Stainless academy

An Education & Skilling Movement by

JSL JINDAL STAINLESS

EMPOWERING

THE FUTURE OF STAINLESS

ABOUT
STAINLESS STEEL

Stainless Steel is one of the fastest growing value-added metal in the world. Stainless Steel is an alloy containing at least 10.5% of chromium and other alloying elements such as nickel and molybdenum which are added to achieve desirable properties of corrosion resistance, hardness, strength, machinability etc. Due to its corrosion resistance, it is most apt for sustainable solution on Life Cycle Costing (LCC) basis.

Magic of Stainless Steel

1. Corrosion Resistance:
The passive oxide layer that forms on stainless steel makes it highly resistant to rust, staining, and corrosion from moisture, chemicals, and high temperatures.

2. Strength and Durability:
Stainless Steel is strong and durable, with high tensile strength, which means it can withstand heavy mechanical loads.

3. Hygiene:
Due to its non-porous surface, stainless steel is easy to clean and is often used in environments where hygiene is a priority, such as kitchens, hospitals, etc.

4. Aesthetic Appeal:
Its shiny, polished appearance makes it a popular material for architectural and decorative uses.

5. Recyclability:
Stainless steel is 100% recyclable, making it an environmentally friendly option in manufacturing and construction.

6. Lower Lifecycle cost:
Stainless steel has a higher initial cost, but its durability, corrosion resistance, low maintenance, and recyclability offset the expense over time.

APPLICATIONS OF STAINLESS STEEL

1. ART (Automobile, Railway and Transportation):

This industry is increasingly using Stainless Steel to reduce weight, improve aesthetics, enhance safety and minimize life cycle cost. In Railways, from complete rolling stocks, such as coaches and wagons, to foot-over-bridges & stations, stainless steel demonstrates its ability to withstand the demanding conditions of railways, such as heavy loads, vibrations, and exposure to harsh weather.

2. ABC (Architecture, Building and Construction):

It's used in structural components, such as beams, handrails, and facades, due to its strength and resistance to weathering. Stainless steel provides tremendous design flexibility to construction projects along with impeccable strength, resistance to corrosion, and fire resistance.

3. Process Industry:

Stainless steel is used in food processing, petrochemical, oil & gas, energy, desalination and medical & healthcare industry for its corrosion resistance and biocompatibility.

4. Consumer durables and Kitchenware:

Consumer durables are driven by stringent quality, aesthetics and high durability of products. Stainless steel, owing to its excellent corrosion resistance and visually appealing surface finishes, finds extensive applications in this segment.

5. Precision Strip & Blade Steel:

Due to its carefully designed microstructure and close tolerances, SS finds its application to produce precision strips down to a minimum thickness of 0.05 mm. In addition, SS is also used to produce cold rolled razor blade to a minimum thickness of 0.074 mm.

STAINLESS STEEL, EMPOWERING VARIOUS SECTORS OF THE NATION

Stainless steel is driving India's path to self-reliance, playing a key role in Atmanirbhar Bharat initiatives like Chandrayaan-3, India's first underwater metro, and the Vande Metro. With innovative solutions and landmark projects, stainless steel is transforming and empowering the nation.

Need of specialized workforce development for the SS Sector with focus on:

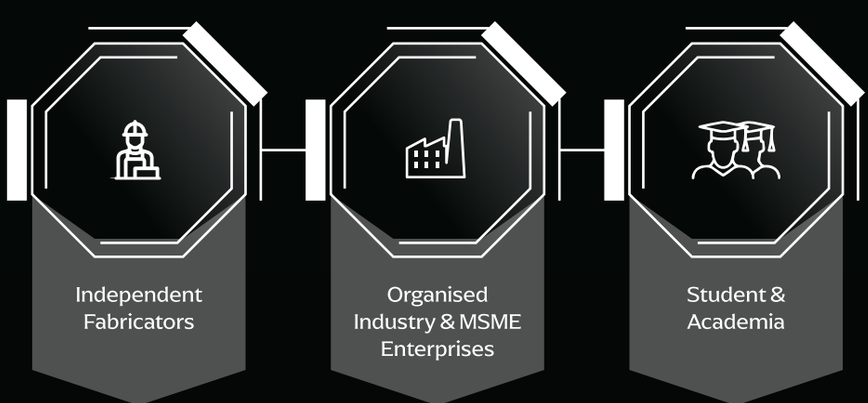
1. Awareness of applications of Stainless Steel
2. Skills to produce quality Stainless Steel products
3. Standardized Curriculum
4. Training and educational options for future talent
5. Certification system
6. Employer and Employee motivation for training
7. Robust talent pipeline of trained professionals

STAINLESS ACADEMY

Stainless Academy is an initiative by Jindal Stainless Limited (JSL) which serves as a hub for education, training, skilling, upskilling, research & collaboration and aims to create a skilled workforce in the Stainless Steel (SS) sector for India. The Stainless Academy envisions becoming the apex body to ensure the development of nationally recognized training standards and curriculum for the Stainless-Steel sector, enabling the adoption of industry-relevant and standardized skill training and education. We aim to unite industry, students, government, and professionals for nurturing talent and driving excellence for human resource that supports the growth and innovation for Atmanirbhar Bharat.

Our Objectives

1. Driving Awareness: Raising awareness about the applications, benefits, & potential of Stainless Steel across the ecosystem (including academia, downstream and other stakeholders).
2. Category Recognition: Positioning Stainless Steel as the material of choice and a sustainable alternative to other products.
3. Upskilling & Building Capability: Enhancing skills and readiness for stakeholders, especially in the downstream sector, while nurturing new talent.
4. Partnerships for Research & Innovation: Fostering institutional collaborations to drive research, influence policies, and promote initiatives in skilling, ESG, and social reforms.



INITIATIVES OF STAINLESS ACADEMY

Stainless Academy is essential in developing a skilled workforce for the Stainless Steel sector across key areas:

1. Fabricator Training Program:

- One-day training and awareness program designed to educate grass-root fabricators on the features and applications of stainless steel.
- Till CY 2024, the program reached 42,000+ fabricators through 400+ sessions.
- 1,300+ fabricators trained on SS Fabrication under the RPL (Recognition of Prior Learning) program.

2. Training Programs for Downstream Industry:

- Enhancing workforce capabilities in the downstream industry.
- Short-term workshops on key skills like welding, cutting, polishing and advanced fabrication.
- By 2024, over 850 individuals from Indian Railways and PSUs have been trained.
- NCVET-approved Qualification Packs for SS Fabrication, Kitchenware, and Heavy Fabrication.

3. Stainless Steel Course in Academic Institutions:

- Stainless-Steel courses in partnership with eight leading engineering colleges across India.
- IIT Kharagpur, IIT BHU, IIT (ISM) Dhanbad, NIT Trichy, NIT Durgapur, NIT Rourkela, IIEST Shibpur and O. P. Jindal University.
- MoUs with Governments of Haryana and Odisha to introduce SS course in Government Polytechnics.
- Efforts underway to extend it to Government ITIs as well.

TRAINING & DISPLAY VANS

Stainless Academy operates 4 Vans to provide hands-on training and raise awareness about stainless steel in public through road shows and exhibitions. These vans have supported in conducting 500+ programs across India including FTPs and Training Programs for Downstream Industry. These vans acts as a school on wheels during fabricator trainings and during conferences, industrial displays, road shows and events.

रोज़ाना
(Everyday usage)

घरौंदा
(Household)

उद्योग
(Industrial)

आधार
(Smart city infrastructure)

1. Rozana:

The Rozana (everyday usage) van showcases stainless steel's everyday applications, including tableware, cabinets, planters, PVD sheets, and public utility models.

2. Udyog:

The Udyog (Industrial) van highlights stainless steel's industrial applications, offering training on products like roofing sheets, shutters, chequered flooring, UV-printed SS sheets, special finishes, textures, and miniature industry models with accessories.

3. Gharaunda:

Starting from gates and railings, and going up to home décor options, the Gharaunda (household) van gives us a glimpse of an array of possibilities in between like kitchen cabinets, water management applications and study tables.

4. Aadhaar:

The Smart City Infrastructure van showcases stainless steel's role in smart cities, featuring footbridges, metro stations, bus shelters, gas pipelines, and more, emphasizing its strength and eco-friendliness.

Stainless Academy is proud to be associated with:

INDIA'S FIRST AND LARGEST SWADESHI **STAINLESS STEEL COMPANY**

Jindal Stainless Limited (JSL), founded in 1970, embodies the vision of improving lives through trustworthy and innovative stainless solutions while maintaining a steadfast commitment to social responsibility. The company prides itself on its excellent workforce, value-driven business operations, customer centric approach, and industry-leading safety practices.

As India's foremost stainless steel manufacturer, JSL is ramping up to achieve an annual melt capacity of 4.2 million tonnes. The company operates 16 stainless steel manufacturing and processing facilities in India & abroad and maintains a global presence across 12 countries. In India, the company has ten sales offices and six service centres. Its diverse product portfolio includes stainless steel slabs, blooms, coils, plates, sheets, precision strips, wire rods, rebars, blade steel and coin blanks.

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