

CHARTEK® OUTPERFORMS TRADITIONAL CEMENT BASED FIRE PROTECTION - IN MORE WAYS THAN ONE



Traditionally, fire protection systems used in the Brazilian oil and gas market have been cement based. With a number of drawbacks for owners associated with cement based protection, Petrobras opted to protect their asset with Chartek, epoxy intumescent fire protection.

The Petrobras owned P-53 floating production unit (FPU) will be anchored off the coast of Brazil in the Marlim Leste Field, at a water depth of 1,080 metres (3,453 feet). The P-53 will be capable of producing 180,000 barrels of oil and 6 million cubic meters of natural gas per day. Output from P-53 will be taken onshore through an underwater line and pumping platform, known as PRA-1, also contracted by Petrobras.

Whilst cement-based passive fire protection systems are relatively cheap, they do have a number of drawbacks, especially with regards to their robustness and durability.

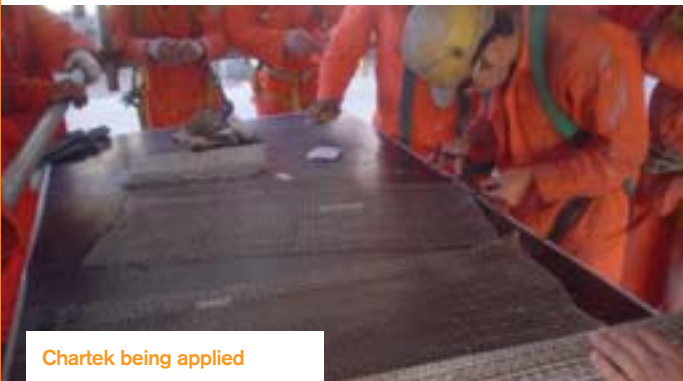
By choosing Chartek, Petrobras have utilised a lightweight epoxy intumescent fire protection system with a long track record in protecting the world's oil and gas facilities. Chartek was used to cover an area of approximately 1,600 square metres (17,222 square feet) of steel on the P-53.

Importantly, Chartek material was ready for immediate start up, delivering improved value and meeting the requirements of Petrobras in a short delivery period.

Specifically designed to offer the lowest installed weight per unit area, Chartek was easily applied without the need for welded pins commonly used in cement based passive fire protection systems. Being virtually maintenance free also delivers Petrobras the following benefits:

- water resistance
- anti-corrosive protection and strong adhesion
- protection against corrosion under fireproofing

These benefits saved both time and money for Petrobras by decreasing their year on year expenditure compared to a cement based system.



Chartek being applied

CEMENT V CHARTEK

• INSTALLATION

Welded pins are commonly used in cement based systems which increases installation costs and time for the customer.

• WEIGHT

The heavy weight of a cement system can cause engineering issues, such as increased load.

• MAINTENANCE AND REPAIR

The lifetime of cement-based coatings is short and requires inspection to ensure the system is still performing. Retrofitting of cement based systems is difficult, meaning high maintenance work for the customer. Installation of Chartek at new construction can last up to 25 years.

