

| IVAMA – Technical Webinars for Skill Development Advance Program 4 | | | |
|--|--|-----------|-----------|
| Webinar | Topic | Day | Date |
| 1 | Sealing Technology in Valves | Wednesday | 12-Jun-24 |
| 2 | Design Methodology for Valves | Friday | 14-Jun-24 |
| 3 | Welding Technology in Valves | Monday | 17-Jun-24 |
| 4 | Non-Destructive Examination (NDE) in Valves | Wednesday | 19-Jun-24 |
| 5 | Flow Characteristics and CV Values of Valves | Friday | 21-Jun-24 |
| 6 | Functional Qualification Tests (FQT) on Valves and Actuators | Monday | 24-Jun-24 |
| 7 | Common Problems and IOM of Valves | Wednesday | 26-Jun-24 |
| | Examination | Wednesday | 03-Jul-24 |

Timing: 2:30 pm to 4:30 pm.

General Guidelines for the Webinars:

- The content details of the webinars of Advance Program are given in Annexure A.
- The webinars shall be conducted using Microsoft Teams Meeting platform.
- Normally each webinar shall be for 100 to 110 minutes followed by 10 minutes for questions and answers.

Fee for Member Companies:

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

Fee for Non-Member Companies:

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



Certificate:

"Certificate of Completion" shall be issued to participants who attend all webinars of Advance Program and qualify the examination with above 75% mark. Participants who quality with less than 75% mark or who do not take examination, "Certificate of Participation" shall be issued.

Annexure A

Webinar-1 Sealing Technology in Valves

 Principle of Sealing; Metal & Soft Seats; Pressure Joint Design (Body/Bonnet/Cover and Gaskets/Seals; Fasteners) and Stem Seals; Fugitive Emissions; Cryogenic, Severe and other Special Services.

Webinar-2 Design Methodology

 Design philosophy; New Product Development and Best Practices; International Codes applicable for Valve Design - ASME Sec II; III & VIII; API Stds; ASME B16.34; Finite Element Analysis/Computational Fluid Dynamics.

Webinar-3: Welding Technology in Valves

 Need for welding in Valves; Different welding processes and Selection; Overlaying of hard faces in Valves; Welder Qualification; Inspection of Welds

Webinar-4: Non-Destructive Examination (NDE) in Valves

 Need for NDE; Various volumetric and surface NDE; Personnel Qualification; Standards for NDE;

Webinar-5: Flow Characterises of Valves

 Definition of Cv and Kv; Different flow characteristics of Valves; Theoretical Flow Calculation – Empirical and CFD; Experimental Flow Testing; Flow induced problems

Webinar-6 Functional Qualification Tests (FQT)

 Need for FQT; Cycle Test (Ambient Temperature; High Temperature); Fire Test; Cryogenic Test; Fugitive Test; Natural Frequency/Seismic Test; Pipe Load Test; Flow Test; Care to be taken during FQT.

Webinar-7 Common Problems and IOM of Valves

- Customer Complaints: Leakage and Operation.
- IOM: Bathtub Curve; Transportation; Storage; Installation; Operation;
 Maintenance; Trouble Shooting.