

VALVE INTERLOCKING CONTROL SYSTEM ON PIG LAUNCHERS AND RECEIVERS

One of the most hazardous activities associated with operational pipelines servicing involves “Pigging”: The process of inserting or removing a pipeline scrapper into a launching or receiving pressure vessel.

It is essential the pig trap is isolated, depressurised and drained before the closure door is opened.



Typical Pig launcher/receiver installation.

The hazards associated with this process can be significantly reduced by fitting a key interlock system to control the opening and closing of the main isolating, kicker, vent, drain and purge valves, as well as the vessel closure door.

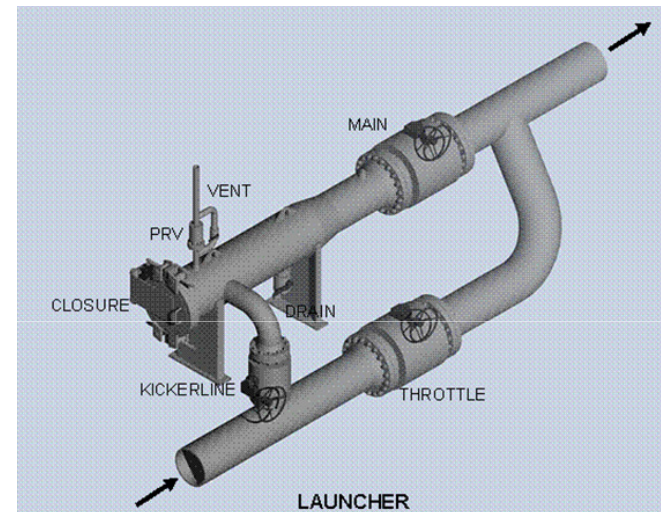
Key interlock systems are dual-keyed mechanical locking devices, which operate on a coded key transfer principle to control the sequence in which safety critical valves can be opened or closed.

Fitting valve interlocks to the pressure control valves of the pig trap introduces a simple mechanical logic that ensures operators follow a pre-determined sequence and therefore avoids the potential for operator error.

For example before the closure door can be opened the isolation and kicker valves must be closed and the vent and drain valves opened.

Key interlocks are therefore an effective safety tool and are recommended in a number of internationally recognised standards for specific process applications.

Key interlocks can be integrated into the pig trap control systems even when the main inlet/outlet valves and kicker valve are actuated (See interlocking of actuated valves HSV-AV).



Valve arrangement on a pig trap.

ISS | Safety_{Ltd.}

ISS Safety Ltd . Devonshire House . 582 Honeypot Lane . Stanmore . Middlesex . HA7 1JS
Tel: +44(0)20 8732 5505 . Fax: +44(0)20 8732 5510 . E-mail: sales@iss-safety.co.uk .
www.iss-safety.co.uk