

# Inspection report

## Inspection summary

Inspection Order No.	PO 000340
Product Description	Gate Valves
Factory Name	***
Purchaser	***
Inspection Date	Oct. 8th to 9th 2016
Inspected By	***

## Items for inspection

Check rate: 100%

No.	Item	Standard	Result	NCR Activity
1	Quantity	As per order list	~	
2	Pressure test	EN12266	~	
3	Dimensions	As per drawings	~	
4	Material	As per client's specification	~	
5a	Painting	See images	~	*
5b	Appearance	See images	~	*
6	Nameplate & marking	See images	~	
7	Packing	As per spec	~	**

<sup>\*</sup> All valves had not yet been cleaned and repaired when inspected, so there are some painting and appearance issues on the flange and body surface. I have asked the factory have to repaint and repair all defective valves before shipping.

<sup>\*\*</sup> Had not completed the packing for all valves during visit.



## 1. Quantity

All quantities meet the requirement on order provided by the factory.

### 2. Pressure Test

### **DN200 Gate Valve with Gear Box - PASS**

Zero leaking on both shell test and seal test.

#### A. Pressure test

Shell test pressure  $\geq$  1.5 times nominal pressure (24 bars for PN16) Seal test pressure  $\geq$  1.1 times nominal pressure (17.6 bars for PN16)

B. Shortest dwell time Shell test pressure ≥ 180s. Seal test pressure for ≥ 60s.

#### **SHELL TEST IMAGES**





### **SEAL TEST IMAGES**





### DN200 Gate Valve - PASS

Zero leaking on both shell test and seal test

### SHELL TEST IMAGES







### **SEAL TEST IMAGES**





### DN450 Gate Valve - PASS

Zero leaking on both shell test and seal test

### SHELL TEST IMAGES















### SEAL TEST IMAGES



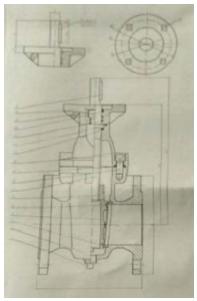


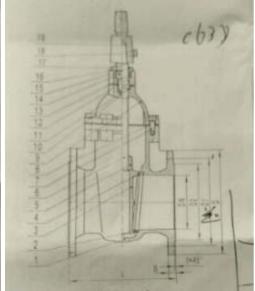
### 3. Dimensions

Checked 1 to 2 valves on each valve type for dimensions according to the drawings provided by the factory. All dimensions meet drawing required. Detailed dimensional report below:

Size	Required Dimensions					Measurements				Result	
DN	L±2	D	D1	В	n-d	L±2	D	D1	В	n-d	ОК
200	292	Ø340	Ø292	19	12-Ø23	294	Ø340.8	Ø295.4	24.5	12-Ø23.1	ок
200 with gear box	292	Ø340	Ø295	19	12-Ø23	293.7	Ø341	Ø295.1	24.8	12-Ø23.2	OK
450	432	640	585	30	20-31	434	641	586	34.7	20-Ø 31.5	OK

### **DRAWINGS**







### 4. Material

Checked the material date according to the material certificates of chemical component and mechanical property provided by factory.

### Heat codes



Item	Description	Heat codes		
		Body	Bonnet	
1	DN200 Gate Valve	C691	C685	
2	DN450 Gate Valve	C68Z	D655C	

NB. For example of DN450 Gate Valve, C691 on 1st Sep. 2016.

- **C** means made by electric furnace
- **6** means 2016
- 9 means Sep.
- **1** means 1st



## **5a.** Painting

The painting thickness is from 684 to 1221 $\mu m$  on DN200 gate valves and 465 to 828 $\mu m$ .

#### **PAINT TEST IMAGES**



Checked all valves on painting and appearance. All valves have not yet been cleaned and repaired when I inspected, so there are some painting and appearance issues on the flange and body surface. I had asked the factory have to repaint or repair all defective valves before shipping.



## **5b.** Appearance



On DN200 Gate Valve



On DN200 Gate Valve with Gear Box



On DN450 Gate Valve



## 6. Nameplate & Marking

Markings are ok.



## 7. Packing

Packing incomplete at time of inspection.