

64 HUBER STEP SCREEN®s SSV FOR RIVER WATER SCREENING IN SOUTH AFRICA

CASE STUDY



The 64 HUBER STEP SCREEN®s SSV, size 4300 x 776 x 3 mm, delivered last year to SASOL, South Africa for river water screening have been working to the full satisfaction of the customer so that they placed a follow-up order for another 10 HUBER Step Screens which were delivered in July 2002. This was the largest individual order for mechanical preliminary treatment equipment for HUBER.

SASOL is one of the ten largest private enterprises in South Africa, with 35,000 employees and 15,000 shareholders. During the oil shock years, SASOL began to produce synthetic fuels from carbon, starting a very successful production, amounting to a total of 700 million barrel produced since 1980.

This enormous amount enables South Africa to remain fairly independent of the OPEC. The synthetic oils are



produced according to the Fischer-Tropsch process. Fischer and Tropsch were German chemists who invented a method for synthetic production of aliphatic hydrocarbons around the turn of the century.

This process converts a gas mixture (water gas, synthetic gas) that consists of coke and hydrogen into liquid hydrocarbons, under the influence of catalyzers and at a slightly increased pressure at 200°C (high or low temperature).

This type of fuel is mainly used for motors in South Africa.

It is very important for heat exchange during the high-temperature process to have a lot of water available to cool the recirculation water. The cooling water comes from a nearby river and has to be clarified in front of and behind the cooling towers and heat exchangers. This task is successfully achieved by the HUBER STEP SCREEN®s with 3 mm openings. Due to the huge water amounts, 7 SSV units of size 4300 x 776 x 3 mm are required for each cooling tower.

The investment has saved millions, preventing blockage of heat exchangers and interruptions in production. Installation of the first 54 screens has ensured a stable production process and saved SASOL millions of Euro per year for expensive cleaning and repair work.