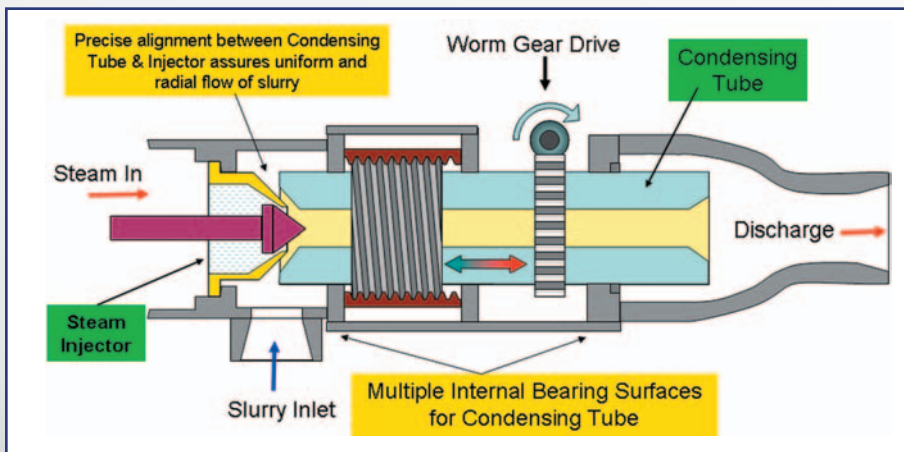




ProSonix™ Direct Steam Injection Heater OptiShear™



How It Works

The **ProSonix OptiShear™** is designed for automatic operation and positioning of the PSX Heater condensing tube. A remote signal from the plant DCS/PLC controls the position of the Condensing Tube relative to the Steam Injection Nozzle. A drive motor turns a worm gear assembly for precise positioning of the tube. Internal bearing surfaces assure uniform alignment between the Condensing Tube and Steam Injector and improved reliability over single point drive devices. Control and operation of the **OptiShear™** is driven directly by the plant DCS/PLC. No proprietary control panels or software are used, allowing for complete plant control.

Product Features & Benefits

- **Radial Slurry Flow** – Condensing tube is mounted on multiple bearing surfaces to provide precise alignment with the steam injector, assuring uniform, radial flow of slurry into the steam jet.
- **Reduced Pressure Drop** – Positive AC motor drive system assures optimal control of **OptiShear™** positioning, eliminating the need to over drive the condensing tube, reducing back pressure and electrical demand on the slurry pumps.
- **Simple Plant Integration** – Simple control interface utilizing a reversing motor contactor for tube open/close travel. No proprietary “black box” control panel or software allows the plant DCS/PLC to control the **OptiShear™**.
- **Auto Feedback Signal** – Linear feedback signal indicating tube position for repeatable performance and position tracking.
- **Flexible Operation** – Optional Local/Remote control panel available
- **Manual Operation** – Manual override of **OptiShear™** included if automatic system unavailable.

Applications

- Process' that require remote operation and positioning of condensing tube.
- Applications where an optimal pressure drop or process flow rate can vary.
- Ethanol and starch applications requiring precise condensing tube position for optimization of enzyme effectiveness.
- High wear applications where non-uniform flow or localized wear leads to premature heater trim failure.

Specifications

- Motor: AC (Fractional hp), 110 VAC, 1 ph, 60 Hz
- Reversing contactor
- Start/Stop signal
- Linear feedback signal (0-100%)
- Explosion Proof optional