



REPORT **MANAK MANTHAN**

Manak Manthan is an annual technology and innovation conclave organized by the Ministry of Micro, Small and Medium Enterprises (MSME) of the Government of India. The event aims to promote innovation and entrepreneurship among micro, small and medium enterprises in the country. Starts with the definition of the word: Manak means “Standards” and Manthan means “Place where we gather and launch the Standards”

The conclave provides a platform for entrepreneurs, scientists, technocrats, students, and innovators to showcase their innovative products, technologies, and ideas. It also facilitates interaction between industry experts, investors, and policymakers to explore potential collaborations and investment opportunities.

Manak Manthan features various activities including exhibitions, panel discussions, workshops, and product demonstrations. The exhibitions provide an opportunity for innovators to showcase their inventions and technological breakthroughs to a wider audience. The panel discussions and workshops cover a broad range of topics related to innovation, technology transfer, intellectual property rights, funding opportunities, and business scaling.

One of the key highlights of Manak Manthan is the National Micro Innovators Awards. These awards recognize and felicitate outstanding innovators who have developed unique and impactful solutions to address societal challenges. The winners are selected through a rigorous evaluation process, and they receive recognition, monetary rewards, and support for scaling up their innovations.

Another important aspect of Manak Manthan is the Technology Exposure Program. This program aims to provide exposure to promising innovations and solutions developed by micro and small enterprises to potential customers, investors, and partners. This helps in creating business linkages and facilitating technology transfer for commercialization.

Manak Manthan also focuses on promoting awareness and education about intellectual property rights among innovators and entrepreneurs. Workshops and sessions are conducted to help individuals understand the importance of protecting their innovations and to guide them through the process of obtaining patents and licenses.



Overall, Manak Manthan plays a significant role in promoting a culture of innovation and entrepreneurship in India, particularly among micro, small, and medium enterprises. It provides a platform for innovators to showcase their ideas, connect with industry experts, and explore opportunities for collaboration and growth. The conclave also encourages the development of intellectual property and facilitates the commercialization of innovative technologies

In the month of May 25th 2023, the Manak Manthan inaugurates the industry persons associates with small scale industry persons and college students who are the member of Standards Club to join in the introduction of new amendment entitled “uPVC Profiles for Doors and Windows” at Hotel Turyaa, Old Mahabalipuram Road.

The session started with the introduction of BIS Activities and its history. The first draft of the Constitution of an Institution takes up the formulation of tasks of National Standards after the British rules in India. This led to the Department of Industries and Supplies issuing a memorandum on 03 September 1946, formally announcing the setting of an organization called the “Indian Standards Institution”. The Indian Standards Institution (ISI) came into being on the 06 January 1947 and in June 1947 Dr. Lal C. Verman as first director.

To provide the advantages of standardization to common consumers, Indian Standards Institution started operating the Certification Mark Scheme under ISI (Certification Marks) Act, 1952. The Scheme, which was formally launched by ISI in 1955 – 1956, enabled it to grant licences to manufacturers producing goods in conformity with IS and to apply ISI mark on their products.

To meet the requirements of the Certification Marks Scheme, the nucleus of a laboratory was started in 1963. While the product certification was being operated under the Indian Standards Institution (Certification Marks) Act, 1952, the formulation of standards and other related work were not governed by any legislation. A Bill with this objective was therefore introduced in the Parliament of 26 Nov 1986.

Bureau of Indian standards (BIS) came into existence, through an act of parliament dated 26 November 1986, on 1 April 1987, with a broadened scope and more powers taking over the staff, assets, liabilities and functions of erstwhile ISI. Through this change over, the government envisaged building a climate for quality culture and consciousness and greater participation of consumers in formulation and implementation of national standards.



The Bureau is a Body Corporate consisting of 25 members representing both Central and State governments, Members of Parliament, industry, scientific and research institutions, consumer organizations and professional bodies; with Union Minister of Consumer Affairs, Food and Public Distribution as its President and with Minister of State for Consumer Affairs, Food and Public Distribution as its Vice-President.

Core activities of BIS includes

- Standardization (Benchmark, Evaluation in concerned labs)
- Conformity Assessment (visiting industries 2 times per year)
- Hallmarking, Training and Consumer protection.

Process of Standards Formulation includes the following steps in the sequential manner.

1. New Work Proposal
2. Working Draft
3. Preliminary Draft
4. Wide Circulation
5. Finalized Draft
6. Indian Standard

BIS is the third-party governmental organization which serves as a bridge for these bodies.

1. Chairman,
2. Industry Associations,
3. Labs / R & D Organization / Professional and Academic Bodies.
4. PSU / Consulting Firms,
5. Manufacturers and Consumers.

Standards are set by 1287 Technical Committee under 15 Division Council.

Types of Certification Schemes which categorized into commercial for mechanical and civil related products ISI mark will be used and for electrical and electronics / services related products the other one will be used





This mark will be made mandatory where the product used in mass consumption to ensure the public health and safety, security of infrastructure requirements. As of now, there are

- 21358 standards introduced all over the world.
- 1105 products under certification.
- 459 products under mandatory certification.

After the history of BIS, then the session starts regarding “IS 17953:2023” entitled ‘uPVC profiles for windows and doors specification. Starts with the terminology related to profile, geometry and material of uPVC. After discussing this, moved to the types of tests needs to be done on the materials. Then, discussing about the requirements of raw material types, appearance of uPVC profile, dimensions and tolerances, Mass of profile, Heat Reversion, Resistance to impact of Falling Mass, Heat Ageing, Weldability, Charpy Impact Resistance of Main profile, resistance to weathering. Queries starts arising regarding the type of standard which is getting introduced will be impact by the existing facility which the industry is having. Then the queries have been solved by the lab researchers and experts.

After the manufacturing process of uPVC, the testing methods like determination of appearance, dimensions, profile mass, thickness of co-extruded layer, Colorimetric Co-ordinates, Permissible tolerances on Standard colors. Then it moves to quality department where sampling and conformity will happen. There is a criteria for sampling and conformity to avoid the defective parts. After the process, the marking has been done in basis of

- Name or trade mark of the manufacturer
- Profile identification code as per uPVC profile nominal shape and dimensions as declared by the manufacturer,
- Profile lot number/batch number or any other code to enable traceability (to date of manufacture, machine, raw material used etc.),
- In case of use of recycled material, it should be mentioned as r-uPVC.

BIS Certification marking has to be done in

- Each profile and its packaging may also be suitably marked with the standard mark.
- The use of Standard Mark is governed by the provisions of Bureau of Indian Standards act, 1986 and the rules and regulations made thereunder. The details of conditions under which the license for the use of Standard Mark granted to manufacturers or producers may be obtained from the BIS.



On 28th June 2023, Manak Manthan is organized at Hotel Saveria, Mylapore for the Electric Vehicle Standards. As we discussed already, for every Manak Manthan, it starts with the history of BIS, how it formed, what's the need for standards, everything will be discussed. They gave the introduction about the BIS care app which contains standards amended by BIS organizations.

Regarding Electric Vehicle, the standards has been set for how to charge the vehicle, how to dispose the battery after it gets dead, replacement of battery after 4 years. For charging methods, they discussed about the AC and DC current type of charging in which AC Charging can be done in home itself and for fast charging DC high-capacity charge can be used to reduce the charge of the vehicle.

Then they discussed about the 3-phase AC Supply for charging the vehicle and the charging methods must obey the Tamil Nadu EV Policies. The battery needs to be managed in order to avoid over consumption of charging and regulating the current and voltage supply for the efficient usage of EV. So, this is the discussion about the battery management, charging methods, TN EV Policies and how to consume electricity of using renewable resources.