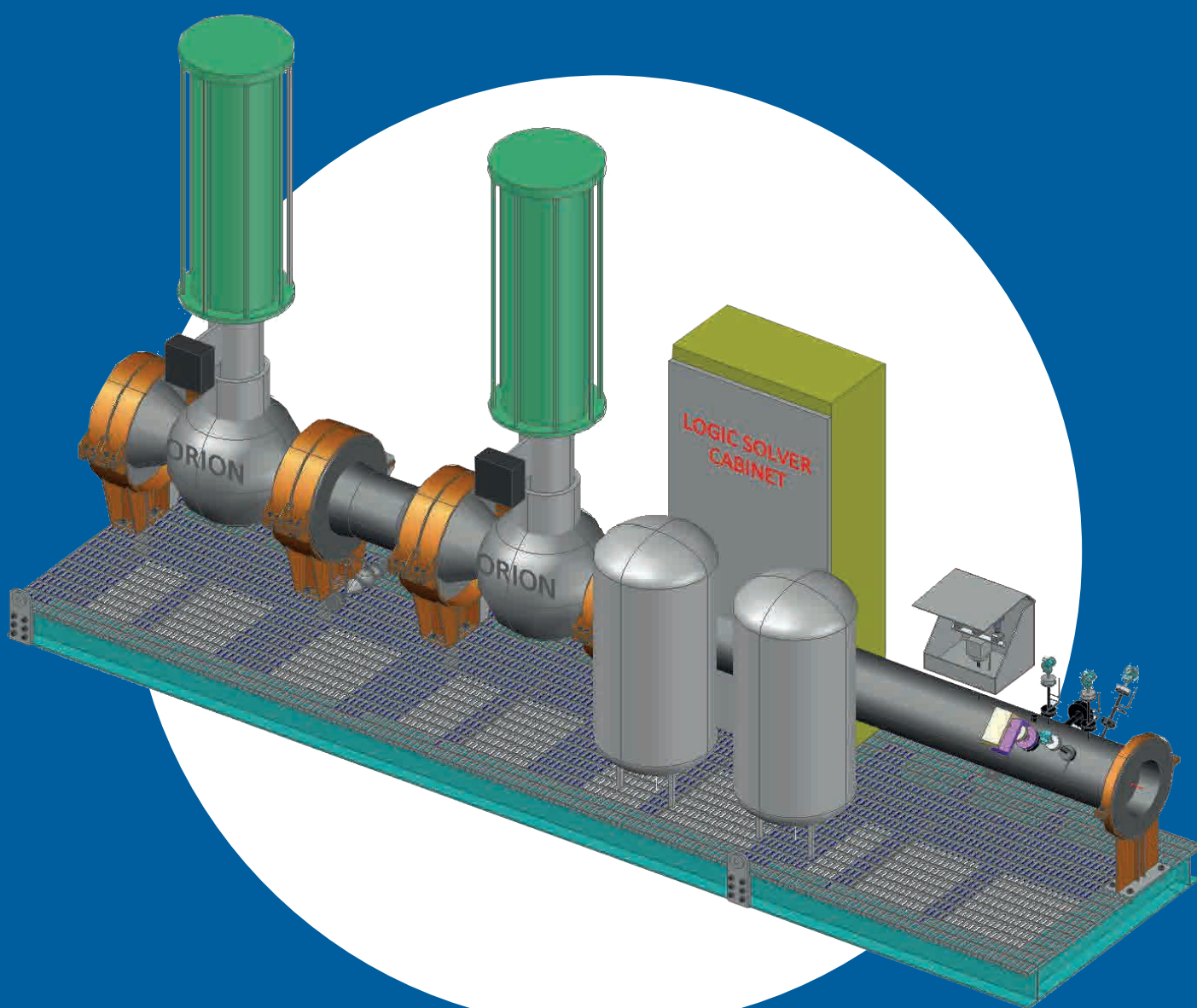


ORION HIPPS High Integrity Pressure Protection System

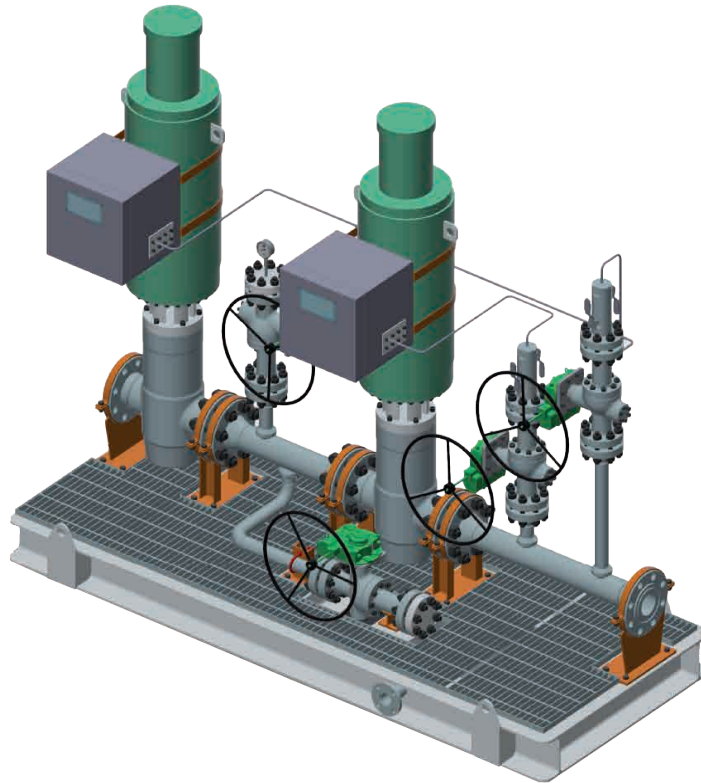
HIPPS



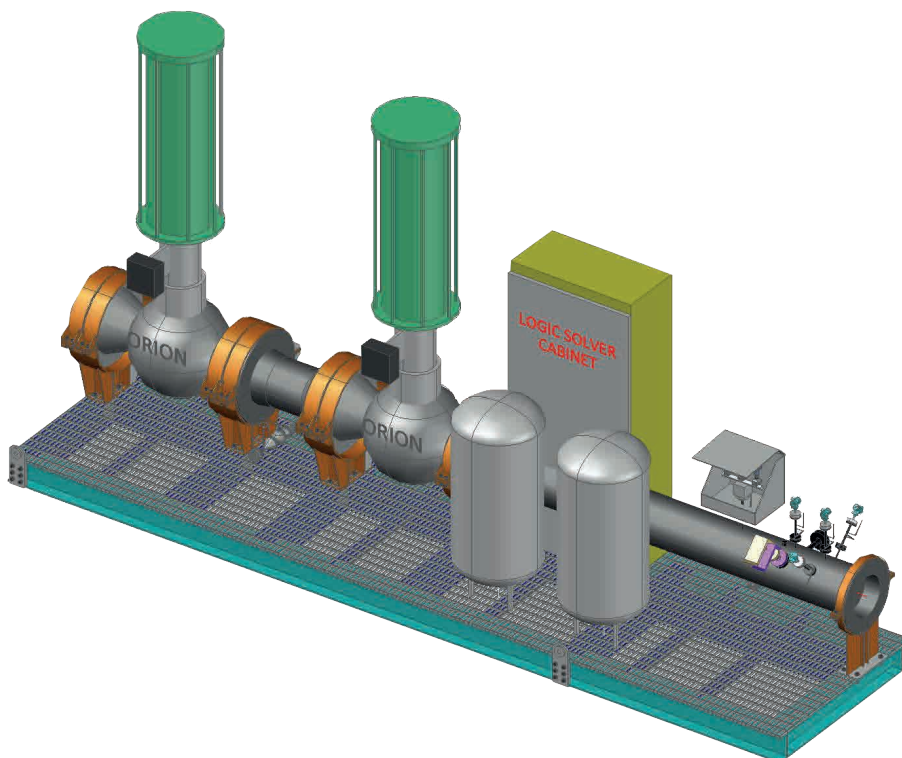
ORION HIPPS

High Integrity Pressure Protection System

HIPPS



MECHANICAL HIPPS



ELECTRONIC HIPPS

ORION HIPPS

1 HIPPS

The High Integrity Pressure Protection Systems (HIPPS) is a mechanical and electrical system designed to protect downstream lines and plant portion from overpressure events and reduce the chance that the system pressure will exceed the tolerable allowable pressure. HIPPS is the ultimate and independent safety layer of a plant on prevention of dramatic even and protection against over-pressure is obtained by quickly isolating the source causing the overpressure.

The complete typical HIPPS is composed by the following subsystems :

- Initiators
- Logic solver
- Final Element

2 INITIATOR

The initiators are field sensors and measuring the (over) pressure are the inputs required to detect the hazardous condition.

3 LOGIC SOLVER

The logic solver as Safety Systems system that receives the signals from the initiators, accepts these inputs and generates correct outputs that drive the final elements in order to mitigate the hazardous condition.

4 FINAL ELEMENT

The final elements are the On/Off valves that provided with actuators, solenoids and limit switches. Typically valves close to isolates the dangerous pressure source and protect the downstream lines

5 INSTALLATION

HIPPS can be installed in any part of the plant where a pipe spec break or protection is needed and HIPPS are used in the oil & gas industries in order to provide pressure protection of pipelines, piping, vessels and process packages against over pressure, allowing the use of lower design pressure downstream the HIPPS.

6 RISK REDUCTION

With HIPPS the overpressure protection is achieved by reducing to a tolerable degree the risk that the pressure can exceed certain maximum levels.

7 HIPPS FUNCTION

HIPPS functions should be independent from other Safety Systems. IEC 61508 and IEC61511 define the Functionality, Availability, Survivability and Interdependencies of the SIS and the ANSI/ISA S84.01-1996, "Application of Safety Instrumented Systems (SIS) for the Process Industry.

THE SKID MANUFACTURING WORKSHOP INSIDE PORT OF TRIESTE



- SKID DIMENSION WITHOUT HASSLE OF TRUCK DELIVERY
- REAL “YARD TO YARD” SHIPMENT



