Regarding the global climate change, natural gas as low-emission energy becomes increasingly important. According to experts, natural gas will replace crude oil as dominant energy medium during the next two decades. The Middle East owns large natural gas fields. Various projects are implemented or planned to use this source of energy prospectively and effectively.

The project “Tange Bijar” will be completed shortly. In the future, 10 million m³ of natural gas will be extracted each day. The sour gas contains a high portion of toxic hydrogen sulfide (H₂S), which has to be filtered out in a sour gas treatment plant.

During the extraction, natural gas is very humid and therefore highly corrosive. Due to the high pressure (in this case 250 bar) and absorbed debris, intensified abrasion occurs on the internal walls of the whole pipeline system. Moreover, the temperature of approximately 60°C (ambient temperature) and the aggressiveness of the hydrogen sulfide demand an absolute high quality and resistant coating system for the internal lining of the gas conveyor plant.

For “Tange Bijar” project a multi-pipe slug catcher (finger-type) is assembled. The conveying tube is extended in parallel pipelines, each with a diameter of 56 inch (1.42 m) and a length of 80 m. In these “fingers” the volume expands and the gas reduces velocity. Due to the lightly falling gradient of the pipes, debris and humidity settle in special catchment tanks and can be removed separately.

One of our premium-products, Proguard CN100 LV-2 was selected for the internal coating of the huge slug catcher. With a film thickness of 1.000 µm, our high performance product guarantees excellent chemical stability to concentrated hydrogen sulfide and high-grade abrasion resistance also at elevated operating temperatures. Thereby, outstanding, durable corrosion protection for highest requirements is provided.

The complete application of Proguard CN100 LV-2 was conducted by the company EXSEAL, our professional partner for this project. www.exseal.com