

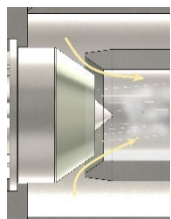
Prosonix Jet Cooker Features

- **Starch Slurry processing** - Designed for starch slurries with solids concentration of up to 40% concentration.
- **Types of Starch** – Our Jet cooker is well suited for all types of starch such as corn, potato, wheat, cassava, rice, & tapioca.
- **Precise temperature control** of +/- 1°F (0-0.5°C) for reliable heating performance.
- **Materials of Construction** - Standard carbon steel or 316SS with optional wear coatings available for erosive slurry conditions.
- Standard ANSI class connections (NPT threaded or RFF flanged) for 150 psig steam, with optional DIN or 300 psig available.
- **Design Standards** - Designed to ASME B31.1, CRN, CE/PED standards
- **Longer Part life** – The slurry flow path, rotary tube adjustment, and advanced wear coatings result in wear life far surpassing our competitors, reducing lifetime cost of ownership.



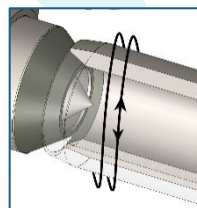
Figure 1 Prosonix Coaxial Jet cooker installation

The **ProSonix Jet Cooker** is specifically designed for Jet cooking starch slurries for ethanol, sweeteners and alcohol production. ProSonix™ unique method of direct steam injection utilizes high velocity steam and an engineered starch path to completely and thoroughly cook the starch to meet customer requirements.



Radial Slurry Flow - In the Prosonix Coaxial design, the condensing tube and steam nozzle interface is truly coaxial, ensuring the starch slurry gap is uniform throughout the full 360° flow path. The tube rests on multiple bearing surfaces so there is no movement of the tube relative to the injector except to adjust the gap.

Advanced slurry gap control System - The condensing tube adjustment in the ProSonix Jet cooker is accomplished using a threaded engagement. As the tube is rotated, it moves towards or away from the steam injector depending on rotation direction. Rotating the tube reduces localized wear. This has the beneficial effect of evening out the wear of the internal parts, extending their operating life.



Optional OptiShear CT Auto Drive System

The **OptiShear™ drive system** is a unique method of automatically controlling the gap the starch slurry passes through between the condensing tube and the steam injector. The OptiShear is operated electrically from the customer's control system allowing remote control of starch pressure drop for optimum cookout.

Control Features & Specifications:

- Motor - AC (Fractional Hp)
- Electrical – 110/230 50/60 Hz (Country Based)
- 4-20mA Tube position output
- On/Off Fwd/Rev Control from plant DCS (no proprietary software)



Figure 2 PSX Jet cooker with OptiShear