



Customers Training Plan for Year 2019 Water-Based Fire Protection APAC & Middle East

Multiple Customers Trainings Plan for Year 2019

Johnson Controls is pleased to invite you to attend our Multiple Customers Trainings for Water-based Fire Protection solutions hosted in one of our TechXchange Academies in Singapore, Dubai or Bangalore.

We offer a range of high quality trainings and educational programs for our customers through our TechXchange Team. Our team of experienced trainers offers high quality and tailored training programs and live training sessions that are educational in content and directly applicable to contractors, distributors, designers, builders, end-users, legal and insurance professionals, consultants, AHJs, inspectors and authorities in the fire protection systems industry.

Below is the annual training plan for year 2019, open to our customers to enroll and attend one of the sessions. We also can offer customized training upon request. Please feel free to reach out to us directly or through your local Sales Manager(s) / contact at Johnson Controls.



TechXchange – Program Offering	
<p>Educational Courses</p> <ul style="list-style-type: none"> Detailed Courses on Technology & Technical Standards <p>     </p>	<p>System Certification</p> <ul style="list-style-type: none"> Technical Systems, products / Software Related Courses for Authorized Tyco Partner Companies <p>    </p>
<p>Hands-on</p> <ul style="list-style-type: none"> Practical hands-on, servicing and commissioning systems <p>  </p>	<p>Spray Demonstrations</p> <ul style="list-style-type: none"> See and feel sprinklers in action <p>  </p>



SINGAPORE TechXchange Academy for Year 2019 – Open Sessions

Month	Topic	Dates
January	• Introduction to Sprinklers and Valves (8 Hours)	15 Jan 2019
	• Extended Coverage Sprinklers vs. Standard Coverage & Storage Sprinkler Application (8 Hours)	16 Jan 2019
	• Hands on Deluge and Pre-Action Training (8 hours)	17 Jan 2019
	• Introduction to Water Mist Systems (4 hours)	18 Jan 2019 (am)
February	• AquaMist Machinery Spaces Design (8 hours)	20 Feb 2019
	• Introduction to Grinnell G-Fire Grooved Fire Protection System (4 hours)	21 Feb 2019 (am)
March	• SprinkCAD Design Software Training (3 Days)*	TBD
	• Introduction to Sprinklers and Valves (8 Hours)	13 Mar 2019
	• Hands on Deluge and Pre-Action Training (8 hours)	14 Mar 2019
April	• Introduction to Grinnell G-Fire Grooved Fire Protection System (4 hours)	9 Apr 2019 (am)
	• Hands on Deluge and Pre-Action Training (8 hours)	10 Apr 2019
May	• NFPA 13 Navigation Course (3 days)*	13-15 May 2019
June	• Introduction to Sprinklers and Valves (8 Hours)	18 Jun 2019
	• Extended Coverage Sprinklers vs. Standard Coverage & Storage Sprinkler Application (8 Hours)	19 Jun 2019
	• Hands on Deluge and Pre-Action Training (8 hours)	20 Jun 2019
	• AquaMist Machinery Spaces Design (8 hours)	21 Jun 2019
July	• SprinkCAD Design Software Training (3 Days)*	TBD
August	• Introduction to Sprinklers and Valves (8 Hours)	22 Aug 2019
	• Hands on Deluge and Pre-Action Training (8 hours)	23 Aug 2019
September	• AquaMist Machinery Spaces Design (8 hours)	18 Sept 2019
	• Introduction to Grinnell G-Fire Grooved Fire Protection System (4 hours)	19 Sept 2019 (am)
October	• Introduction to Sprinklers and Valves (8 Hours)	15 Oct 2019
	• Extended Coverage Sprinklers vs. Standard Coverage & Storage Sprinkler Application (8 Hours)	16 Oct 2019
	• Hands on Deluge and Pre-Action Training (8 hours)	17 Oct 2019
	• Introduction to Water Mist Systems (4 hours)	18 Oct 2019 (am)
November	• NFPA 13 Navigation Course (3 days)*	TBD
December	• Introduction to Sprinklers and Valves (8 Hours)	3 Dec 2019
	• Hands on Deluge and Pre-Action Training (8 hours)	4 Dec 2019

**This training will apply a fee and will be closed for registration 6 weeks before the training start dates.*

DUBAI TechXchange Academy for Year 2019 – Open Sessions

Month	Topic	Dates
January	<ul style="list-style-type: none"> Introduction to Sprinklers and Valves (8 Hours) Hands on Valves – Wet, Deluge and Pre-Action Training (8 hours) 	9 Jan 2019 16 Jan 2019
February	<ul style="list-style-type: none"> Introduction to Water Mist Systems (4 hours) Grinnell G-Fire Grooved Fire Protection System (4 hours) Enhanced Fire Protection Solutions – Tunnel Protection with TN17/25 Nozzle & Window Sprinklers (8 Hours) Enhanced Fire Protection Solutions – Extended Coverage Sprinklers & Storage Sprinkler Application (8 Hours) 	6 Feb 2019 (am) 6 Feb 2019 (pm) 13 Feb 2019 20 Feb 2019
March	<ul style="list-style-type: none"> Introduction to Sprinklers and Valves (8 Hours) Hands on Valves – Wet, Deluge and Pre-Action Training (8 hours) 	6 Mar 2019 20 Mar 2019
April	<ul style="list-style-type: none"> NFPA 13 Navigation Course (3 days)* SprinkCAD Software training 	15-17 Apr 2019 TBD
May	<ul style="list-style-type: none"> Introduction to Sprinklers and Valves (8 Hours) Hands on Valves – Wet, Deluge and Pre-Action Training (8 hours) 	1 May 2019 2 May 2019
June	<ul style="list-style-type: none"> Introduction to Water Mist Systems (4 hours) Enhanced Fire Protection Solutions – Tunnel Protection with TN17/25 Nozzle & Window Sprinklers (8 Hours) Enhanced Fire Protection Solutions – Extended Coverage Sprinklers & Storage Sprinkler Application (8 Hours) 	12 Jun 2019 (am) 19 Jun 2019 26 Jun 2019
July	<ul style="list-style-type: none"> Introduction to Sprinklers and Valves (8 Hours) Hands on Valves – Wet, Deluge and Pre-Action Training (8 hours) Enhanced Fire Protection Solutions – Tunnel Protection with TN17/25 Nozzle & Window Sprinklers (8 Hours) 	3 Jul 2019 10 Jul 2019 17 Jul 2019
August	<ul style="list-style-type: none"> Enhanced Fire Protection Solutions – Extended Coverage Sprinklers & Storage Sprinkler Application (8 Hours) 	1 Aug 2019
September	<ul style="list-style-type: none"> Introduction to Sprinklers and Valves (8 Hours) Hands on Valves – Wet, Deluge and Pre-Action Training (8 hours) 	11 Sept 2019 25 Sept 2019
October	<ul style="list-style-type: none"> NFPA 13 Navigation Course (3 days)* SprinkCAD Software Training 	TBD TBD
November	<ul style="list-style-type: none"> Introduction to Water Mist Systems (4 hours) Grinnell G-Fire Grooved Fire Protection System (4 hours) Enhanced Fire Protection Solutions – Tunnel Protection with TN17/25 Nozzle & Window Sprinklers (8 Hours) Enhanced Fire Protection Solutions – Extended Coverage Sprinklers & Storage Sprinkler Application (8 Hours) 	6 Nov 2019 (am) 6 Nov 2019 (pm) 13 Nov 2019 20 Nov 2019
December	<ul style="list-style-type: none"> Introduction to Sprinklers and Valves (8 Hours) Hands on Valves – Wet, Deluge and Pre-Action Training (8 hours) 	11 Dec 2019 18 Dec 2019

**This training will apply a fee and will be closed for registration 6 weeks before the training start dates.*

BANGALORE TechXchange Academy for Year 2019 – Open Sessions

Month	Topic	Dates
January	• Introduction to Sprinklers and Valves (8 Hours)	17 Jan 2019
	• Training on Designing of AquaMist ULF-Machinery Spaces & AquaMist FOG-Machinery Spaces (8 hours)	18 Jan 2019
	• Introduction to Water Mist Systems (4 hours)	25 Jan 2019 (am)
February	• SprinkCAD Training	TBD
	• Hands on Deluge and Pre-Action Training (8 hours)	14 Feb 2019
	• Field Issues Setting of Pre-Action & Alarm Valves (3 hours)	15 Feb 2019 (am)
March	• Enhanced Fire Protection Solutions – Extended Coverage Sprinklers vs. Standard Coverage Sprinklers (8 hours)	14 Mar 2019
	• AquaMist Machinery Spaces Design (8 hours)	15 Mar 2019
April	• Hands on Deluge and Pre-Action Training (8 hours)	11 Apr 2019
	• Field Issues Setting of Pre-Action & Alarm Valves (3 hours)	12 Apr 2019 (am)
May	• Introduction to Sprinklers and Valves (8 Hours)	17 May 2019
June	• Introduction to Water Mist Systems (4 hours)	13 June 2019 (am)
	• AquaMist Machinery Spaces Design (8 hours)	14 June 2019
July	• Enhanced Fire Protection Solutions – Extended Coverage Sprinklers vs. Standard Coverage Sprinklers (8 hours)	12 Jul 2019
August	• Hands on Deluge and Pre-Action Training (8 hours)	8 Aug 2019
	• Field Issues Setting of Pre-Action & Alarm Valves (3 hours)	9 Aug 2019 (am)
September	• Introduction to Sprinklers and Valves (8 Hours)	19 Sept 2019
	• Enhanced Fire Protection Solutions – Extended Coverage Sprinklers vs. Standard Coverage Sprinklers (8 hours)	20 Sept 2019
October	• SprinkCAD Training	TBD
	• Hands on Deluge and Pre-Action Training (8 hours)	17 Oct 2019
	• Field Issues Setting of Pre-Action & Alarm Valves (3 hours)	18 Oct 2019 (am)
November	• Enhanced Fire Protection Solutions – Extended Coverage Sprinklers vs. Standard Coverage Sprinklers (8 hours)	14 Nov 2019
	• AquaMist Machinery Spaces Design (8 hours)	15 Nov 2019
December	• Introduction to Water Mist Systems (4 hours)	6 Dec 2019 (am)
	• Hands on Deluge and Pre-Action Training (8 hours)	12 Dec 2019
	• Field Issues Setting of Pre-Action & Alarm Valves (3 hours)	13 Dec 2019 (am)

Multiple Customer Sessions (open for enrolment)

1. Introduction to Sprinkler System and Valves

The objective of this training program is to provide a basic understanding and overview intro of the different types of sprinklers and alarm valves available. Each type will be defined and the specific application will be addressed. To complete the training, we will provide a live demonstration of the different sprinkler types and their spray patterns in our Spray Demo Room.

In regards to the alarm valves we will explain the working principles and technical details of all available types of alarm valves and at the end we will provide a live demonstration of the valves in our Valve Demo Room.

Highlights:

- Overview of different types of sprinklers available.
- Live demonstration of sprinkler spray patterns.
- Explanation of the different available sprinkler systems.
- Live demonstration of the working principles of all available types of valves.

2. Enhanced Fire Protection Solutions

Extended Coverage vs. Standard Coverage Heads

There is more to it than the higher cost of an Extended Coverage (EC) Sprinkler. We explain the difference between standard and extended coverage, discuss the types of spaces where the EC will provide an effective protection. We will show how the more costly sprinkler can result in significant total savings in a sprinkler system. Join us to review this subject and the potential savings when using a cost effective design in buildings.

Storage Sprinkler Application

The distribution of products has undergone a huge transformation over the years fueled by telemarketing and online shopping. Developments in construction and warehouse management systems and increasing cost of land have resulted in the quest to build taller warehouses. We discuss these challenges higher ceilings with mixed commodities as well as the need to ensure the system's viability in the longer term. Let us show how you can futureproof your warehouse.

Window Sprinkler (Model WS)

The TYCO Model WS Specific Application Window Sprinklers are fast response, glass bulb-type spray sprinklers available in Horizontal Sidewall and Pendent Vertical Sidewall models.

Tunnel Protection with TN17/25 Nozzle

Protecting tunnels against fire hazards poses many unique challenges. Tunnels see every type of vehicle and possible fuel load; congestion and the potential for large fires create the need for a fire protection system that increases safety by minimizing the risk of fire propagation. The innovative, integrated fire suppression solutions from Tyco Fire Protection Products help to control and suppress fire even in the most challenging of environments, helping to manage fire risk and keep people, assets and the environment safe.

3. Hands on Valves Training

This class is for Sprinkler Installers, Owners and End-users of the different types of Sprinkler Valves, including Pre-action, Deluge Valves and Systems. We will review the operation of the valve. Switches and accessories, operation and maintenance requirements. Come and Join the fun in our Live Demonstration room with real valves and operational features.

4. Field Issues Setting of Pre-Action & Alarm Valves

We will handle and simulate field issues at setting pre-action & alarm valves. Common installation and practical training how to solve or avoid issues.

5. Introduction to Water Mist Systems

In this class we will provide an overview of our AquaMist fire protection solutions for different applications. We do show the difference between traditional sprinkler systems and Watermist as well as a live demonstration on spray patterns.

6. AquaMist Machinery Spaces Design

In this class we will provide the Design and Budgetary BOQ of AquaMist ULF (Intermediate Pressure Watermist System) and AquaMist FOG (High Pressure Watermist System).

7. Grinnell G-Fire Grooved Fire Protection system

In this class, we will provide an overview of our Grinnell G-fire Fire Protection System.

Please note: You can only choose programs your company carries an authorized distributor agreement for OR after consulting your Johnson Controls regional sales manager.

General Terms and Conditions

Venue

The training will take place in one of our regional TechXchange Academies:

- **Singapore TechXchange**
Tyco Fire & Building Products Asia Pte Ltd
Address: 2 Serangoon North Avenue 5, #07-01, Singapore 554911.
Telephone: +65 6601 9403, Email: training-apac@tycofp.com
- **Dubai TechXchange**
Tyco Building Services Products ME.
Address: Block D, Floor 3, Office Park Building #56, Dubai Internet City, Dubai, United Arab Emirates.
Telephone: +971 (0)4 455 0768, Email: Training-ME@tyco-bspd.com
- **Bangalore TechXchange**
Tyco Safety Product (India) Private Ltd
Address: C-601, RMZ Centennial, Kundalahalli Main Road, Bengaluru – 560048, India.
Telephone: +91 80 4052 7062, Email: training-apac@tycofp.com

Training Fee

The open enrollment trainings are provided on complimentary basis unless the training have quoted training fee will apply.

However, a cancellation fee will apply at USD100 (US Dollars One Hundred) per participant, if participant notify to the Training Coordinator / TechXchange Academy less than 3 working days (exclude weekends and public holiday) before the training start dates by email or No Show.

Overseas Participant(s)

- **VISA Application** – We can issue you a Letter of Invitation for your VISA application at your own arrangement and expenses. In the letter, we will only issue the duration based on the training dates (+1 day before and after the training dates). Please contact us should you need the letter.
Please Note: If you're staying more days than the training dates, please apply the Tourist VISA due to JCI cannot be your guarantor of your personal overstay.
- **Hotel Accommodation** – You must book and pay at your own expenses, please contact us should you need any hotel recommendations.

Enrolment

Outlook invitations for each session will be sent out soon. Please inform your regional training coordinator if your customers are interested to participate. Please be aware that only limited number of participants can attend each training course – so please register latest by the deadline. Please let the interested customers wait for email confirmation prior to purchase of airline tickets and hotel accommodation (for overseas participants).

Contact Information

For any questions, feel free to contact the Tyco regional sales managers. In addition, you may also contact the TechXchange Academy Training Coordinator at:

Singapore and Bangalore TechXchange Email: training-apac@tycofp.com Phone: +65 6601 9403	Dubai TechXchange Email: Training-ME@tyco-bspd.com Phone: +971 (0)4 455 0701
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Advanced Trainings / Customized Sessions

These sessions will be delivered at customer request and scheduled accordingly. Training fee may apply. Depending on the topic and customer location, the preference will be in one of our facilities and/or if required/possible on customer-site:

- Quell, Protection of Cold Storage & Unheated Warehouses.
- Residential Fire Protection Training according NFPA.
- Design and Installation of Sprinkler Systems according NFPA13 (Navigation training).
- Water Spray Fixed Systems for Fire Protection.
- Tunnel fire protection system with TN17/25 Nozzles.
- Alarm Valves Training - Inspection, test and maintenance NFPA or EN.
- AquaMist (ULF/FOG/SONIC) Watermist Certification trainings.
- SprinkCAD Design Software Training.
- Specific Application Sprinklers – Window Sprinklers (Model WS).
- Specific Application Sprinklers – Attic protection (Models BB, SD, HIP, and AP).
- Specific Application Sprinklers – Combustible Concealed Spaces (Model CC1/CC3).
- BlazeMaster CPVC pipe & fittings.
- Grinnell G-Fire Grooved Fire Protection system.

For any questions, feel free to contact your regional sales managers or customer services. In addition, you may also contact the TechXchange Academy Training Coordinator at:

Singapore and Bangalore TechXchange Email: training-apac@tycofp.com Phone: +65 6601 9403	Dubai TechXchange Email: Training-ME@tyco-bspd.com Phone: +971 (0)4 455 0701
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Learning Management System

Please visit also our training landing page at <https://www.onlinetechxchange.com/> we will soon make all our global trainings offering available. This will include:

1. Live Training Sessions we host at our TechXchange academies globally.
2. E-learning/video's to download for self-learning on your own pace.

Website is currently being worked on and expect to have content available on live trainings around April 2019 for the APAC-ME region. E-learning are already available and can be downloaded.