



## Optimize Steam and Condensate Recovery

**Customer:** Anshan Iron & Steel

**Location:** Anshan, China

**Scope of Work:** This facility knew it had very inefficient steam and condensate systems and felt it did not have the on-site expertise to determine the area of inefficiencies nor how to prioritize and manage the work. Armstrong International addressed these needs by discovering the areas of inefficiency, justifying the work on an economic basis, and then performing the work on a turnkey contract.

**Upgrade Projects:** A total of three phases of the project have been implemented, which includes:

- Re-engineered and optimized the steam system flow by installing two flash recovery systems to recover and re-use the flash steam.
- Installed a condensate recovery system to achieve maximum condensate recovery and use the residue heat in the recovered condensate for area heating.
- Re-engineered and optimized the steam trapping system to improve steam efficiency and eliminate steam loss, while meeting the requirements for the condensate recovery system.

**Contract:** The total value of the agreement was \$646,000.

**Terms:** Project Phase I, II, III was signed in November 1999, October 2000, and October 2001 respectively. Project Phase I, II, III was completed in December 1999, December 2000, and October 2001 respectively.

**Benefits:**

- Total project savings: \$1,500,000
- Average project payback period: less than one year

