrust brake systems, CATRAC™ cable and hose carriers, and B/W point level and continuous liquid level control with EPA approved leak detection in below ground tanks.