

SAMP SUPPLIED 40 AIR HANDLING UNITS FOR TENGIZCHEVROIL, KAZAKHSTAN

SAMP[®]
SOLUZIONI AEROMECCANICHE S.p.A.



Tengizchevroil is a joint venture between Chevron (50% share in the consortium), ExxonMobil (25%), KazMunayGas (20%) and LukArco (5% share) formed in April 1993, when the Kazakhstan government granted an exclusive 40-year right to Tengizchevroil LLP (TCO) to develop the **Tengiz** and **Korolevskoye oil fields** located in the north-eastern reaches of the Caspian Sea in Kazakhstan.

Deep beneath the western Kazakhstan steppe is a giant reservoir known as the Tengiz Field, where the oil column measures an incredible 1 mile (1.6 km) across. With a surface area more than four times that of Paris, France, Tengiz ranks as the

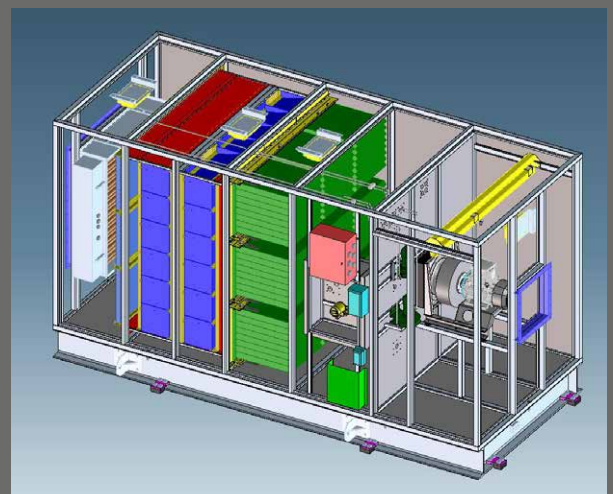
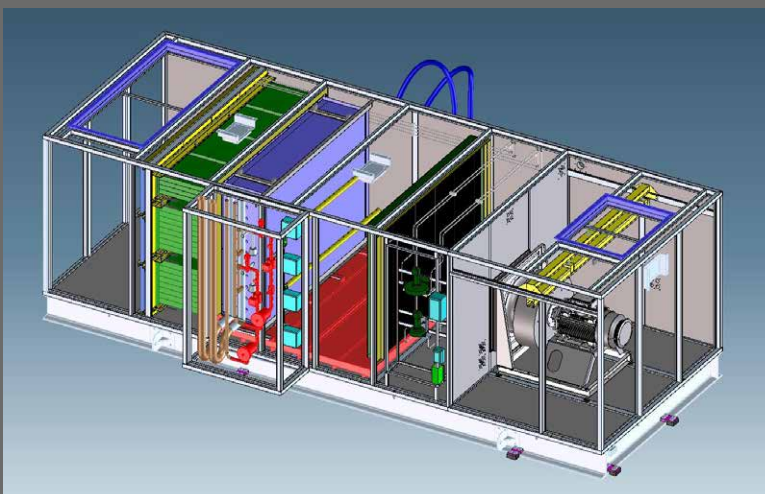
world's deepest producing supergiant oil field and the largest single-trap producing reservoir in existence.

Today, the fields' yearly output could satisfy the annual oil demand of entire nations. In January 2014, the firm reported a record rise in output to 27.1 million tons from 24.2 million tons.

Net daily production in 2016 (Chevron share) averaged 263,000 barrels of crude oil, 375 million cubic feet of natural gas and 22,000 barrels of natural gas liquids. A growth program was created, called **Future Growth Project-Wellhead Pressure Management Project (FGP-WPMP)**, designed to further increase total daily pro-

duction from the Tengiz reservoir and maximize the ultimate recovery of resources.

The project has already created more than **20,000 jobs**, of which 86% for Kazakh people. Up to now, 10,500 specialists worked on several projects, involving 9,400 Kazakh citizens. Tengizchevroil project is considered an example of excellence as successful long-term investment and national policy. SAMP met all the needs in terms of **absolute quality, durability** and **safety of the product**, both from mechanical to chemical and electrical point of view, obtaining Chevron's approval as qualified supplier and making Atex rated units with unique technical solutions.



MAIN TECHNICAL DATA

UNITS AIR FLOWS

10 unità: 85.000 m³/h complete of steam heating coils

10 unità: 85.000 m³/h extraction units

10 unità: 7.600 m³/h with 4 filtration stages

10 unità: 29.400 m³/h with direct expansion coil and resistive steam humidifier

MECHANICAL FEATURES EN 1886

Mechanical Resistance: D1

Leakage class: L1

U value: T3

Thermal bridge factor: TB4

Fully welded Stainless Steel AISI 316L structure

Sandwich panels thickness 50 mm

Outer panel in pre-coated steel 12/10 thick or SS 316L and internal panel in SS 304 or 316L 10/10 thick

Panel insulation in mineral rockwool 60 kg/m³

Main base frame hot-dipped Galvanized IPE 300

PECULIARITIES

Atex units with test and certificate of equipotentiality in compliance with the Atex norm.

- > Fans: Epoxy painted plug-fans
- > Motors: Epoxy painted Atex motors
- > Steam coils: with SS 304 pipe and fins and Heresite coating
- > Electric heaters: made entirely of SS AISI 316L, IP55
- > Chemical filters
- > Special labelling in English, Russian and Kazakh to identify all sections and elements
- > Structure designed to bear 1 G acceleration
- > Pressure detection system certified and tested at 100 bar



SAMP QUALITY CERTIFICATES

- > **ISO9001:2008**
- > **ISO 14001:2004**
- > **BS OHSAS 18001:2007**
- > **EUROVENT**
- > **CESI – ATEX**
- > **HYGIENE VDI 6022**
- > **EAC**

SAMP “was born” in Monza in 1969 and was one of the first Italian companies to specialize in the production of air handling unit. Today SAMP is the market leader of Air treatment not only due to the quality of its products, but mainly about the total quality which is able to provide to its customers from the start of design to delivery ... and even afterw

REFERENCES



Info: **SAMP S.p.A.**