

# Training Programs for a Laboratory Equipment

## 1. Product & Application Training

- Fundamentals of Aerodynamic Testing
- Principles of Spray Patternation and Visualization
- Basics of Air Mass Flow Measurement Techniques
- Hands-on Operation and Calibration of Laboratory Equipment
- Safety Procedures for Handling High-Pressure Air and Fluids

## 2. Technical & Engineering Training

- Fluid Dynamics for Laboratory Applications
- Spray Atomization and Droplet Dynamics
- Optical Methods for Flow and Spray Visualization (e.g., Schlieren, PIV, Shadowgraphy)
- Data Acquisition and Signal Processing in Flow Measurement
- Calibration and Maintenance of Mass Flow Meters

## 3. Software & Data Analysis Training

- Using Specialized Software for Spray and Flow Analysis
- Image Processing for Spray Pattern Evaluation
- CFD (Computational Fluid Dynamics) Basics for Supporting Experimental Work
- Data Interpretation and Reporting Standards

## 4. Quality & Compliance Training

- ISO and ASTM Standards in Spray and Flow Measurement
- Laboratory Quality Management (ISO 17025 principles)
- Documentation and Traceability in Experimental Testing

## 5. Customer-Oriented Training

- Equipment Demonstration & Best Practices for End-Users
- Troubleshooting and Service Training for Technicians
- Application Workshops for Automotive, Aerospace, and Energy Sectors

## 6. Innovation & Future Technologies

- Emerging Trends in Spray Characterization (AI-based visualization, laser diagnostics)
- Digital Twin Applications for Flow and Spray Systems
- Sustainable Testing Methods (H<sub>2</sub>, e-fuels, biofuels)