CUSTOMER: Huntsman

LOCATION: Monthey, Switzerland

BACKGROUND: Huntsman is a global manufacturer and marketer of differentiated chemicals. A complete steam and condensate audit handled by Armstrong International indicated the opportunity to recover flash steam generated by high temperature condensate from distillation columns at their Monthey plant.

SCOPE OF WORK: Armstrong conducted a detailed study to design the heat recovery installation. In order to optimize energy savings and to fit the low pressure users' needs, two thermocompressors, working in split range have been designed to handle the load variations. It allows Huntsman to produce steam at 58 psig (4 barg) supplied to low pressure steam consumers by using steam at 174 psig (12 barg) motive steam and flash steam at 29 psig (2 barg).

After the audit, Armstrong delivered a complete turnkey installation of new condensate lines, flash tank, modulating thermocompressors, instrumentation, and continuous measurement and system control.

BENEFITS: After commissioning, Huntsman's flow of recovered steam averages about 1,764 lbs/hr (800 kg/h) (6% of the steam consumption of the unit), which represents savings around 196,000 dollars a year.