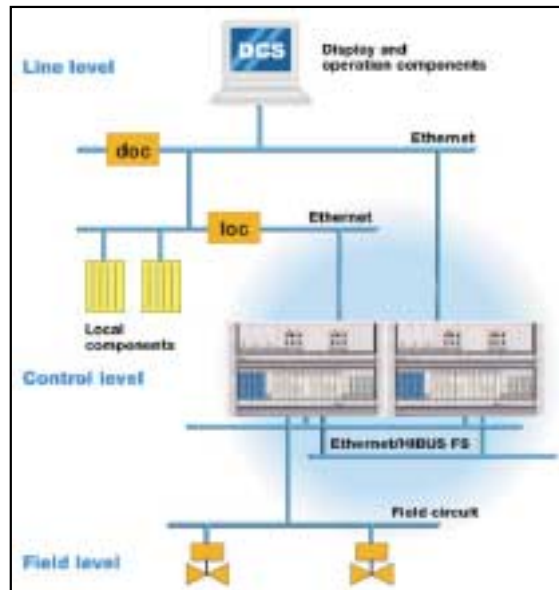


In every off-shore oil and gas platform or process plant, there are areas which are closely monitored round-the-clock due to potential hazards. These operating environments require reliable fail-safe control and monitoring technology with 99.999% availability, to ensure the maximum protection possible for personnel working in such areas. Such systems incorporate line monitoring and comprehensive self-diagnostic solutions that prevent “stuck-on” circuitry in the control hardware.

CSE has a wealth of experience in deploying complete and comprehensive mission-critical solutions, with built-in redundancies, that monitor and control potentially hazardous operating environments. We are recognized by many leading upstream oil & gas companies as a reputable industrial system integrator with the necessary expertise in consulting, designing and implementing mission-critical solutions that require TUV/SIL classification approval, such as emergency shut-down systems and fire and gas systems that are deployed on off-shore oil and gas platforms, as well as turbine control and pipeline monitoring and control.



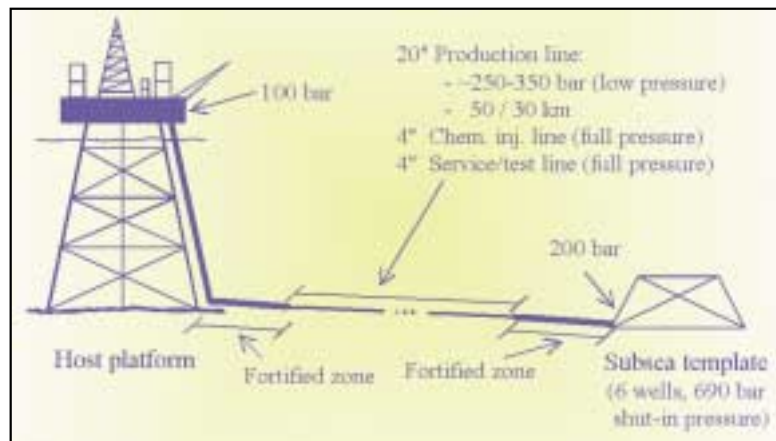
DCS-ESD Configuration

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We have an extensive track record, having implemented such systems for numerous projects over the last decade, many of which are customised, based on proprietary systems that meet the latest TUV/SIL standards. Our specialist knowledge include the following applications:

- Emergency Shutdown Systems (ESD)
- High Integrity Pressure Protection Systems (HIPPS)
- Fire & Gas Systems (F&G)
- Turbine Control



High Integrity Pressure Protection System (HIPPS)

