



INDIAN VALVE AND ACTUATOR MANUFACTURERS ASSOCIATION

IVAMA – Technical Webinars for Skill Development Basic Program – 5			
Webinar	Topic	Day	Date
1	Basics of Valves	Wednesday	21-Feb-24
2	Different Types of Valves and Selection		
3	Codes and Standards for Valves and Actuators	Wednesday	28-Feb-24
4	Thrust and Torque of Valves		
5	Materials of Construction for Valve Shell Components	Friday	01-Mar-24
6	Materials of Construction for Valve Trim and Sealing Components		
7	Valve Operation	Tuesday	05-Mar-24
8	Pressure Testing		
	Examination	Tuesday	12-Mar-24

Timing: 14:00 to 17:00 h

General Guidelines for the Webinars

- The content details of the webinars of Basic Program are given in Annexure A.
- The webinars shall be conducted using Microsoft Teams Meeting platform.
- Normally the each webinar shall be for 70 to 80 minutes followed by 10 minutes for questions and answers.

Charges for Member Companies:

- A nominal fee of Rs 1500* per webinar per participant
- If one participant joins in all webinars, a nominal fee of Rs 9000* per participant
- For 5 participants and more per company in all webinars, a nominal fee of Rs 8000* per participant
- For 10 participants and more per company in all webinars, a nominal fee of Rs 7000* per participant
- For webinars exclusively for employees of a company (20 min to 30 max participants), a nominal fee of Rs 6000* per participant.

Charges for Non-Member Companies:

- A nominal fee of Rs 2000* per webinar per participant
- If one participant joins in all webinars, a nominal fee of Rs 12000* per participant
- For 5 participants and more per company in all webinars, a nominal fee of Rs 10500* per participant
- For 10 participants and more per company in all webinars, a nominal fee of Rs 9000* per participant



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- Certificate of Completion shall be issued to participants who attend all webinars of Basic Program and qualify the examination with 75% mark. Participants who do not qualify or who do not take examination, participation certificate shall be issued.

Annexure A

Basic Program

Webinar-1: Basics of Valves and Pipes

- Brief history of Valves; Basics of Pipes; Different functions of Valves; Basic principles of flow control; Basic types of valves; valve size and pressure rating; special and intermediate classes; Definition of Valve terminologies.

Webinar-2: Different Types of Valves and Selection

- Different types of valves: Gate, Globe, Check, Floating ball, Trunnion mounted ball; Butterfly; Plug; Diaphragm; Applicable standards; Advantages and limitations of each type; Basis for selection of particular valve type.

Webinar-3: Codes and Standards for Valves and Actuators

- Boiler disasters; Boiler codes; Safety and Interchangeability; Standardization bodies; Different end connections; Face-to-face dimensions; Material standards; Standards for valves and actuators; Metrification; Standards for pressure testing; Functional qualification testing; Customers' specifications; Applicability of standards.

Webinar-4: Thrust and Torque of Valves

- Calculation of thrust and torque of gate and globe valves; Factors contributing torque in Ball valves; Butterfly valves; Torque characteristics of valves.

Webinar-5: Materials of Construction for Valve Shell Components

- Engineering materials; Different forms of materials; Advantages and limitations; Pressure containing components; Cast iron, Ductile iron, Carbon steels, Low alloy steels, Alloy steels and Stainless steels; Special and exotic materials; Temperature limitations; NACE Requirements; Selection of materials.

Webinar-6: Materials of Construction for Valve Trim and Sealing Components

- Trim components and codifications as per API; Trim materials; Sealing components – Gaskets and packing; Elastomers and plastics; Temperature limitations.

Webinar-7: Valve Operation

- Manual operation; Indicator; Locking Arrangements; Interlocking; Extension Spindle; Buried Application; Gear Operation and Power operation.

Webinar-8: Pressure Testing of Valves

- Applicable Standards; Shell test; Seat test; Hydrostatic and pneumatic test; Torque test; Supplementary tests; Remote inspection; Site tests.