



Barossa Offshore Project



Package
No:

0482-MI20-44PO-9950

Package
Name:

DELUGE VALVE PACKAGE (w/ Deck Foam Valve)

Scope of Work

The deluge systems shall be activated automatically upon confirmed fire in the zone where the fire is detected as well as in the adjacent modules with common boundary.
 Firewater deluge systems from fire water ring main shall be provided for the turret and topside process areas. The use of foam from low expansion foam package, with the firewater deluge systems for the turret and topside process systems coverage are assessed based on the type of fire (pool fire or jet fire), process decks chosen (solid versus grated) and other consideration.

The scope of supply for Deluge Valve Package shall consist of Deluge valves, Foam Valves and control system for Foam valves which shall comply with the following:

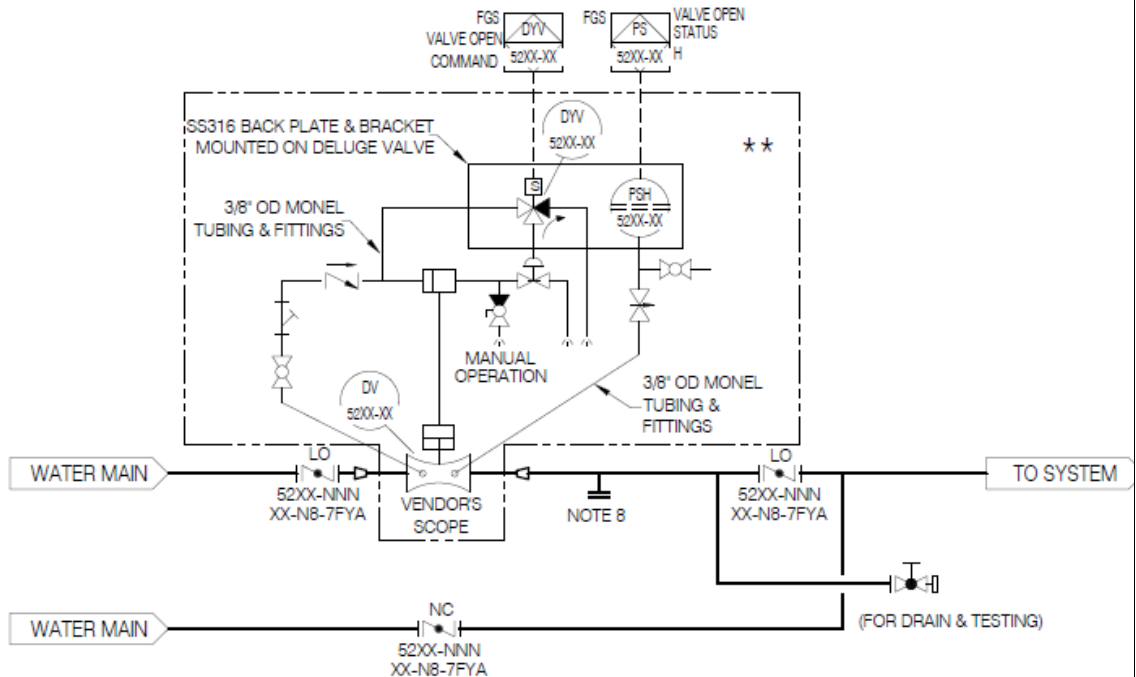
- Firewater/ Foam deluge systems shall be designed in accordance to ISO13702, Class Rule, NFPA15 and NFPA16 requirements.
- The associated deluge valves will have the option for remote and local manual release and will physically be located at some distance from the fire zone.
- Fixed firewater deluge systems shall be initiated:
 - Automatically, by signal from the FGS (fire and gas system);
 - Remotely, by manual activation from the CCR;
 - Manually, by local operation at the deluge control valve;
- Foam application shall be initiated:
 - Remotely, by manual activation from the CCR; and
 - Manually, by local operation at the relevant deluge valve skid
- Deluge valve skid external field equipment shall meet IP66 minimum.
- Deluge valves shall remain open until manual reset locally in the field
- Manual reset (closure) of deluge valves shall not be possible during an ESD scenario.
- Deluge valves shall be energized to open
- Water Deluge/Foam Valve shall be fire safe as per ABS Pub 63 - Rules for Building and Classing Facilities on Offshore Installation", 3-8 5.1.1 (b) ii)

- Type B : Fire Water Deluge Valve for topside module

Water deluge valves shall be associated with solenoid valves, pressure limit switch, and check valves etc. as mentioned below. Fire water from ring main to be distributed to each topside modules, proving with adequate water capacity in accordance with ISO 13702, NFPA 13/15, and ABS.

(** To be supplier scope)

WATER DELUGE SKID FOR
TOPESIDE MODULE (TYPE "B")



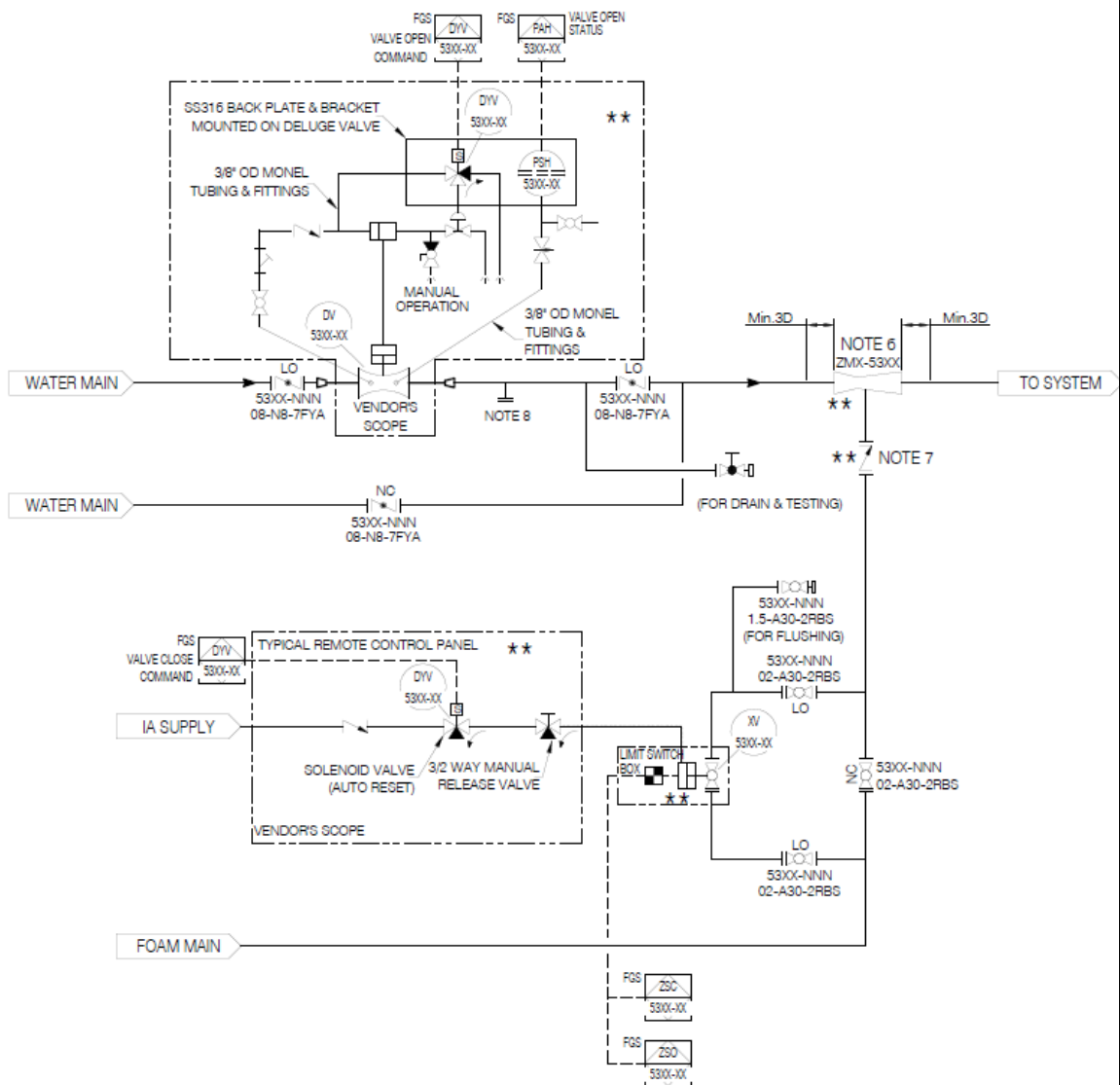
- Valve size and quantity for "type B" Deluge Valves shall be referred to below table.

TOPSIDES DELUGE SKIDS

SL.No	MODULE NAME	SIZE OF DELUGE VALVE	DELUGE SKID TYPE	FW DEMAND (m3/h)	TYPE OF DELUGE SYSTEM
DV-5255-16	1P (FLARE)	6"	B	236.0	WATER
DV-5255-26	2P (INLET SEPARATION/CONDENSATE TREATMENT)	12"	C	907.3	FOAM-WATER
DV-5255-36	3P (MRU & DEW POINT CONTROL)	10"	B	683.3	WATER
DV-5255-56	5P (BOILER-1)	12"	B	971.1	WATER
DV-5255-66	6P (BOILER-2)	12"	B	971.1	WATER
DV-5255-46	TURRET LOWER AREA	14"	B	1,500	WATER
DV-5255-48	TURRET UPPER AREA	14"	B	1,500	WATER

- Type C : Fire Water Deluge Valve with Foam Valve for cargo deck area and topside module
 Water deluge valves/Foam Valves shall be associated with solenoid valves, pressure limit switch, check valves, Proportioner, manual release valves, air actuated ball valves with positioner and local control panels etc. as mentioned below.
 Fire water and foam water to be distributed to each topside modules and cargo tanks, proving with adequate water capacity in accordance with ISO 13702, NFPA 13/15, and ABS.
 (** To be supplier scope)

FOAM / WATER DELUGE SKID FOR
CARGO DECK AREA & TOPSIDE
(TYPE "C")



- Valve size and quantity for “type C” Deluge Valves w/ Foam Valves shall be referred to below table.

DECK FOAM SKIDS

HOLD 1

SL.No	MODULE NAME	SIZE OF DELUGE VALVE	DELUGE SKID TYPE	FW DEMAND (m3/H)	TYPE OF DELUGE SYSTEM
DV-5357-61	SLOP.P, PRODUCED WATER. P,M.G.O.1(P)& W.B.T.6P	6"	C	341	FOAM-WATER
DV-5357-60	CONDENSATE TK.6C & M.G.O.2(P/S)	8"	C	393	FOAM-WATER
DV-5357-62	SLOP.S, PRODUCED WATER. S,M.G.O.1(S)& W.B.T.6S	6"	C	341	FOAM-WATER
DV-5357-51	VOID 5P & W.B.T.5P	8"	C	390	FOAM-WATER
DV-5357-50	CONDENSATE TK.5C	8"	C	449	FOAM-WATER
DV-5357-52	VOID 5S & W.B.T.5S	8"	C	390	FOAM-WATER
DV-5357-41	VOID 4P & W.B.T.4P	8"	C	390	FOAM-WATER
DV-5357-40	CONDENSATE TK.4C	8"	C	449	FOAM-WATER
DV-5357-42	VOID 4S & W.B.T.4S	8"	C	390	FOAM-WATER
DV-5357-31	VOID 3P & W.B.T.3P	8"	C	390	FOAM-WATER
DV-5357-30	CONDENSATE TK.3C	8"	C	449	FOAM-WATER
DV-5357-32	VOID 3S & W.B.T.3S	8"	C	390	FOAM-WATER
DV-5357-21	VOID 2P & W.B.T.2P	8"	C	390	FOAM-WATER
DV-5357-20	CONDENSATE TK.2C	8"	C	449	FOAM-WATER
DV-5357-22	VOID 2S & W.B.T.2S	8"	C	390	FOAM-WATER
DV-5357-11	LEAN MEG TK.2P/1P& W.B.T.1P	8"	C	390	FOAM-WATER
DV-5357-10	CONDENSATE TK.1C	8"	C	449	FOAM-WATER
DV-5357-12	RICH MEG TK.2S/1S & W.B.T.1S	8"	C	390	FOAM-WATER

HOLD 1 : Size of Deluge valve to be confirmed in accordance with final fire water demand calculation and hydraulic analysis.

Contract Award Q2 2020; Delivery Q4 2020 all units

Project Registration

ConocoPhillips is committed to ensuring Australian Industry full, fair and reasonable opportunity to participate in the Barossa Offshore Project. Expressions of Interest are invited from contractors and suppliers with the relevant capability and capacity to undertake the scope of work.

This is a request for specific expressions of interest. Contractors and suppliers will be considered for prequalification and tender if suitably qualified against this package.

Note that an important part of the project registration process is to register an Expression of Interest at the correct Scope level.

Scope level definition:

Full scope: Able to produce / supply the entire package.

Partial scope: Able to produce / supply one or more of the sub-packages.

All registrations are to be completed via ICN Gateway BarossaOffshore.icn.org.au. Please contact the ICNNT if registration assistance is required. Contact details: (08) 8922 9422 or admin@icnnt.org.au.

Project

Website ConocoPhillips Australia

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