LONG-DISTANCE PIPELINE TRANSMISSION EQUIPMENT

HIPPS Logic Control System

The HIPPS (High-Integrity Pressure Protection System) is a commonly used safety protection system in natural gas pipeline interconnection stations and for export pipelines on FPSO and FLNG facilities. On site, the system typically consists of a configuration of “shut-off valve + shut-off valve + pressure transmitter (2 out of 3)”. The entire system is designed in a modular format, with the control unit operating through an independent logic controller to ensure fast, reliable, and fail-safe protection.

Natural Gas Metering System

Natural Gas Metering System serves as the basis for custody transfer. It uses ultrasonic, turbine, orifice, and mass flowmeters as the metering devices and is configured as a skid-mounted package that integrates metering, flow computation, flow comparison, online calibration, composition analysis, safe venting, automatic switching, data storage, and metering supervision. In addition to flowmeters and computers that meet accuracy requirements, the system is equipped with shut-off valves, straight pipe, conditioners, and temperature and pressure compensation instruments. Gas composition analysis is performed by instruments installed in an analyzer shelter, including an online gas chromatograph, H_2S and moisture analyzer, and hydrocarbon analyzer.