



FLOAT AIR TRAP AFT SERIES

AUTOMATION & REGULATING VALVES

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Total Engineering Solution Service

GvK Limited

HEAD OFFICE

Techno Valley C-503, 236, Jubuto-ro,
Bupyeong-gu, Incheon, Republic of Korea

TEL +82-32-678-7972
FAX +82-32-678-7973
E-MAIL ican@gvkvalve.com

www.gvk.co.kr
www.gvkvalve.com

VMV[®]



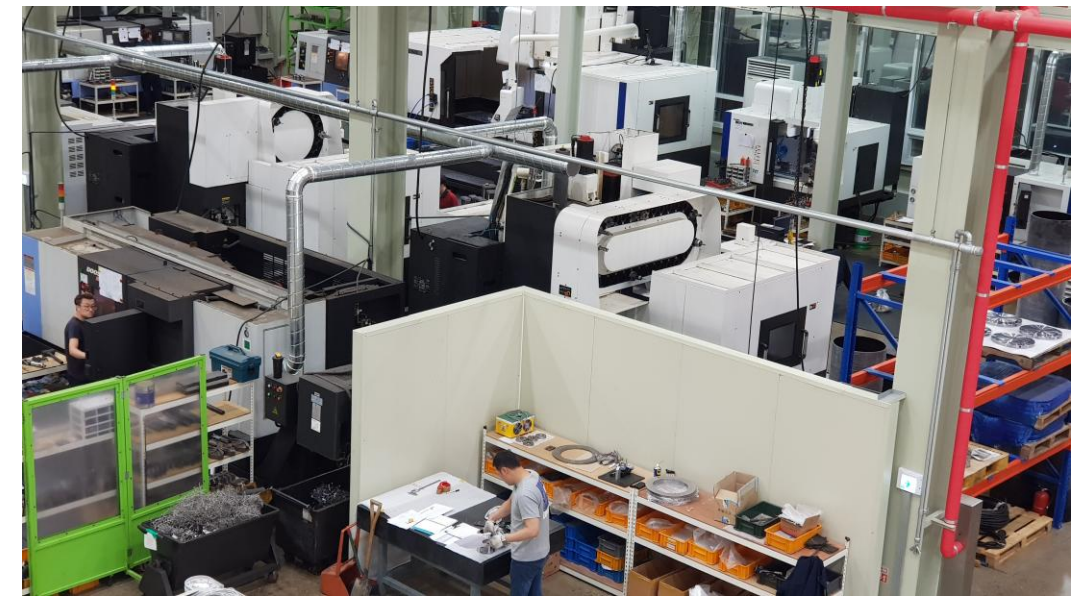
GvK Limited, founded in June 2020 by a leader with 38 years of experience, focuses on R&D while ensuring quality, price, and functionality through domestic production. The company offers Process Valves, Valve Equipment, and Total Engineering services for industries such as Gas, Refining, Petroleum, Power generation, Environment, and Water treatment. With a management team possessing 30-40 years of experience, GVK has developed numerous patents and adheres to quality standards like ISO 9001, 14001, 45001, and CE, ASME "U" & "PP", EAC. Recognized for its advanced automatic control valves, GVK also supplies a range of Control Valves globally through OEM and ODM partnerships.

Although Still In The Early Design And Manufacturing Stages, GVK Has Emerged As A Leading Company In Korea, Equipped With Skilled Personnel And Testing Capabilities. The Company Aims To Lower Production Costs, Enhance Efficiency And Improve Quality While Accumulating Hyper-intelligence Valve Engineering (Hive) Technology. GvK Limited Is Committed To Meeting Customer Needs With Competitive Pricing And High Value-added Services.

Mutually Beneficial Relationships



To Be Your Best Partner



The Professional Provider of Automatic valve Actuators



38 years experience "one stop" goods and services





Mission

기초에 근거하여 원천 기술을 살리고 원천 기술을
극대화하여 세계 중심에 서는 것

To place oneself at the center of the global landscape by utilizing
core groundbreaking technology and maximizing its capabilities.

Vision

우리는 옳은 일과 가치 있는 일에 주저함이 없이
최선을 다하고 실천하여 세계의 중심에 서자

Let us place ourselves at the forefront of the world by striving to do
our best and confidently advocating for what is just and valuable.

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AFT-20 SERIES

Structural Features

VMV applies the flexible closing system to air trap, which solves the problems of short life-time and bad sealing. In the design, factors such as shell strength, pressure and temperature grade, casting processability, fluid flow path, impact caused by water and vapor mixing, closing of the auxiliary water seal, and the strength of the valve cover gasket affected by the low temperature condition are fully considered. Air trap relies on the density difference between air and condensate to work. When the valve body is full of air, the air is discharged through the balance pipe, and the water enters the trap. The floating ball moves up and drives the valve to open. After discharging the condensed water, the floating ball drives the valve to move down and closes the drain valve. Air trap has the following advantages, long life, reliable operation, convenient maintenance, no original steam leakage. The greatest advantage of the air trap is can work under pressure as low as 0.1bar.

Air Trap Selection and Installation

The air trap can drain water continuously. It is suitable for discharging water or liquid from gas transmission pipeline, gas storage tank and air separation unit. Generally, the safety factor is 2-3 times when selecting models. The discharge capacity of air trap increases with the increase of pressure difference. Check the discharge capacity curve in detail. Special reminder: Please do not mistakenly think that the large diameter trap with large capacity The air trap is installed horizontally at the bottom of the pipeline or equipment, being equipped with pressure equalizing and balancing pipe and flange as leaving factory-(PN25,DN10 RF). The air trap is made of ASTM216WCB cast steel, part of the valve cover is made of ASTM A105, the internals are made of stainless steel, with built-in filter.

AFT 20 –Air Trap

Features

The valve body and Bonnet are made of cast steel/forged steel. All internal parts are made of stainless steel, and the wear allowance has been fully considered in the design of moving parts, which improves the service life of the trap. Special flow channel design to achieve zero water hammer. Patented flexible closing system and micron-level precision closing system double guarantee no air leakage and long service life. The pressure equalizing and balancing pipe completely solves the air locking. The independent filter makes the protects from foreign substances. Choose different displacement curves according to the pressure. The blowdown plug is designed at the bottom of the air trap to ensure that the internal ponding is removed after shutdown and prevent the floating ball from freezing.

Technical Standard

- GB/T12250-2005 Steam Trap Terminology Marking Construction Length
- GB/T22654-2008 Technical conditions of steam traps
- GB/T12251-2005 Test methods for steam traps
- ISO 6948 Automatic steam traps
- Production and performance characteristic tests

Material List

- Bonnet : A105
- Body : WCB
- Seat : Martensitic Stainless Steel
- Disc : Martensitic Stainless Steel
- Other Internal Parts : Austenitic Stainless Steel



Technical Parameter

Technical Parameter	
Nominal Pressure	PN25
Max. Allowable Pressure (shell)	2.45MPa / 200℃
Max. Allowable Temperature (shell)	450℃ / 1.03MPa
Factory Steam Operation Test	>3times / 1.6MPa
Max. Working Pressure	1.6MPa
Max. Operating Temperature	350℃
Factory Hydro Test Pressure	3.8MPa
Air Test	2.0MPa

Dimension Table

Model	Size	L (mm)	H (mm)	H1 (mm)	W (mm)	Weight (kg)
AFT20T	DN15-25	150	225	75	227	9
AFT20W	DN15-25	150	225	75	227	9
AFT20F	DN15-25	210	225	75	260	1.5

AFT-30 SERIES

AFT 30 –Air Trap

Features

The valve body and Bonnet are made of cast steel/forged steel. All internal parts are made of stainless steel, and the wear allowance has been fully considered in the design of moving parts, which improves the service life of the trap. Special flow channel design to achieve zero water hammer. Patented flexible closing system and micron-level precision closing system double guarantee no air leakage and long service life. The pressure equalizing and balancing pipe completely solves the air locking. The independent filter makes the protects from foreign substances. Choose different displacement curves according to the pressure. The blowdown plug is designed at the bottom of the air trap to ensure that the internal ponding is removed after shutdown and prevent the floating ball from freezing.

Technical Standard

- GB/T12250-2005 Steam Trap Terminology Marking Construction Length
- GB/T22654-2008 Technical conditions of steam traps
- GB/T12251-2005 Test methods for steam traps
- ISO 6948 Automatic steam traps
- Production and performance characteristic tests

Material List

- Bonnet : A105
- Body : WCB
- Seat : Martensitic Stainless Steel
- Disc : Martensitic Stainless Steel
- Other Internal Parts : Austenitic Stainless Steel



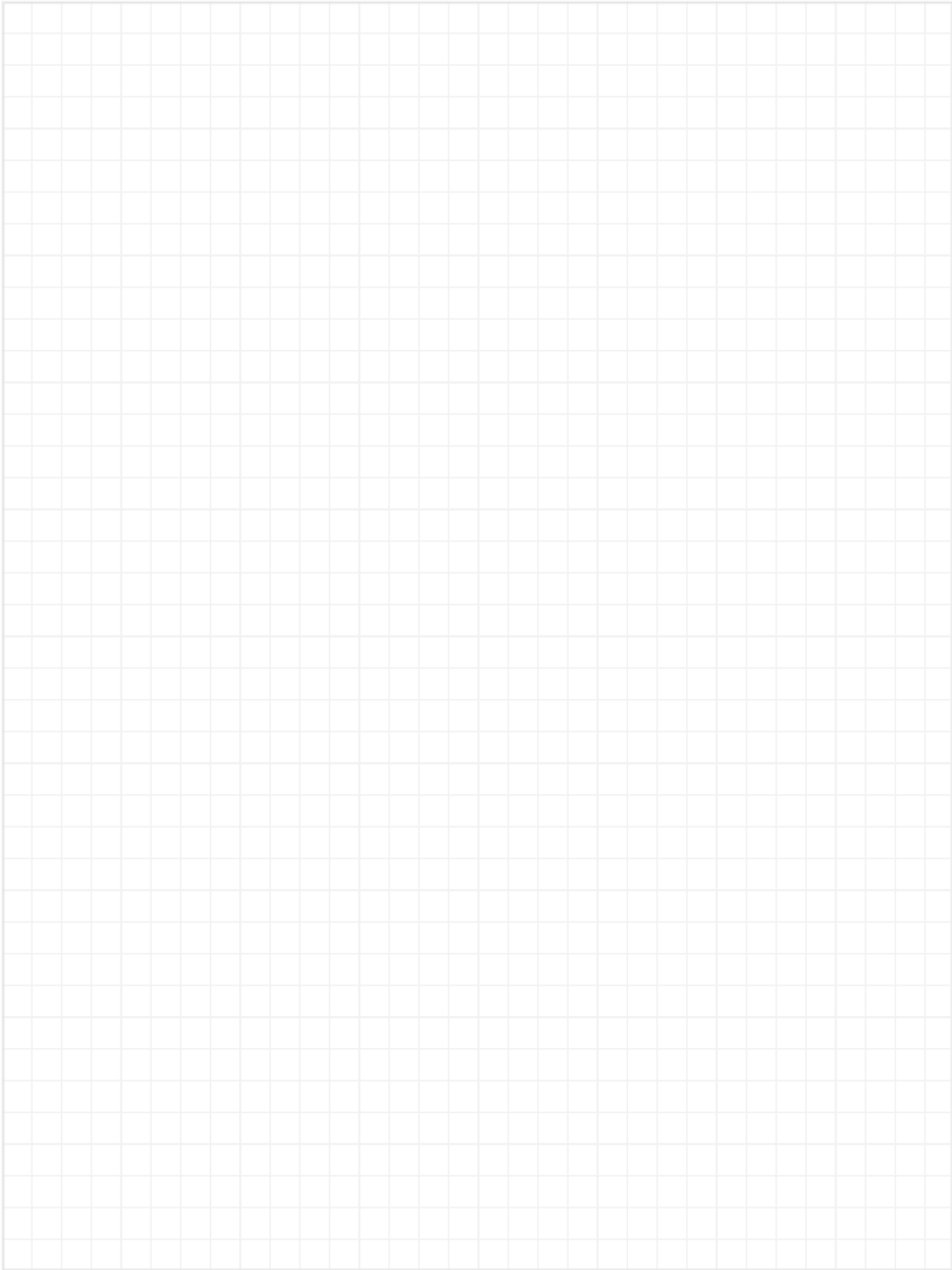
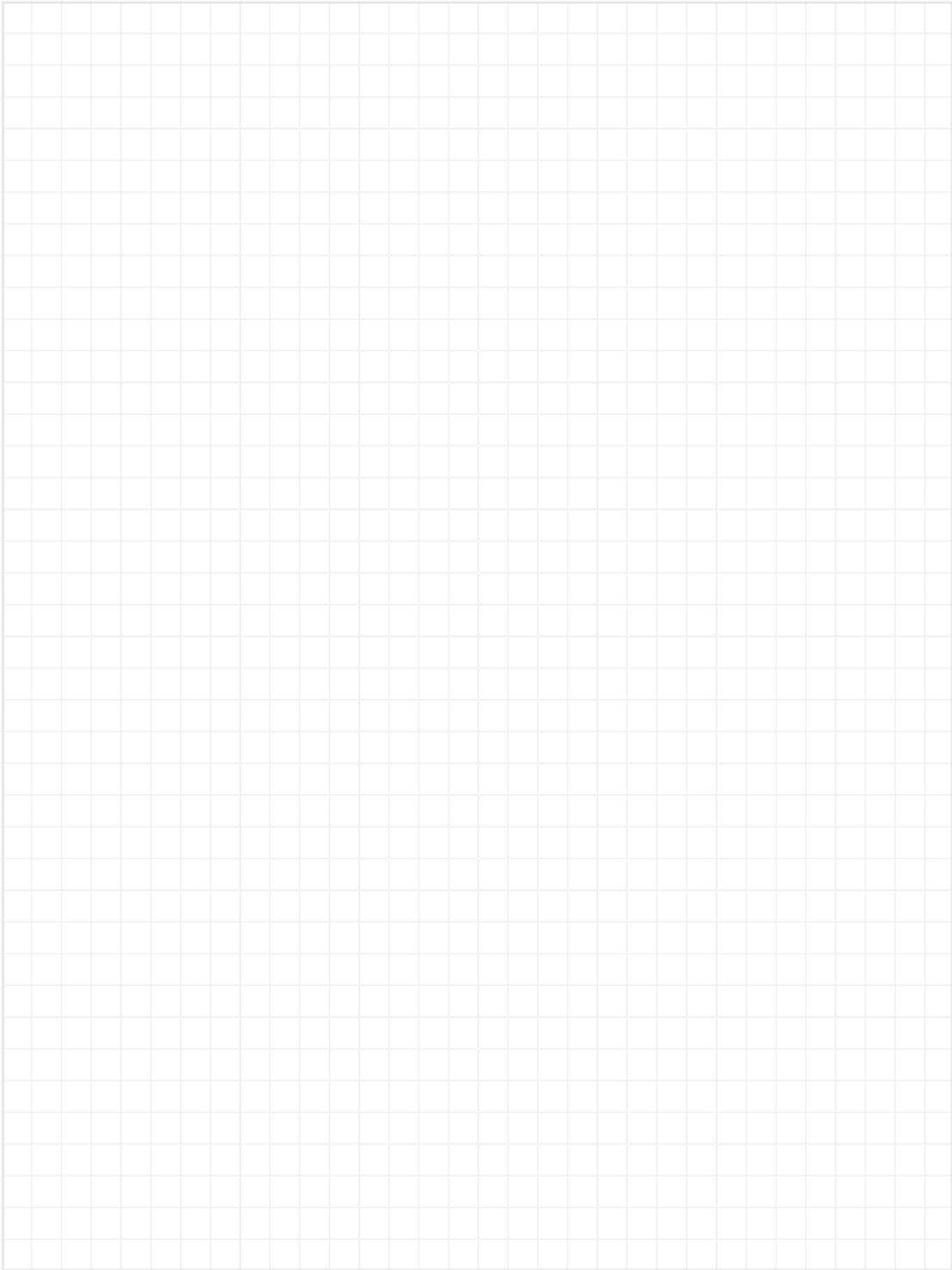
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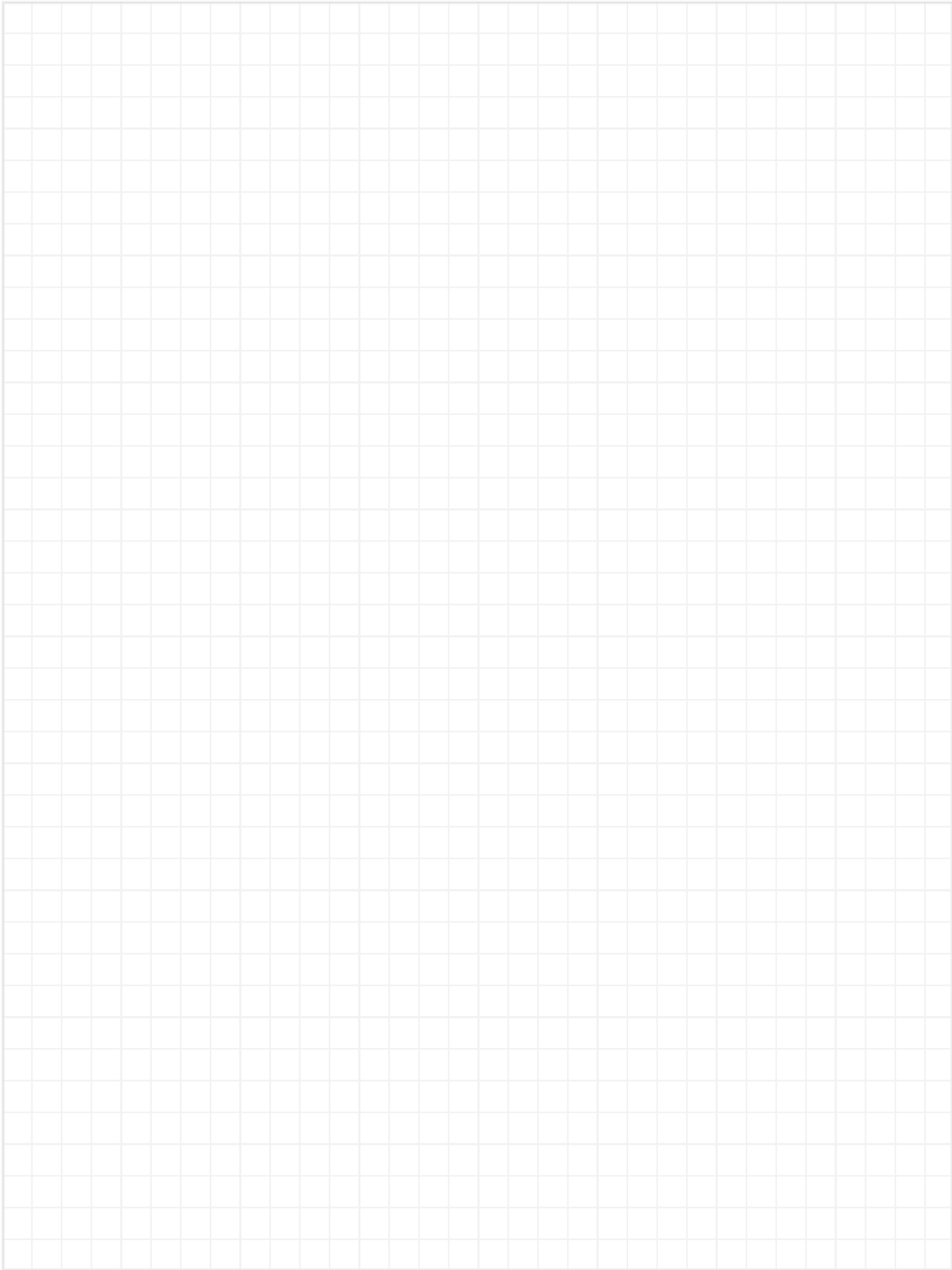
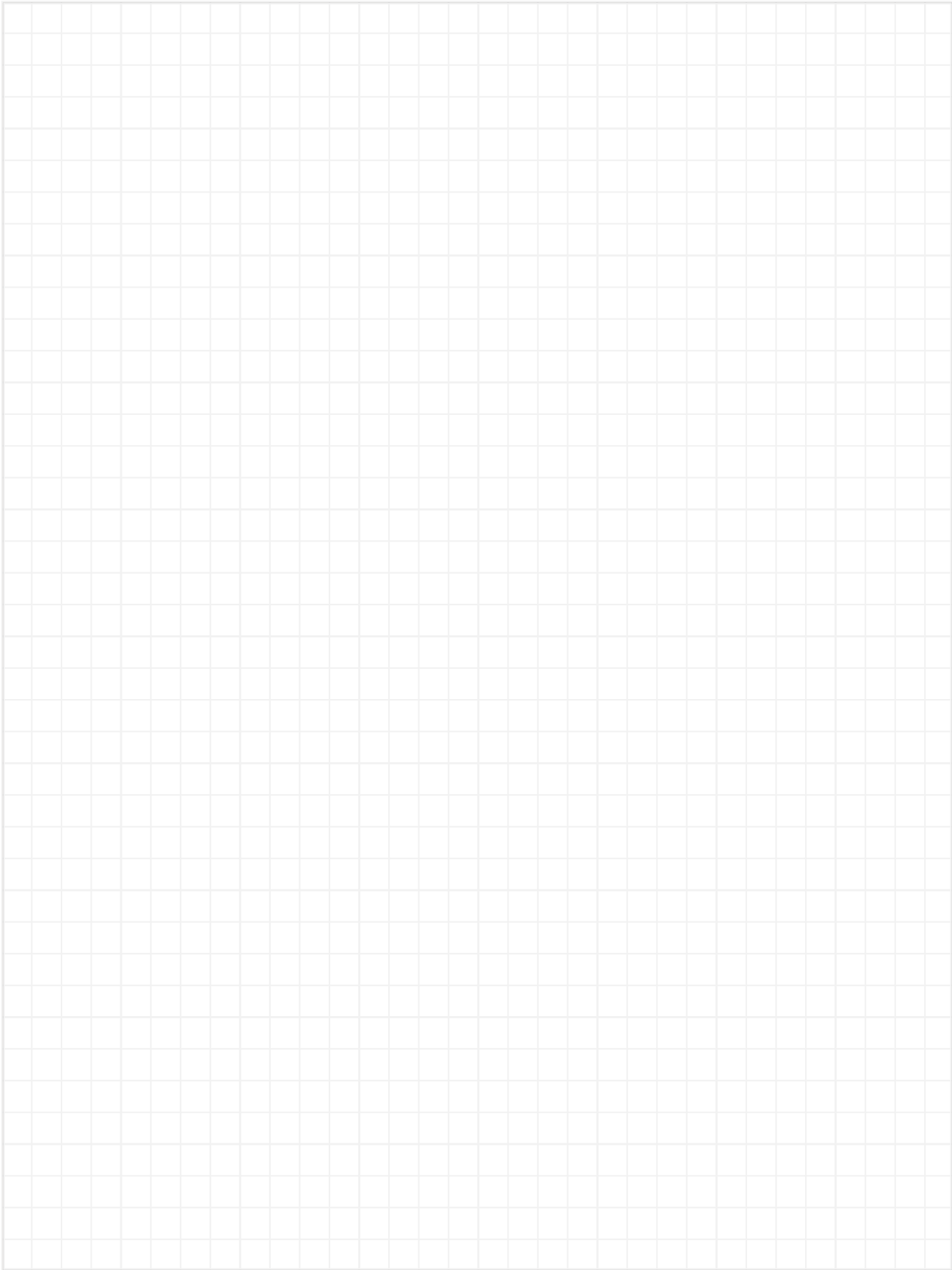
Technical Parameter	
Nominal Pressure	PN25
Max. Allowable Pressure (shell)	2.45MPa / 200℃
Max. Allowable Temperature (shell)	450℃ / 1.03MPa
Factory Steam Operation Test	>3times / 1.6MPa
Max. Working Pressure	1.6MPa
Max. Operating Temperature	350℃
Factory Hydro Test Pressure	3.8MPa
Air Test	2.0MPa

Dimension Table

Model	Size	L (mm)	H (mm)	H1 (mm)	W (mm)	Weight (kg)
AFT30T	DN25-32	170	260	87	258	12.5
AFT30W	DN25-32	170	260	87	258	12.5
AFT30F	DN25-32	230	260	87	300	17

NOTE





CERTIFICATE

ISO 9001:2015

ISO 14001:2015

ISO 45001:2018

ASME U, PP Stemp

EAC : RUSSIA TRCU

API 6D / 600 By KSM



CE: GLOBE CONTROL VALVE

CE : BALL VALVE

Research Institute

Venture Company

Material · Part · Equipment

Rooting Enterprise

