Plant Infeed

Belt scales - Siemens-Milltronics MSI/MMI series belt scales
Conveyor failure detection – Siemens speed switches and motion failure alarm
Raw coal silo level – Siemens-Milltronics LR560 radar gauge
Truck dump, crusher level – Siemens-Milltronics LUT400 ultrasonic level gauge
Coal sampler bin level – Siemens-Milltronics LUT400 ultrasonic level gauge
Plugged chute detection – Banner Engineering photoeyes
Siemens-Milltronics CLS300 and LVS200 probes
Siemens Acoustic sensor for material flow monitoring

Processing

Magnetite bin level - Siemens-Milltronics LR560 radar gauge
Media & thickener underflow density – Thermo Fisher Density Pro Plus nuclear density
Rhosonics Slurry Density meter (non-Nuclear)
Cyclone pressure – Siemens DSIII series pressure transmitter
Sump level – Siemens DSIII series differential flanged level transmitter
Chemical tank level – Siemens-Milltronics Probe LU and LU150 ultrasonic level
Froth flotation cell level – Siemens-Milltronics Probe LU and float plate for flotation cells
Belt press safety light curtains – Banner Engineering EZ-Screen LS light curtains
Water valves and automation – Georg Fisher Signet
Lubricant flow monitoring – UFM (Universal Flow Monitors)
Bearing vibration and temperature – Banner Engineering QM42VT1

**Thickener, Clean Coal** and **Refuse**

| Thickener bed depth – ATI/Entech Design Echosmart level transmitter |
| Thickener pH – ECD S80 |
| Belt scales – Siemens-belt scales |
| Clean coal silo level – Siemens-Milltronics LR560 radar gauge |
| Slurry flows – Siemens MagFlo 5100 and 3100 series magnetic flowmeters |
| Slurry Pipe Leak Box Fluid Detection – Siemens-Milltronics CLS200 point level switches |

**Balance of Plant**
Water tank level – Siemens-Milltronics Probe LU and LU150 ultrasonic level transmitters  

pH & ORP measurement - ECD S80 sensors and T80 transmitters  

Pond level - Siemens-Milltronics Probe LU and LU150 ultrasonic level transmitters  

Wireless for remote signals – Elpro, Banner Engineering license-free radios  

Signal isolators and splitters – Moore Industries  

Panel and field-mount indicators – Precision Digital  

Gas monitoring – Mine Safety Appliance (MSA) X5000 single point sensors  

Altair4X portable gas detectors