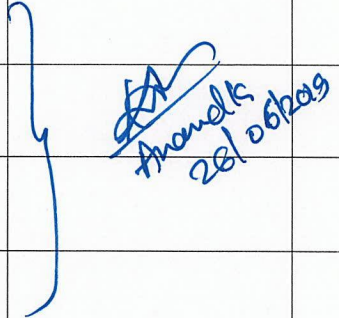


Design & Development Verification & Final Review

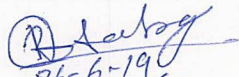
Design Package No.: **2L-DSD-02-03**

Package start date: **08/06/2019**

Customer:	2L Engineers
Work Order No., if any:	2LE-002 (PRO)
Valve Type:	Category-A, Butterfly Valve
Design Specification/Standard:	API 609, 8 th Edition Feb 2016, Errata April 2017.
Operation:	Gate Operated.
Size:	DN 150 (NPS 6)
Bore:	148.4 mm
Pressure Class:	Detested Valve at 10 bar.
End Connections:	Welder to SPT 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:	No- Required.
Unidirectional/Bidirectional:	Bi-directional
Dead-end Service (API 609)	Not Applicable
Reference Specifications:	Refer Format no: 2L-DSD-02-609, Rev-00.


Sl. No.	Parameter	Design Output	Verification method followed:		Does the Input meet Output Requirements (Y/N)	Verified by (Name & sign.)	Date of verification
			By 2 D drawing / 3D Modeling	Comparing past proven design (mention drawing number or design package number)			
1)	Shell Thickness	Calculated shell thickness 8mm	Adopted shell thickness 11mm	n/a	Yes		
2)	Disc Thickness	Calculated disc thickness 5.24mm	Adopted disc thickness 6mm	n/a	Yes		
3)	Disc outer diameter	Calculated 161mm	Adopted Disc OD is 157.5mm	n/a	Yes		
4)	Gear Box	GFA-150	Adopted Gear Box is Safe	n/a	Yes		

Prepared by: Design Engineer


26-6-19
 (Rajuraj L. S.)

After Design Verification and Final Review Design found : OK / ~~NOT OK~~

Verification and Final Review performed by : Design Manager


26/06/2019