

Type Approval Certificate

Certificate No TAC-1266-361-2301

Valid From: 7th June 2023

Valid Until: 6th April 2027

Manufacturer Tekno Valves

Manufacturer's Mark

Address Natun Rasta, Bilkanda, 24 Parganas (N)
Kolkata – 700 113



Country India

Regulation[s]: CDG TPE Regulations 2009 (As amended); ADR 2023

Design Specification: EN ISO 10297:2014+A1:2017, EN ISO 15996:2017

TPE Type: Cylinder Valves for Technical Gases

Drawing No: SWN-12, BOWN-12 & TWN-12

Revision: -

Test Pressure: 540/360/60 **bar** **Working Pressure:** Dependant on service gas **bar**

Material: Body: CW617N, CW722R; O-ring: EPDM; Seat insert: PA 66, PEEK, PCTFE

Contents: See Below

Additional Information: UK counterpart approval of BAM certificate BAM-TPED-2017/003, Rev 4
Drawing suffix designates the service gas type. 'O' compatibility listed in 'Gas Annex S_O', 'N' compatibility listed in 'Gas Annex S_I', only 'D' compatible for acetylene service.
BOWN-12 designs incorporate Type 1 RPD

Revision No	Revision History

Details of the results of the examination of the TPE for type approval and the main features of the type are attached.

The undersigned certifies that the TPE type described above conforms to the requirements of the Regulation[s] specified above.

The applicant is obliged to advise AISL in writing of all modifications to this approved type. Such modifications may be subject to additional approval.

An application for renewal after expiration shall be made to enable continued certification.

Simon Davies

Signature

Certifying Inspector

Arrowhead Industrial Services Limited

Orion House, 14 Barn Hill, Stamford, Lincolnshire, PE9 2AE, UK

UK Appointed Identification Number: 1266



Inspector's Mark



Type Approval Number TAC-1266-361-2301– Supporting Technical Documents

Nº	Documents	References
1	Application for Type Approval	Email dated 23 rd May 2023
2	Valve Drawings of Design Series'	TV/DR-2268/2015-R Rev 0 (SWN-12/O) TV/DR-3849/2016-R Rev 0 (SWN-12/O) TV/DR-3850/2016-R Rev 0 (SWN-12/O) TV/DR-3852/2016-R Rev 0 (SWN-12/O) TV/DR-3854/2016-R Rev 0 (SWN-12/O) TV/DR-3887/2016-R Rev 0 (SWN-12/O) TV/DR-3889/2016-R Rev 0 (SWN-12/O) TV/DR-4464/2018-R Rev 0 (BOWN-12/O) TV/DR-4502/2018-R Rev 0 (BOWN-12/O) TV/DR-4573/2018-R Rev 0 (TWN-12/O) TV/DR-4639/2018-R Rev 0 (SWN-12/O) TV/DR-4640/2018-R Rev 0 (SWN-12/O) TV/DR-4712/2018-R Rev 0 (BOWN-12/N) TV/DR-4953/2019-R Rev 0 (SWN-12/O) TV/DR-4969/2019-R Rev 0 (BOWN-12/O) TV/DR-5116/2019-R Rev 0 (BOWN-12/N) TV/DR-5117/2019-R Rev 0 (BOWN-12/N) TV/DR-5341/2020-R Rev 0 (SWN-12/N) TV/DR-5615/2020-R Rev 0 (SWN-12/O) TV/DR-5813/2021-R Rev 0 (SWN-12/D) TV/DR-5815/2021-R Rev 0 (SWN-12/D) TV/DR-5821/2021-R Rev 0 (TWN-12/D)
3	Representative Stamp Mark Drawings	Integrated on valve drawings
4	Stage 2 Test Review	SWN-12 Stage 2 test review ISO 10297 SWN-12 Stage 2 test review ISO 15996
5	Hydraulic Burst Pressure Test (EN ISO 10297)	"DGA-18-041 Tekno SWN-BOWN ISO 10297 15996 PB pg 3 DGA-20-023 I Tekno SWN-12_O + SWN-12_N + TWN-12_O ISO 10297 PB pg 3 DGA-21-057 tekno SWN-12_D + TWN-12_D ISO 10297 PB pg 4"
6	Flame Impingement Test (EN ISO 10297)	DGA-15-046 Tekno SWN-12 O ISO 10297 PB pg 4
7	Excessive Torque Test (EN ISO 10297)	DGA-18-041 Tekno SWN-BOWN ISO 10297 15996 PB pg 4
8	Leak Tightness Test (EN ISO 10297)	DGA-18-041 Tekno SWN-BOWN ISO 10297 15996 PB pg 4
9	Endurance Test (EN ISO 10297)	DGA-18-041 Tekno SWN-BOWN ISO 10297 15996 PB pg 4
10	Visual Examination (EN ISO 10297)	DGA-18-041 Tekno SWN-BOWN ISO 10297 15996 PB pg 4

Nº	Documents	References
11	Valve Impact Test (EN ISO 10297)	"DGA-18-041 Tekno SWN-BOWN ISO 10297 15996 PB pg 4 DGA-20-023 I Tekno SWN-12_O + SWN-12_N + TWN-12_O ISO 10297 PB pg 3-4 DGA-21-057 tekno SWN-12_D + TWN-12_D ISO 10297 PB pg 4"
12	Acetylene Hydraulic Burst Pressure (EN ISO 10297)	DGA-21-057 tekno SWN-12_D + TWN-12_D ISO 10297 PB pg 4
13	Acetylene Seat Leak Tightness (EN ISO 10297)	DGA-21-057 tekno SWN-12_D + TWN-12_D ISO 10297 PB pg 4
14	Oxygen Pressure Surge Test (EN ISO 10297)	DGA-15-046 Tekno SWN-12 O ISO 10297 PB pg 6
15	Resistance against vibration (EN ISO 15996)	N/A Not required
16	Integrity under high flow (EN ISO 15996)	N/A Not required
17	Opening pressure and closing-off pressure (EN ISO 15996)	DGA-18-041 Tekno SWN-BOWN ISO 10297 15996 PB pg 5-6
18	Leakage (EN ISO 15996)	DGA-18-041 Tekno SWN-BOWN ISO 10297 15996 PB pg 5
19	Endurance (EN ISO 15996)	DGA-18-041 Tekno SWN-BOWN ISO 10297 15996 PB pg 6
20	Resistance to ignition (EN ISO 15996)	DGA-18-041 Tekno SWN-BOWN ISO 10297 15996 PB pg 6
21	Resistance of the non-return function against pressure in the reverse direction (EN ISO 15996)	DGA-18-041 Tekno SWN-BOWN ISO 10297 15996 PB pg 5
22	Leak tightness in the reverse direction (EN ISO 15996)	DGA-18-041 Tekno SWN-BOWN ISO 10297 15996 PB pg 6