

**Electro-Sensors Product:** SA420 Signal Conditioner, 907XP Hall Effect Sensor and Split Collar Pulser Wrap

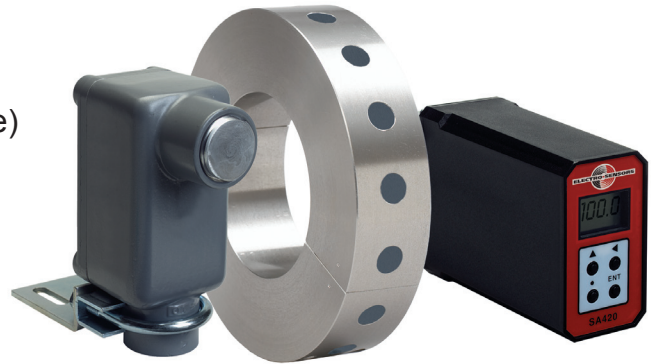
**Application:** Modulate gravimetric conveyor shaft speed for precise coal discharge.

**Purpose:** Provide precise coal feed to power plant pulverizers (feeding plant boilers). The Gravimetric feeder conveyor speed changes as coal density changes to ensure the proper coal tonnage is discharged to the pulverizer.

**How it works:** The SA420 Signal Conditioner is used in conjunction with the 907XP Sensor and Pulser Wrap to provide concise conveyor shaft speed feedback to a PLC (PLC not included). The 907XP sensor provides an accurate digital pulse train (relative to shaft speed) to the SA420 module. The SA420 converts the digital pulses to a proportional 4-20 mA analog signal, which is then fed to the PLC. The PLC will in turn modulate the conveyor speed, so the proper amount of coal is discharged.

### Benefits

- Optimize boiler performance (less coal waste)
- Rugged shaft speed sensing and control
- Lower emissions (at boiler)
- Accurate conveyor control
- Concise product discharge
- Operational efficiency



SA420 Signal Conditioner Module



907XP Sensor and Pulser Wrap