



Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex

Report of Alumni Talk on Vehicle Procurement and Specialized AAI Equipment

Topic: Alumni Talk on Vehicle Procurement and Specialized AAI Equipment

Organized by: Department of Automobile Engineering, Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex. (In Association with IQAC)

Speaker: Mr. Arghya Mondal, Skill Technician, Airport Authority of India, Kolkata

Date: 2nd April 2026

Time: 03:00 PM onwards

Mode: Online (Virtual Google Meet Platform)

No. of Participation: 31

Introduction:

The Department of Automobile Engineering of Dr. Sudhir Chandra Sur Institute of Technology and Sports Complex in association with IQAC organized an alumni talk on “Vehicle Procurement and Specialized AAI Equipment” on 2nd April 2026 from 03:00 PM onwards in virtual mode. The session aimed to provide students with practical insights into procurement processes and specialized equipment used in airport operations.

The session was delivered by Mr. Arghya Mondal, Skill Technician at the Airport Authority of India, Kolkata, and an alumnus of the Department of Automobile Engineering (Passout Batch of 2024). He shared his valuable industry experience and technical insights with the participants. The program witnessed enthusiastic participation from both students and faculty members.

Background:

Vehicle procurement and the use of specialized equipment are crucial aspects of airport management and operations. Organizations like the Airport Authority of India (AAI) require advanced vehicles and equipment for safety, maintenance, and efficient functioning of airport services.

Understanding procurement procedures, technical specifications, and operational applications of such equipment is essential for students in automobile engineering, as it bridges the gap between academic knowledge and real-world industrial practices.

Objectives:

The primary objectives of the webinar were:

- To provide an overview of vehicle procurement processes in aviation sectors.
- To introduce participants to specialized equipment used by AAI.
- To explain technical and operational aspects of airport vehicles.
- To enhance students' understanding of real-world industrial practices.

- To motivate students toward career opportunities in aviation and allied industries.

Overview of the Webinar:

The session commenced with a brief introduction of the speaker by the organizing faculty. Mr. Arghya Mondal then delivered an informative session focusing on procurement strategies and specialized airport equipment.

Key highlights of the session included:

- ❖ **Vehicle Procurement Process:** Explanation of procurement stages including requirement analysis, tendering, vendor selection, and quality assurance.
- ❖ **Specialized AAI Equipment:** Detailed discussion on various airport vehicles such as runway sweepers, aircraft towing tractors, fire tenders, and maintenance vehicles.
- ❖ **Technical Specifications:** Insights into the design, safety standards, and performance requirements of airport vehicles.
- ❖ **Operational Applications:** Real-life examples demonstrating how specialized equipment is used in airport operations for safety and efficiency.
- ❖ **Industry Exposure:** The speaker shared practical experiences from his role, highlighting challenges and best practices in handling advanced equipment.
- ❖ The session concluded with an interactive Q&A segment where students asked questions regarding procurement challenges, equipment maintenance, and career opportunities in the aviation sector.

Learning Outcomes:

The webinar enriched participants with the following takeaways:

- ❖ **Conceptual Knowledge:** Understanding of procurement procedures and equipment usage in airport operations.
- ❖ **Technical Awareness:** Knowledge about specialized vehicles and their specifications.
- ❖ **Industry Insight:** Exposure to real-world applications in aviation sectors.
- ❖ **Professional Development:** Awareness of career opportunities in Airport Authority of India and related fields.
- ❖ **Practical Understanding:** Ability to relate theoretical concepts with industrial practices.


Conclusion:

The session on “Vehicle Procurement and Specialized AAI Equipment” by Mr. Arghya Mondal was highly informative and insightful. The session successfully connected academic learning with industrial applications, providing students with valuable exposure to aviation sector practices.

The event served as an excellent platform for enhancing technical knowledge and motivating students to explore career opportunities in emerging and specialized domains of automobile engineering.


RRRM (RUNWAY RUBBER REMOVAL MACHINE)

- Airports Authority of India, RHQ-Eastern Region and NSCBI Airport Kolkata believes in Make in India Initiative.
- Currently we are using RRRM from ANLON.
- Rubber Removal Unit is powered by an Auxiliary Engine from CAT™ which generates a water jet pressure of 2500 Bars (36259.43 Psi).
- Water is blasted over the Rubber Deposits on the Runway and sucked back in Debris Tank using a Vacuum System running at 1400 Bars (20305.28 Psi).



ASFT (AIRPORT SURFACE FRICTION TESTER)


- Airports Authority of India, RHQ-Eastern Region we use Surface Friction Tester Vehicle by SARSYS™
- NSCBI Airport Kolkata also uses Surface Friction Tester Vehicle by MOVENTOR™
- Most of the Surface Friction Tester Vehicles are equipped with Self-Wetting Technology.



WHY APPROPRIATE SURFACE FRICTION IS REQUIRED ON A RUNWAY

Higher Runway Friction		Lower Runway Friction	
PROS	CONS	PROS	CONS
• Better Braking and Directional Control	• Increases Aircraft Tyre Wear	• Better Runway Life	• Poor Braking and Directional Control
• Enhanced Safety during Wet Condition	• Faster Runway Wear and Tire	• Reduced Aircraft Tyre Wear	• Higher Risk of Hydroplaning
• Shorter Take-Off Distance	• Can cause Harsh Braking during Landing	• Better Rolling Resistance	• Longer Landing Distance

Therefore, Optimal Co-Efficient of Friction is required to maintain for smoother operation of Aerodrome.



Alumni Talk on “Vehicle Procurement and Specialized AAI Equipment” conducted by department of Automobile Engineering in association with IQAC on 02/04/2026