

TTR Group Inc.

The Engineered Valve
& Speciality Products Company



Municipal Products

Certified

CONTRACTOR PRE-INSTALLATION TRAINING & COMMISSIONING DOCUMENTS

Document TTRTC-0114



www.ttrgroupinc.com

Valve & Application Solutions for the Municipal, Industrial, Mining and Power Industries

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Product Pre-Installation & Commissioning Training Requirements

Project: _____

Customer: _____

Contractor: _____

Consultant: _____

Customer PO: _____

TTR SO: _____

Date: _____



Pre-Installation Instructions & Commissioning Request Valves - Manual & Automated

CAUTION

Read all manufacturer's handling, storage, installation and operation manuals prior to proceeding with any installation. It is the installer's responsibility to obtain or request the manufacturer's installation manual.

SAFETY PRECAUTIONS

1. Prior to installation, inspection or servicing, safety procedures should be established prior to performing any work.
2. Precautions must be considered for a safe environment and all risks must be evaluated based on the planned work to be conducted.
3. It is recommended valves be inspected prior to installation.
4. Follow all local confined space regulations when installing the valve.
5. Do not disassemble any components of the valve.
6. Verify the valve is operating in the direction as specified: open right or open left.

TRAINING

1. The commissioning and training form is located in this document.
2. Complete valve training is recommended prior to installing any valve to the specific installers and/or operators.
3. Operational training is recommended prior to installing or commissioning the valve assembly.
4. Training should only be performed by a factory authorized representative.

REVIEW ITEMS

The following items must be considered and evaluated when receiving product:

1. Receiving

Is the location suitable for the valve and actuator that will prevent physical or environmental damage?

2. Handling

Is the lifting equipment suitable for the total assembly weight?

After receipt of the material and inspection is complete ensure the inspecting parties have packaged the material back in the same protective state. Failure to do so may cause environmental damage and void warranties.



3. Storage

Will the valve and actuator require indoor heated storage?

Will the actuators need to be heated to prevent internal corrosion?

Have the conduits in the actuators been sealed from the environment or rodents?

4. Installation

All Installation manuals should be distributed and reviewed with the installing contractor.

5. Training

Pre-installation training must be arranged with the manufacturer or supplier prior to installing the valve.

6. Installation Inspection

Valves or actuators should not be operated until the installation inspection has been completed and signed off.

7. Operating the Valve & Actuator

Do not operate any valve or actuator until the installation is accepted.

8. Commissioning

Site commissioning of the valve and actuator is required prior to placing the assembly into service and arranged with the manufacturer or supplier of the equipment.

INSTALLATION AND OPERATION CHECKLIST

The drawings and OM&I Manual must be on site at the time of installation and readily available.

Valve Inspection

1. Inspect the valve to ensure it is free of debris and no foreign material or dirt is on the internal surfaces of the valve.
2. Clean the surfaces with clean potable water.
3. Manually operate the valve, fully open and closed position, in a clean environment.
4. Prior to installation place the valve in the fully closed position.
5. Use the appropriate gasket for raised or flat faced valve body surfaces.
6. Gasket dimensions are critical and gaskets must be pre-fit to the valve flange face surfaces.

Gasket Inspection

Inspect the flange gasket valve surfaces for damage or debris. Remove and clean the flange gasket surface as required.

Lifting

1. Do not lift the valve using any method other than the certified hoist rings supplied with the valve.
2. Hoist rings are rated based on using the number of supplied rings for the installation.
3. Ensure the hoist rings are secured in place and flush with the valve body.
Refer to the hoist ring details as part of a separate OM&I Manual.
4. Confirm the hoist ring manufacturer tags are in place. Verify they rotate on both axis.
Do not remove these hoist rings once installed.
5. The weight of the valve and actuator is indicated on the approved submittal drawing.
Refer to the drawing for the selection of correct sling ratings for lifting.
6. Verify if the body is raised or flat faced and select the correct gasket dimensions.



VALVE INSTALLATION PRE-WATER UP OPERATION

Ensure the valve body is installed with the flow arrow indicating the operating direction of the flow under normal conditions. Verify the valve is installed in the orientation as identified on the reviewed drawings. Altering of the installation may void any warranties and must be approved by the manufacturer. Verify all brackets and actuator mounting hardware is properly torqued.

HARDWARE INSTALLATION

Confirm all flange hardware is in place and torqued to the valves based on the gasket material and manufacture. Flange hardware bolting torques must be obtained from the gasket manufacturer based on the following:

- Flat face or raised face surfaces
- Gasket material
- Bolting grade and size
- Flange material and class on the valve and pipe flange
- Follow bolt torque sequence and bolting suppliers suggested torque values based on bolt material, gasket material and the materials of both valve and pipe flange.
- Be cautious of cast flanges that are not back spot faced.

TTR Dry and Wet commissioning of the valves must be requested prior to the operation of the valve or actuator. Operation of the valve prior to installation, inspection or commissioning may void all warranties. Commissioning and training is arranged through your local representative. Training and commissioning forms are available online at www.ttrgroupinc.com.

CONSULT TTR

It is recommended, if you are unfamiliar with this type of valve, to consult TTR or authorized representative prior to installing the valve. Installations vary and environmental circumstances should be evaluated prior to all installations of valves. This includes potential and anticipated storage for the valve or actuator.



Training Request

Customer _____

Customer PO _____

TTR SO _____

Training Request Date _____

Training Request Time _____

Number to be trained _____

Field Training

Classroom Training

PRODUCTS

TRAINING LOCATION AND ADDRESS

Primary Contact _____

Phone Number _____

Cell _____

Email _____

Secondary Contact _____



Site Work: Commissioning Request

GENERAL

Customer: _____	Site: _____
Contractor: _____	Location: _____
Consultant: _____	Travel: _____ Hrs Travel: _____ Km
Project: _____	Service Duration: _____
SO# _____ PO# _____	Date: _____
Weather: _____	Commissioning Duration: _____

System Conditions: _____

Pressure: _____

PRODUCT DESCRIPTION

Valve Size	Description	Tag No.

Actuator Size	Description	Tag No.

SITE WORK REQUEST

Work Required: _____
 Equipment Required: _____
 Indoor: _____
 Outdoor: _____
 Description of Scope: _____
 Estimated Time Required: _____

Print Name

Company

Project Name

Site

Tag #:



Site Commissioning Report

Dry Start-Up

DRY START-UP: PIPE IS EMPTY

Start-Up
 Installation/Inspection
 Pipe is Dry
 Pipe is Clean

Customer: _____
 Contractor: _____
 Consultant: _____
 Project: _____
 SO# _____ PO# _____
 Weather: _____

Site: _____
 Location: _____
 Travel: _____ Hrs Travel: _____ Km
 Service Duration: _____
 Date: _____
 Commissioning Duration: _____

System Pressure: _____

Valve Size	Description	Tag No.

Actuator Size	Description	Tag No.

		Yes	No	Not Required	Rejected	Accepted	N/A
1	Valve Cycled Dry						
2	Valve Cycle Under Load						
3	Speed Controls Set: OPEN						
4	Speed Controls Set: CLOSED						
5	Valve Factory Testing Certificates are attached						
6	Actuator Factory Testing Certificates are attached						
7	Actuator Factory Calibration Completed						
8	Actuator Site Calibration Completed						
9	Valve Pressure Rating and SO ID Labels Installed						
10	Valve Tagging Installed						
11	Actuator Rating and ID Tag Installed						
12	Visual Condition all Components of Assembly						
13	Overall Valve Condition						
14	Internal Valve Coating						
15	External Valve Coating						
16	Valve Seat Inspection prior to Pipe Installation						
17	Valve Seat Inspection in the Pipe						
18	Hoist Rings Installed						
19	Valve Installation in Pipe per the the GA Drawings						
20	Valve Disc Sweeps Downstream: Horizontal Shaft in Horizontal Pipe						
21	Valve Disc Sweeps Upstream: Horizontal Shaft in Horizontal Pipe						
22	Rotation of the disc CWC						
23	All Valve Flange Hardware is Installed						
24	Valve Flange Torque Records attached from contractor						
25	Dismantling Seal Torque Records attached (seal ring)						
26	Gear Actuator Manual Over-ride Tested						
27	Actuator Condition						

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	Yes	No	Not Required	Rejected	Accepted	N/A
28						
29						
30						
31						
32						
33						
34						
35						
36						
37						
38						
39						
40						
41						
42						
43						

Notes:

- 1) Valve leakage must be verified by the client as the valve disc position or leakage is not visible at this time.
- 2) This will confirm TTR Group Inc. has completed the commissioning of the above noted valves and actuators, to the satisfaction of the customer and contractor. This also confirms that all valves and actuators perform in accordance with design and specifications required.

TTR Group Inc.
(print name)

Signature
Authorized Representative

Date

Customer/Contractor/Consultant
(print name)

Signature
Authorized Representative

Date

This form shall only be signed by individuals authorized by their corporators to sign for or on the behalf of the corporation they represent. Failure to sign this form negates all commissioning.

Noted Deficiencies:

Requirements to Correct Deficiencies:

General Notes:

Project Name

Site

Tag #:



Site Commissioning Report

Wet Start-Up

WET START-UP: PIPE IS FULL

Start-Up
 Installation/Inspection
 Pipe is Full Static
 Pipe is Pressurized

Customer: _____
 Contractor: _____
 Consultant: _____
 Project: _____
 SO# _____ PO# _____
 Weather: _____

Site: _____
 Location: _____
 Travel: _____ Hrs Travel: _____ Km
 Service Duration: _____
 Date: _____
 Commissioning Duration: _____

System Pressure: _____

Valve Size	Description	Tag No.

Actuator Size	Description	Tag No.

	Yes	No	Not Required	Rejected	Accepted	N/A
1	Valve Cycled Dry					
2	Valve Cycle Under Load					
3	Speed Controls Set: OPEN					
4	Speed Controls Set: CLOSED					
5	Valve Factory Testing Certificates are attached					
6	Actuator Factory Testing Certificates are attached					
7	Actuator Factory Calibration Completed					
8	Actuator Site Calibration Completed					
9	Valve Pressure Rating and SO ID Labels Installed					
10	Valve Tagging Installed					
11	Actuator Rating and ID Tag Installed					
12	Visual Condition all Components of Assembly					
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Requirements to Correct Deficiencies:

General Notes:

Project Name

Site

Tag #:



Site Work: Commissioning Request

GENERAL

Customer: _____	Site: _____
Contractor: _____	Location: _____
Consultant: _____	Travel: _____ Hrs Travel: _____ Km
Project: _____	Service Duration: _____
SO# _____ PO# _____	Date: _____
Weather: _____	Commissioning Duration: _____

System Conditions: _____

Pressure: _____

PRODUCT DESCRIPTION

Valve Size	Description	Tag No.

Actuator Size	Description	Tag No.

COMPLETION & INSPECTION

Work Completed By: _____
 Print Name _____ Company _____

 Signature _____ Date _____

Inspected By: _____
 Print Name _____ Company _____

 Signature _____ Date _____

Not Inspected: _____ Reason: _____

Accepted with Inspection: _____

Accepted without Inspection: _____

Work Performed is Incomplete and Rejected: _____

Reason for Rejection: _____

Disposition: _____

Corrective Action Required: _____

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Commissioning Data Sheets Attached: Yes No
Reference Documents: Wet & Dry Commissioning Sheets

Commissioning Data Sheets Not Applicable: N/A

Notes:

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TTR Group Inc.
(print name)

Signature
Authorized Representative

Date

Customer/Contractor/Consultant
(print name)

Signature
Authorized Representative

Date

This form shall only be signed by individuals authorized by their corporators to sign for or on the behalf of the corporation they represent. Failure to sign this form negates all commissioning.

Noted Deficiencies:

Requirements to Correct Deficiencies:

General Notes:

Project Name

Site

Tag #:

COMMITMENT TO OUR CUSTOMERS & INDUSTRY

TTR has combined quality products manufactured in North America selecting originators of these products as early as 1879 that exist today as leaders and role models in the Markets and Industry today. TTR has combined these products as a package with our speciality Engineered Products Division to meet the requirements of many applications within the same project culminating the advantages of established proven quality engineered products with over 70 years of combined field service and site commissioning experience.

Products & Services – AWWA Compliant and NSF



Products

Valve and Full Electric / Pneumatic / Hydraulic and Electro Hydraulic Automation \ Packages for In-Plant and Submerged Service

Engineered Speciality Products

- Energy Dissipating Valves and Systems / AWWA Knife Gate Valves
- Counterweighted Turbine Isolation
- Torque Tubes / Shaft Extensions / Rod Extensions

AWWA Valves

Butterfly /Resilient Seated Wedge Gate /Knife Gate / Air and Sewage Relief Globe, Silent, Tilting Check Self Piloted Control / Slide / Plug / Ball

Services - 35 Years Experience

Speciality Engineered Products / Design and Manufacturing Capabilities / FEA and CFD modelling Support / Unbiased Specification Assistance / Field Service Analysis and Support / Site Commissioning / 3rd Party Inspection / Confined Space Certified

Continuing Education Courses

OWWCO - Director Approved Training Course

TTR Training Course Name - AWWA C504 Butterfly Valves & Actuators

Follow <http://www.owwco.ca> Course ID 8733. Page 228

CONTACT

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Established 2009

ASSOCIATIONS

