

SUCCESS STORY

ANDRITZ Aqua-Screen T fine screen, a reliable and resistant screening technology in a revolutionary plant for OTV France



SEPARATION

SEAWATER FOR HEATING AND COOLING

EUROPE'S FIRST GEOTHERMAL POWER PLANT IS USING
IMPROVED SCREENING TECHNOLOGY FROM ANDRITZ

ANDRITZ

ENGINEERED SUCCESS

The challenge

Develop a screen that can withstand the rigors of the sea

Built and operated by Engie, Thassalia is a marine geothermal power station at the Port of Marseille Fos, France – the first in Europe to use the sea's thermal energy to supply buildings with power for heating and cooling. It will heat and cool 500,000 m² of space, thereby reducing greenhouse gases by 70%. In October 2016, the plant started supplying energy to the new Marseille district Ecocité Euroméditerranée.

OTV, a specialist in wastewater and water treatment, was awarded the seawater loop design and

construction on the project, and was searching for reliable separation equipment that is resistant to wear and corrosion. OTV knew the ANDRITZ Aqua-Screen T fine screen was reliable and efficient, but they had no details on the material or the solutions needed to prevent wear and corrosion from seawater.

As a trusted key supplier, they asked ANDRITZ to supply two fine screens to protect the downstream equipment, especially the pumps and heat exchangers.



100%

CORROSION-
RESISTANT

>20

YEAR LIFESPAN

UP TO
20,000 m³/hr

FLOW RATE

ANDRITZ Aqua-Screen T, efficient fine screen with teeth system



Our solution

Customized development of the popular ANDRITZ Aqua-Screen T fine screen

With more than 6,000 references and recognized as the most efficient headwork screen, the ANDRITZ Aqua-Screen T fine screen is already a popular, tried-and-tested choice. The challenge called for a solution that is resistant to corrosion from seawater, and the extensive record of the ANDRITZ Aqua-Screen T fine screen in seawater and desalination equipment proves that the simple and reliable screen is suited to marine applications.

The ANDRITZ specialists supplied a frame made of painted steel, protected with sacrificial anodes and internal elements in duplex. Already familiar with the efficiency and reliability of our fine screening technology and experience in seawater intake, the customer was also convinced by the lower investment cost. The solution was agreed: Two ANDRITZ Aqua-Screen T fine screens.

Results

A corrosion-proof screen with a long lifespan

The already excellent relationship between OTV and ANDRITZ meant that a solution could be developed and the contract signed within just a few months. Being a local supplier was an added benefit, as this ensured the availability and proximity of services. What's more, the investment cost came in lower than expected, thanks to the innovative materials solution applied to a highly reliable product.

The ANDRITZ Aqua-Screen T fine screen has a lifespan of up to 20 years and, by adapting the frame finish and adding sacrificial anodes, it can withstand the rigors of the sea and will play a part in heating and cooling the homes of thousands of people in Marseille for years to come.

"40% of the world's population lives on coastlines, not more than 100 km away from the sea. This means that geothermal power from seawater is an ideal sustainable energy source for heating and cooling, hence the favorable market for this ANDRITZ screening technology."

FREDERIC BONNARDON

Directeur Adjoint Ingénierie, OTV France



WHAT'S YOUR SEPARATION CHALLENGE?

ANDRITZ Separation is the world's leading separation specialist with the broadest technology portfolio and more than 2,000 specialists in 40 countries. For more than 150 years, we have been a driving force in the evolution of separation solutions and services for industries ranging from environment to food, chemicals, and mining & minerals. As the OEM for many of the world's leading brands, we have the solutions and services to transform your business to meet tomorrow's changing demands – wherever you are and whatever your separation challenge. **Ask your separation specialist!**

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