

# Checklist

(for Test Benches)



## EFCO Maschinenbau GmbH – Valve repair and testing equipment

Otto-Brenner-Straße 5 – 7 • D - 52353 Düren/Germany • Phone: +49-(0)2421-989-0 • Fax: +49-(0)2421-86260  
 sales@efco-dueren.de • info@efco-dueren.de • www.efco-dueren.com • Agencies in many countries

Company name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Phone: \_\_\_\_\_  
 Contact person: \_\_\_\_\_ E-mail: \_\_\_\_\_

• **Type of valves and how to be tested?**

- Shut off valves and regulating valves (Page 1)  
 Safety relief valves (Page 2)

**- Shut-off valves and regulating valves -**

**Valve type:**  Gate valves     Valves     Ball valves  
 Butterfly valves     Return flaps     Control valves  
 Others: \_\_\_\_\_

**Valve end:**  Flange-     Butt welded-     Threads-  
 Others: \_\_\_\_\_

**Valve shape:**  2-Way-     Straight form     Angular form  
 Others: \_\_\_\_\_

• **What kind of tests have to be done?**

- Water /  Air (LP-6 bar (87 psi))  
 Water /  Air (LP-6 bar (87 psi)) /  Air/Nitrogen (HP)  
 Other tests: \_\_\_\_\_  
*(LP = Low pressure; HP = High pressure)*

• **What is the maximum test pressure at what size (DN)?**

*(you should only indicate DN sizes and test pressures according to your main program. Exceptions (sizes/pressures) can increase the price of the test bench and its accessories very much!)*

**Max. test pressure using water (bar, psi or class)**

	bar	psi	class		bar	psi	class		bar	psi	class
DN10 (3/8")				DN80 (3")				DN400 (16")			
DN15 (1/2")				DN100 (4")				DN500 (20")			
DN20 (3/4")				DN125 (5")				DN600 (24")			
DN25 (1")				DN150 (6")				DN700 (28")			
DN32 (1 1/4")				DN200 (8")				DN800 (32")			
DN40 (1 1/2")				DN250 (10")							
DN50 (2")				DN300 (12")							
DN65 (2 1/2")				DN350 (14")							

**Max. test pressure using air/nitrogen (bar, psi or class)**

	bar	psi	class		bar	psi	class		bar	psi	class
DN10 (3/8")				DN80 (3")				DN400 (16")			
DN15 (1/2")				DN100 (4")				DN500 (20")			
DN20 (3/4")				DN125 (5")				DN600 (24")			
DN25 (1")				DN150 (6")				DN700 (28")			
DN32 (1 1/4")				DN200 (8")				DN800 (32")			
DN40 (1 1/2")				DN250 (10")							
DN50 (2")				DN300 (12")							
DN65 (2 1/2")				DN350 (14")							

**DIE PREMIUM-PRODUKTE – MADE BY EFCO – MADE IN GERMANY**

# Checklist

(for Test Benches)



- Safety relief valves -

**Valve end:**       Flange-                       Thread-  
 Others: \_\_\_\_\_

**Valve shape:**       Straight form       Angular form

• **What kind of tests have to be done?**

Set pressure test using       Water /  Air/nitrogen (HP)

Seat leakage test using       Water /  Air/nitrogen (HP)

Other tests: \_\_\_\_\_

(HP = High pressure)

• **What is the maximum test pressure at what size (DN)?**

(you should only indicate DN sizes and test pressures according to your main program. Exceptions (sizes/pressures) can increase the price of the test bench and its accessories very much!)

**Max. test pressure using water (bar, psi or class)**

	bar	psi	class		bar	psi	class		bar	psi	class
DN10 (3/8")				DN80 (3")				DN400 (16")			
DN15 (1/2")				DN100 (4")				DN500 (20")			
DN20 (3/4")				DN125 (5")				DN600 (24")			
DN25 (1")				DN150 (6")				DN700 (28")			
DN32 (1 1/4")				DN200 (8")				DN800 (32")			
DN40 (1 1/2")				DN250 (10")							
DN50 (2")				DN300 (12")							
DN65 (2 1/2")				DN350 (14")							

**Max. test pressure using air/nitrogen (bar, psi or class)**

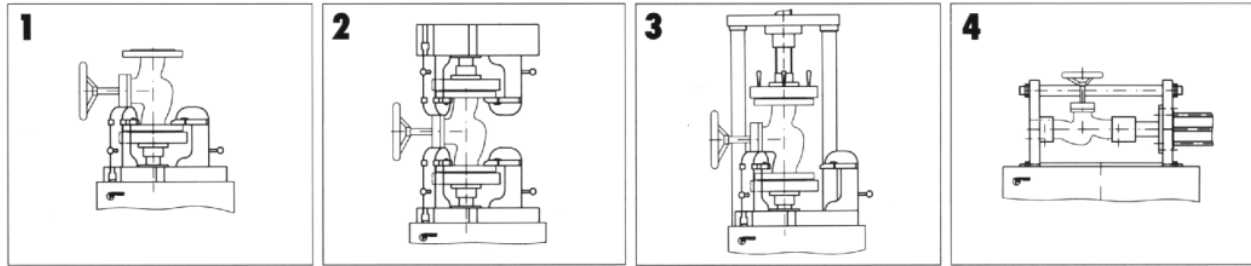
	bar	psi	class		bar	psi	class		bar	psi	class
DN10 (3/8")				DN80 (3")				DN400 (16")			
DN15 (1/2")				DN100 (4")				DN500 (20")			
DN20 (3/4")				DN125 (5")				DN600 (24")			
DN25 (1")				DN150 (6")				DN700 (28")			
DN32 (1 1/4")				DN200 (8")				DN800 (32")			
DN40 (1 1/2")				DN250 (10")							
DN50 (2")				DN300 (12")							
DN65 (2 1/2")				DN350 (14")							

# Checklist

(for Test Benches)



• **What kind of valve Clamping is required/preferred?**



Unilateral clamping of flanged valves using claws

Applicable  
Clamping forces 7,5t - 150t

Bilateral clamping of flanged valves using claws

Applicable  
Clamping forces 100t - 150t

Unilateral clamping of flanged valves using claws or clamping of flanged or and butt-welded valves between two tables (Test bench with upper clamping yoke)

Applicable  
Clamping forces 15t - 150t\*

Horizontal Clamping of flanged valves and butt-welded valves between two tables (Horizontal test bench)

Applicable  
Clamping forces 5 - 75t  
Clamp. forces 100t -550t\*  
Clamp. force 600t-1500t\*

\* To avoid damages due to deformation of the test valve during the test our test benches with clamping forces of more than 75 tons can be furnished with a proportional clamping control function

• **Gauge readings preferred?**

Reading:  bar  psi  bar/psi  MPa  kg/cm<sup>2</sup>

• **Available energy resources on the customer side?**

Air (shopair): \_\_\_\_\_ bar  
Electricity  110VAC/60Hz  230VAC/50Hz  400VAC/50Hz  
 Others: \_\_\_\_\_

• **What options are required?**

- Digital Bubble counter (bubbles/minute) for seat leakage tests using air/nitrogen
- Separate air compressor (booster) up to:
  - 200 bar (2.900 psi)  300 bar (4.350 psi)
  - 350 bar (5.070 psi)  400 bar (5.800 psi)
- Digital displays with peak value storage function for the measured highest pressure (=set pressure of safety valves), including suitable pressure transducer
- Display of test result via PC and print out of a test reports
- Piping and bolting made of non-rusting steel
- Instruction manual and Machine labels in other language than German or English:  
Language required is: \_\_\_\_\_
- Further requirements / country specific requirements (Please describe)

---



---



---



---



---