

TYPE APPROVAL CERTIFICATE

Certificate No: TAP0000152 Revision No:

This is to certify:		
That the Gate Valve		
with type designation(s) Non-rising Stem Type		
Issued to Dikkan Gemi ve Izmir, Türkiye	e Endustriyel Vana Sana	yi Ticaret Anonim Sirketi
	DNV-CP-0186 – Type approval – Valv ation – Ships Pt.4 Ch.6 Piping systen	
Application :		
Product(s) approved by	this certificate is/are accepted for ins	stallation on vessels classed by DNV.
Temperature range: Max. working press.: Sizes:	0°C to 120°C 16 bar (except for DN 250 where it is DN 40 to DN 250 (see page 2)	10 bar, see page 2)
Issued at Høvik on 2023	-05-31	
This Certificate is valid until 2028-01-01 . DNV local unit: Istanbul		for DNV
Approval Engineer: Jane Lozanov		Zeinab Sharifi Head of Section

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.

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This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.



Job Id: **262.1-022199-3** Certificate No: **TAP0000152**

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Product description

Gate valves – non rising stem type designed as per EN 12516-3 with the following data:

Valve size	Minimum wall thickness of	Maximum allowable working
	valve body & bonnet, mm	pressure, bar(g)
DN 40	7	16
DN 50	7	16
DN 65	8	16
DN 80	8.5	16
DN 100	9	16
DN 125	9	16
DN 150	10	16
DN 175	10.5	16
DN 200	11	16
DN 250	14	10

End flanges are in accordance with EN 1092-2.

Material of construction:

Valve component	Material grade
Body, bonnet & gland	EN GJS-400-18-LT from EN 1563
Wedge	EN GJS-400-18-LT from EN 1563/
-	CuSn5Zn5Pb5-C from EN 1982
Seat	CuSn5Zn5Pb5-C from EN 1982/
	X5CrNi18-10 from EN 10028-7
Stem	CuZn39Pb3 from EN 12164
	X20Cr13 from EN 10088-3
Bonnet gasket	Organic fibers/ mineral fibers bonded by
	NBR elastomer
Gland packing	PTFE

Application/Limitation

Valves covered by this certificate may be used in general machinery service for class II and class III piping systems only.

Materials and material protection chosen for the specific system shall be suitable for the intended medium and environmental conditions.

Pressure temperature ratings shall follow Table 16 from EN 1092-2.

Valves covered by this certificate are not considered as fire-safe.

The approval does not include any operating gear for remote control of the valves.

The valves may not be used as shut off or quick closing valve.

Production testing and Certification

Production Testing and Certification for the actual intended application shall follow the latest applicable edition of the Rules (as mentioned on the front page of this certificate).

Type Approval documentation

Gate valve Non-rising stem drawing titled GATEVALVE.XLSX dated 2017-12-28

Burst test calculation report as per EN 12516-3

Burst test report (with procedure) witnessed by DNV Surveyor dated 2017-05-12

Datasheet for gasket titled 'Non asbestos jointing materials – Expanded graphite sheets'

Tests carried out

Burst tests as per EN 12516-3

Marking of product

Valves shall be marked at least with the following details:

- manufacturer's name or trade mark
- valve type designation

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- size
- maximum design pressure and temperature
- arrow to indicate direction of flow on one way flow valves

Periodical assessment

For retention of the Type Approval, a DNV Surveyor shall perform periodical assessment after two years (+/- 90 days) and after 3.5 years (+/- 90 days) to verify that the conditions for the approval are complied with. Reference is made to DNV-CP-0338.

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