

2L Engineers	Design & Development Outputs & Review	
	Design Package No.:	2L-DDP1920-03
	Package start date:	08/06/2019

Customer:	2L Engineers
Work Order No., if any:	2L19-002 (PRO)
Valve Type:	Category - A, Butterfly Valve
Design Specification/Standard:	API 609, 8 th Edition Feb 2016, Errata April 2017.
Operation:	Gear Operated
Size:	DN 150 (NPS 6)
Bore:	148.4mm
Pressure Class:	Designated Valve at 10 bar
End Connections:	Wafer to Suit Class 150.
Drilling /End Connection as per Std:	As Per ASME B16.5-2017.
Face to face as per Std:	56mm, As Per Table-2, API 609, 8 th Edition Feb 2016, Errata April 2017.
Inspection/ Testing Standard:	API 598, 10 th Edition, Oct-2016.
Material- Body/Bonnet/Cover/Flap/Ball:	ASTM A216 Gr. WCB
Trim Material:	ASTM A479 TP 304
Overlay/Hard facing:	Not Required
Unidirectional/Bidirectional:	Bi-directional
Dead-end Service (API 609)	Not Applicable
Reference Specifications:	(Refer Format No : 2L-WDU-02-609, Rev 00

The following documents / drawing / specification / plan / process etc generated as Design Outputs and these are reviewed and approved by respective persons:

Sl. No.	Output Generated	Doc No. / Rev/ Date	Generated by: Designation/sign	Reviewed/ Approved by: Designation / Sign	Date of Review /Approval
1)	Design Outputs provides the Appropriate Information for Purchasing / Production;	YES / NO 2L-DDD-06 Rev-01	Raghu A.H. (Design Engineer)	Aditya Pati (Design Engineer)	20/06/2019
2)	Design Outputs identifies the Design Acceptance Criteria (DAC);	YES / NO (If yes, Where documented 2L-DDD-013 Rev-00	Raghu A.H. (Design Engineer)	Aditya Pati (Design Engineer)	19/06/2019
3)	Design Outputs - includes identification of, or reference to, products	YES / NO (If yes, Where	Raghu A.H. (Design Engineer)	Aditya Pati (Design Engineer)	20/06/19

Design & Development Outputs & Review

Design Package No.: 2L-DP1920-05

Package start date: 08/06/2019

	and/or components and activities deemed critical to the design;	documented 2L-D&D-06 Rev-01	<u>Raghuveer</u> Raghuveer h.t. (Design Engineer)	<u>Aditya</u> Aditya.Patil (Design Engineer)	20/06/19
4)	Design Outputs include results of applicable calculations;	Yes, Refer Format No:- 2L-D&D-06 Rev-01/2L-D&D-03, Rev-01	<u>Raghuveer</u> Raghuveer h.t. (Design Engineer)	<u>Aditya</u> Aditya.Patil (Design Engineer)	20/06/19
5)	Design Outputs - specify the characteristics of the product that are essential for its safe and proper use;	Refer format NO:- 2L-DOM-BFV (Rev-00)	<u>Raghuveer</u> Raghuveer h.t. (Design Engineer)	<u>Aditya</u> Aditya.Patil (Design Engineer)	21/06/19
6)	Flange Design conforms to;	ASME B16.5 - 2014 Class 150	<u>Raghuveer</u> Raghuveer h.t. (Design Engineer)	<u>Aditya</u> Aditya.Patil (Design Engineer)	20/06/19
7)	Dimensions conforms to API 6 D / 609 requirements;	Yes, According to API 609 8th Edition Feb 2016, Errata April 2017	<u>Raghuveer</u> Raghuveer h.t. (Design Engineer)	<u>Aditya</u> Aditya.Patil (Design Engineer)	20/06/19
8)	Casting / Forging Drawing;	Refer format NO:- 2L-D&D-06, Rev-01	<u>Raghuveer</u> Raghuveer h.t. (Design Engineer)	<u>Aditya</u> Aditya.Patil (Design Engineer)	19/06/19
9)	Final Machining Drawing;	Refer format NO:- 2L-D&D-06, Rev-01	<u>Raghuveer</u> Raghuveer h.t. (Design Engineer)	<u>Aditya</u> Aditya.Patil (Design Engineer)	19/06/19
10)	Bill of material and Material of Constructions;	Refer format NO:- 2L-D&D-06, Rev-01	<u>Raghuveer</u> Raghuveer h.t. (Design Engineer)	<u>Aditya</u> Aditya.Patil (Design Engineer)	20/06/19
11)	Material Specifications;	Refer Format NO:- 2L-TS-01 to 2L-TS-06	<u>Raghuveer</u> Raghuveer h.t. (Design Engineer)	<u>Aditya</u> Aditya.Patil (Design Engineer)	Available
12)	Quality Plan(s), Inspection Plan;	Refer Format NO:- 2L-DPP-05, Rev-00	<u>Raghuveer</u> Raghuveer h.t. (Design Engineer)	<u>Aditya</u> Aditya.Patil (Design Engineer)	Available
13)	Assembly Drawing;	Refer Format NO:- 2L-D&D-05, Rev-01	<u>Raghuveer</u> Raghuveer h.t. (Design Engineer)	<u>Aditya</u> Aditya.Patil (Design Engineer)	20/06/19
14)	Design conforms to API 6D / 609;	YES / NO API 609, 8th Edition, Feb 2016, Errata April 2017	<u>Raghuveer</u> Raghuveer h.t. (Design Engineer)	<u>Aditya</u> Aditya.Patil (Design Engineer)	20/06/19

Prepared by: Design Engineer

Raghuveer
25-6-2019
Raghuveer h.t.

Design Outputs are : OK / NOT OK

Aditya
25/06/2019 Aditya.Patil
(Design Engineer)

Reviewed by: Design Engineer