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Applications & Systems

Weinman Split Case Crucial To Oil Recovery Operation

WEINMAN SPLIT CASE 3L6

Whiting Oil and Gas Relies on Weinman

Whiting Oil and Gas Corporation uses tertiary oil recovery methods to increase oil production in the North Ward Estes oil fields in Wickett, TX. The plant injects Carbon dioxide (CO_2) at high pressure into rock structures to recover additional oil remaining in place.

Carbon dioxide (CO_2) compressors are used to inject the gas. These compressors generate heat and are at risk of shutdown when overheated. Cooling towers are used to cool process gas in several exchangers in the system.

While the compressor needs to be kept cool, the gas needs to be kept warm. Heat media pumps move a heat transfer liquid to harvest waste heat from compressor gas stream to be reapplied in the process to maintain a prescribed gas temperature.

Whiting Oil and Gas Operations Manager, Ronny Schooler, needed pumps in the oil production area to transfer fluids in emulsion phase (oil/water) and in produced water service to "charge" injection pumps to stabilize flow as compared to operations from tank levels or hydrostatic pressure. Crane Pumps & Systems' distributor Master Pumps & Equipment introduced them to the Weinman Horizontally Mounted Split Case. The pump is ideal for transferring hot or chilled water, pressure boosting and transferring water from a cooling tower - this pump fits the needs for both of the plant's applications.

The Weinman pumps contribute to the North Ward Estes oil recovery operation's increased revenue and ability to run 24/7.

WEINMAN SPLIT CASE AT NORTH WARD ESTES OIL FIELD

"We chose these pumps because of the simplicity of design and ease of maintenance. These pumps have been in service for 5 years without major failures."
-Ronny Schooler, Operations Manager

IN BRIEF:

SITE/LOCATION:
Wickett, TX
Tertiary oil recovery project to increase the amount of crude oil that can be extracted from the oil field.

PROBLEM:
Two risks could lead to the Carbon dioxide (CO_2) injection system shutting down. The first risk is the compressor overheating. Cool water needs to continuously be transferred to the Carbon dioxide (CO_2) compressor to keep it from overheating.

The second risk is the gas coming from the compressor not being preheated properly. Heat transfer fluid must continuously be transferred so it can preheat the gas.

SOLUTION:
Weinman Horizontally Mounted Split Case - 3L6 and 3L5
- High efficiency
- Outstanding pump life
- Available in horizontal base mount
- Cost effective

Durable Material Construction
- Bronze fitted with iron casing

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