## NINGJIN APC INDUCTRIES CO., LTD.

FILE NO.: MH Z41X-300PSI

EDITION: 2012

## OPERATION MANUAL FOR GATE VALVE

#### NING JIN APC INDUSTRIES CO., LTD

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## **1. APPLICATION AND PERFORMANCE OF VALVE**

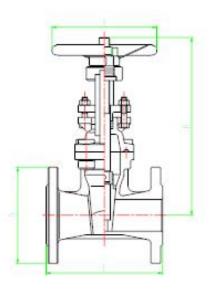
## **1.1 APPLICATION**

The valve is used in steam or water system under normal temperature and low pressure environment. Its main function is pipe connection

1.2 PERFORMANCE:	
Nominal diameter:	2.5 " ~12 "
Nominal Pressure:	300PSI or 200PSI
Temperature:	≪120℃
Applicable medium:	water, steam
Face to face dimension:	ANSI B16.10
Flange Dimension:	ANSI B16.1
Test:	API598

## 2. VALVE STRUCTURE

WHICH CAN BE SEEN IN FIGURE 1:



## 3. MATERIAL OF MAIN SPARE PARTS

VALVE PARTS	01-VALVE BIDY	02-BONNET	3-DISC	04-STEM	
MATERIAL	DI	DI	DI+EPDM	SS304	

## 4. OPERATION PRINCIPLE

This OS&Y gate valve is manual operated. It adopted wedge resilient valve disc. The valve body and bonnet were joined together by bolts. Its working and sealing principle is as following:

The rotation of the handwheel would leads to the valve disc moves upward and downward.So that the valve can be opened and closed.In order to make sure the sealing of the stem is good enough, three V-type seal rings were adopted.

## 5. INSTALLATION, MAINTENANCE AND USE OF VALVE

5.1 The valve should be stored in a ventilated and dry storehouse while outdoor storage is strictly prohibited. Valve disc should be closed during the Storage stage and machining parts should be oiled at the same time. The flanges of the valve should be covered with two plastic covers to avoid the dust and impurity coming into the valve.

5.2 The replacement of the greasy dirt should be done regularly if the valves need to be stored for a long time,

5.3 Before installation, the certification and logo of the valve should be checked carefully.

5.4 The valve should be used when the valve is fully opened or closed

5.5 In the process of using, people should keep an eye on the valve. Stop using the valve if it fails. Try to find the reason and Remove the hidden danger.

### 6. VALVE FAILURE AND METHODS OF ELIMINATING

6.1 Hard to rotate the handwheel- Put more oil on the joint

6.2 Damage between the stem and other parts- Take the valves apart and eliminate the defect.

6.3 Leakage between valve body and bonnet-The connecting bolt was not tightened. Try to tighten the bolt. If the gasket was damaged, exchange the gasket with a good quality one.

6.4 The sealing surface of the valve body and bonnet was damaged or the sealing surface is dirty- Take off the bonnet and eliminate the dirt.

6.5 There is leakage in the sealing surface when the valve is closedclosing moment is not powerful enough, try to increase the closing moment.

## 7. QUALITY ASSURANCE AND SERVICE

7.1 warranty period

7.1.1 18 months from the date of ex-factory date

7.1.2 If the valve fails within the guarantee period:

If the valve failure was resulted from the factory, the factory should bear the cost for repair or replacement.

If the valve failure was resulted from the buyer (due to the faulty operation), the buyer should bear the cost for repair or replacement.

### 7.2 SERVICE

7.2.1 The factory can come to the locale for installation and debugging according to the contract.

7.2.2 The factory should track the quality and provide service according to the requirement of buyer.