

STAINLESS INDIA

A MAGAZINE PUBLISHED BY

**Indian Stainless Steel
Development Association**

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Stainless steel rolling shutters gaining acceptance



At M/s Sakhalas International Mall, Nashik, Maharashtra.

Stainless steel with an elegant finish distinctly looks hi-tech and is very much appreciated by architects. M/s Gandhi Entrance Automations Pvt. Ltd, Mumbai, have combined hi-tech stainless steel with high technology automation and drive systems to present distinctly up-market rolling shutters in stainless steel with a brush finish.

M/s Gandhi Entrance Automations Pvt. Ltd, Mumbai, are engaged in fabrication of doors, gates, barriers, shutters etc. The company specializes in entrance automation systems and is the distributor of DITEC SpA, Italy (the largest manufacturer of door and gate automation systems in the world) and GAPOSA, Italy (the number one Italian manufacturer of motors for rolling shutters). The company fabricates stainless steel rolling shutters, gates and barriers for industrial sectors, private areas and commercial establishments.



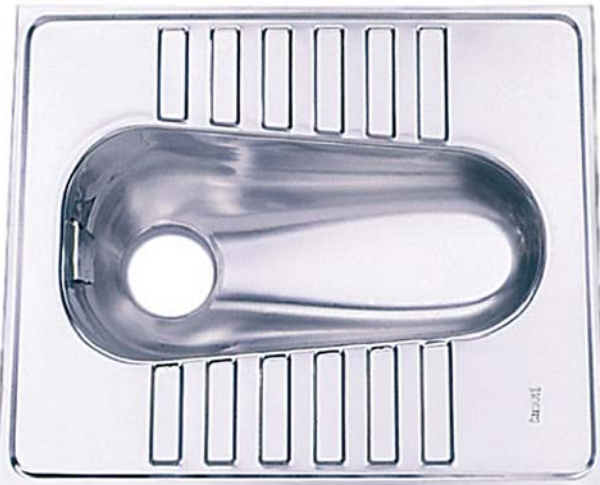
At M/s Roha Dyechem Pvt Ltd, Dhatar, Maharashtra.

Security is reinforced when stainless steel is used. Compared to carbon steel, stainless steels are very difficult to cut or saw. In addition, stainless steel absorbs 2.5 times the energy of carbon steel in the course of deformation, and is able to take much more impact and protect the interiors. Since painting is not required, it will not catch fire or help spread it in any way. Occasional dusting or washing with soap and water is all the maintenance required. Apart from the beauty and elegance, stainless steel shutters will easily last for decades and also yield good scrap value when its useful life is over. Eco-friendliness is built into stainless steel.

According to Gandhi Entrance, stainless steel rolling shutter has a niche market and has a very good growth potential. More and more architects and designers recommend stainless steel rolling shutters for obvious advantages. Stainless steel rolling shutters also give an up-market look to the premises / showrooms besides withstanding harsh weather conditions. Pharmaceutical and chemical companies use stainless steel rolling shutters, gates, and barriers as no other material withstands corrosive environment. A 10 feet by 10 feet stainless steel rolling shutter uses about 150 kg of stainless steel. Generally, AISI 304 and AISI 316 sheets of 1 mm thickness are used with brush surface finish.

Contact details of the fabricator of stainless steel rolling shutters:
GANDHI ENTRANCE AUTOMATIONS PVT LTD, 22, Nirman Industrial Estate, Link Road, Chincholi Bunder, Malad (W), Mumbai – 400 064; Tel: 022-5679 3810 / 20 / 30, 2872 2238, 2876 3424; Fax: 022-2871 1112; E-mail: sales@geapl.com geapl@yahoo.co.in
Web: www.geapl.com

Stainless steel toilet pans — Eco-friendly, Hygienic and Long-lasting



M/s Jyoti (India) Metal Industries Pvt Ltd, the makers of Nirali brand kitchen sinks, also manufacture toilet pans in stainless steel. The pans are manufactured from 1 mm thick Salem Stainless Steel to withstand rugged use.

Eminently cleanable and Eco-friendly design

Like ceramic pans, these pans eliminate the waste very easily because of the very smooth stainless steel surface. There is also no yellowing of the stainless steel pan. In addition, these are designed to be eminently cleanable with minimum use of water by eliminating the ledge provided in ceramic pans to cover the sprinklers under the footrest. The product is thus eco-friendly in minimizing water usage while providing high levels of hygiene. If you happen to destroy the toilet, the stainless steel pans will not end up in the rubble; it could be sold profitably as scrap for recycling. Remember, any stainless steel object has an average recycled content of about 60%.

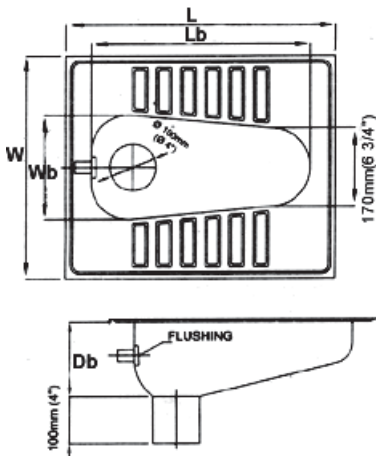
Fixing

Stainless steel pans are fixed in the same way as ceramic ones – grouted in concrete. The concrete backing the bowl eliminates any vibrating metallic noise during use or cleaning and also eliminates any possibility of denting during accidents.

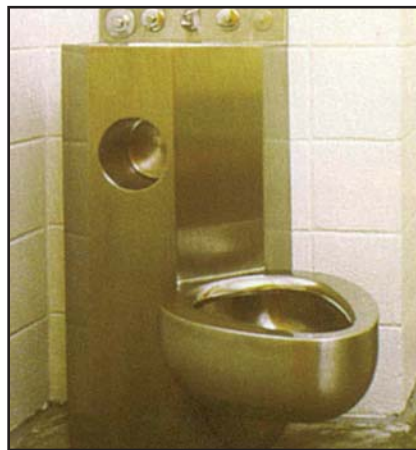
Contact details of the stainless steel toilet pan fabricator: Mr Navin Gada, Managing Director, JYOTI (INDIA) METAL INDUSTRIES PVT LTD, Palghar – Manor Road, Palghar (E) – 401 404, Maharashtra; Tel: 022-2431 5500; Fax: 022-2438 2543; E-mail: niralisink@vsnl.com; Web: www.niralisinks.com

Per cent removal of *micrococcus aureus* from various worn surfaces when deposited under a protein soil film with detergent wash and rinse at 71 °C.

What happens when you replace ceramic toilet pan with a stainless steel one? You combine the ideal properties of ceramics such as cleanability, slideability, and hygiene and eliminate the problem of breakages or cracks that happen once in a while with ceramic pans. You thus get a very long lasting toilet pan, which is unbreakable, however rough may be the usage. Thus, in situations like public toilets, theatres, hotels, factories, restaurants, railway stations, large scale subsidized housing etc, where rough usage combined with difficulties of keeping clean and maintenance of hygiene is a big problem, go for stainless steel toilet pans. Due to its unbreakable properties, worldwide, stainless steel toilets are used in prisons because a broken ceramic piece can be weapon in the hands of the inmates.

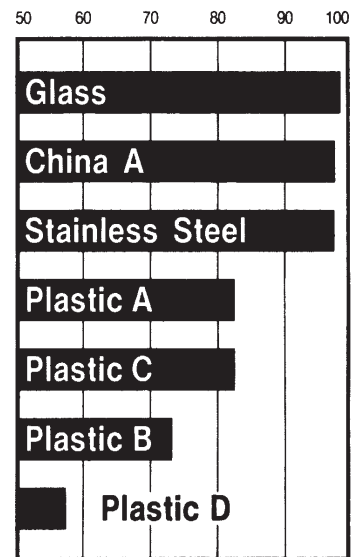


Overall size L X W: 580 x 480 mm
Bowl size Lb X Wb: 470 x 225 mm
Bowl depth Db: 165 mm



Toilet in a prison;
Source: NICKEL magazine September 1994.

Cleanability Chart; Source: NICKEL magazine March 1988.



Architectural Workshop

“Use of Stainless Steel in Architecture, Building & Construction”

Date: Saturday, July 10, 2004 at 10.00 am

Venue: Fortune Hotel Landmark, Ashram Road, Ahmedabad.

The objective of this workshop in Ahmedabad is to familiarize and provide help to architects, interior designers, fabricators, builders, contractors, consulting engineers, building hardware suppliers, students of architecture, PWD and CPWD engineers and others with the properties of stainless steel, grade selection,

availability, fabrication methods, erection and final finishing.

There is no participation fee for attending the Workshop.

RSVP: ISSDA, E-mail: nidissda@del3.vsnl.net.in

Fax: 011-2686 3376 Tel: 011-2686 5631, 2686 3389;

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New Executive Director for Salem Steel



Mr Mrinmoy Roy, joined as Executive Director of SAIL's Salem Steel Plant on February 25, 2004. Mr Roy brings with him

over three decades of experience in marketing and materials management in the steel industry. He is a graduate in Economics from the St. Xavier's College, Kolkata and did his masters from the Indian Institute of Management (IIM).

Mr Roy joined the marketing department of the Indian Iron & Steel Company Ltd (IISCO) in 1974 and grew to head the marketing function in 1995. Between 1995 and 1997, he headed the materials management function in IISCO. In 2001, he became the Executive Director of SAIL's Growth Division. Mr Roy conceived and created the export department of IISCO and developed an export market of 80,000 tonnes per annum. He transformed the Eastern Region of IISCO from being the lowest selling region to being the highest selling region. He also accomplished a turnaround of the Southern Region of IISCO by doubling the sales.

He developed the marketing strategy of IISCO as its head. He also developed the vision statement and strategy for the materials management function of IISCO. During his tenure as the Chief Executive of the Growth Division, he re-engineered it into a full fledged project and engineering products marketing outfit. Mr Roy has been trained in steel making and marketing at British Steel, UK and attended a number of programmes at the Management Training Institute of SAIL. He has participated in the Advanced Management Programme of the All India Management Association.

Mr Roy is the Chairman of the IIM Alumni Association, Kolkata Chapter and is a consultant and speaker in the field of management. He is active in the lecture-circuit of SAIL.

(Source: SSP-SAIL Press Release dated 31.3.2004)

National Workshop on Stainless Steel Fabrication



From right to left: Dr S Y Quraishi, Additional Secretary and Financial Advisor, Ministry of Steel; Mr G Mishra, Program Coordinator and Chairman Technical & Publication Committee, BPNSI; Mr S Dewan, Chairman, Organizing Committee, BPNSI; Mr N C Mathur, President, ISSDA.

The Biju Patnaik National Steel Institute (BPNSI) organized a 2-day workshop on stainless steel fabrication in Puri, Orissa on April 8 and 9, 2004. This workshop was organized jointly with support of the Indian Stainless Steel Development Association (ISSDA) and the Indian Welding Society (IWS). Dr S Y Quraishi, Additional Secretary and Financial Advisor in the Ministry of Steel, was the Chief Guest. The keynote address during the inaugural session was delivered by Mr N C Mathur, President, ISSDA.

The main strength of the workshop was the presence of a galaxy of speakers from various reputed organizations like ISSDA, Nickel Institute, Engineers India Ltd (EIL), Bharat Heavy Electricals Ltd (BHEL), Welding Research Institute (WRI), Esab India Ltd, Bhabha Atomic Research Centre (BARC), Larsen & Toubro Ltd (L&T), Modi Arc Electrodes Co (Modi Arc), Indira Gandhi Centre for Atomic Re-

search (IGCAR), Rail Coach Factory (RCF), Suhner India Pvt Ltd, Surface Innovators Pvt Ltd etc, covering a wide range of topics related to stainless steel fabrication – from material properties and design to cutting and forming, plasma and laser processing, welding, consumable selection, and right down to pickling, passivation, painting and final grinding and polishing of weldments.

The course contents and clarification of technical queries during the course of the two days and especially during the panel session at the end of the workshop were very much appreciated by every one present. The workshop was attended by 140 delegates, mainly fabricators, from all over India. The event was sponsored by many organizations including Salem Steel Plant-SAIL, Jindal Stainless Ltd, Modi Arc, BHEL, L&T, the Joint Plant Committee (JPC) etc.

Hyatt hotel opts for stainless steel



Spiral staircase at Hyatt, Mumbai. AISI 316 stainless steel, 1.6 mm stringer, 40 mm dia handrails. Toughened glass has been used as the balustrade and the steps are made of laminated glass. The central hollow column is made of stainless steel.

Contact details of stainless steel fabricator: Mr Shyam Agarwal, Director (Works), SHARP ENGINEERS, Plot No. A 77, H Block, MIDC Pimpri, Pune – 411 -18; Tel: 020-411 2023 / 2024; Mobile: 0-98230 16996; Fax: 020-411 2026; E-mail: sharpeng@vsnl.com
Web: www.sharpeng.com

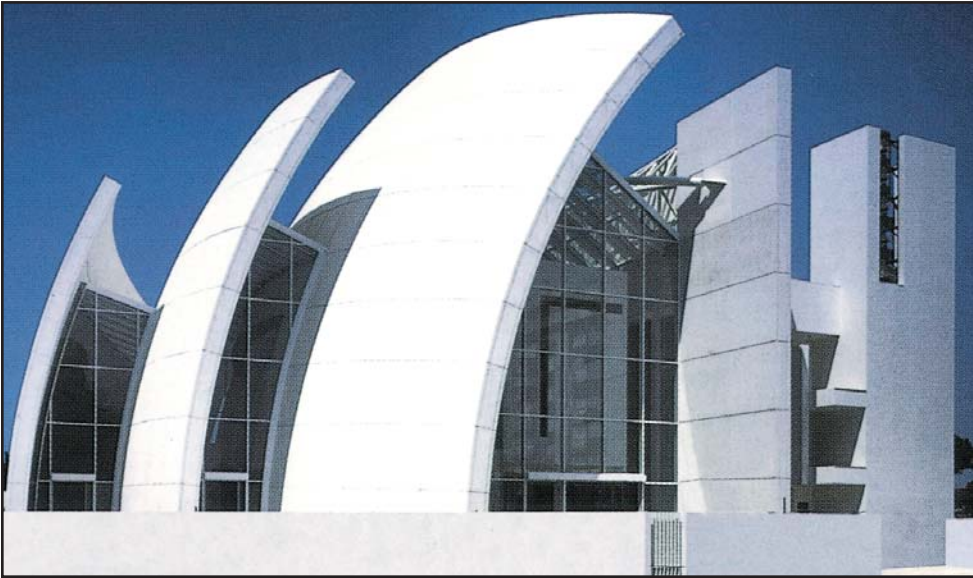
Stainless steel decorates residential garden

Stainless steel wires have been used for creating garden furniture, sculptures of a goose, peacock at the residence of Mr Arvind Sanghvi, Managing Director, Raajratna Metal Industries Ltd, Ahmedabad.
Web: www.raajratna.com

The sculptures were fabricated by Raajratna's personnel while the 'bridge' over the water body was done by Mr Suresh Patel, Rupen Engineers Pvt Ltd;
Tel: 02764-234 002; Fax: 02764-233 513;
E- mail:
rupenengg@wilnetonline.net



Stainless steel rebar for Rome's church



"Dives in Misericordia" church, designed by architect Richard Meier, opened in Rome on October 26, 2003 to mark the 25th anniversary of the Pontificate of Pope John Paul II. The building was constructed by combining traditional local materials, such as travertine, with innovative materials like sunlight sensitive white concrete and stainless steel for reinforcement of the concrete ashlars making up the three self supporting sails and the other walls bearing the weight of the entire building.

The high durability and improved safety, even in the event of an earthquake, provided by stainless steel reinforcements will ensure that future generations continue to enjoy the futuristic building in the centuries to come.

Stainless steel was chosen to prevent oxidation of the rebars with unacceptable consequences of the appearance and stability of the white concrete.

The problem was solved with stainless steel rebars from Cogne Acciai Speciali (CONCRINOX™), that not only resist corrosion but

also possess unique mechanical properties, the most important of which is ductility, a quality that appears in a material when subjected to heavy loads, including abnormal loads such as those produced by seismic waves.

In such conditions, conventional carbon steel has limited capabilities as the correct balance between tensile strength and toughness, two opposite mechanical properties: as one increases, the other decreases.

Managing to increase both, means producing a highly resistant structure which can be plastically deformed without breaking in the event of seismic stress.

Supplier of stainless steel rebars: Cogne Acciai Speciali, Via Paravera 16, I-11100 Aosta AO, Italy; Tel: +39 0165 3021; Fax: +39 0165 43779; E-mail: mailman@cogne.com Web: www.cogne.com www.concrinox.com

Source: From Inossidabile edited by Centro Inox (Italian Stainless Steel Development Association) www.centroinox.it

Major stainless steel rebar application

Mr Richard L. Trate, Managing Director of Stainless Rebar of Carpenter Technology Corp., USA, reports that over 200 tons of stainless steel reinforcing bar was recently supplied to The Fort Miller Co. of Schuylerville, NY. The Carpenter 2205 duplex alloy rebar was used to produce pre-cast concrete modules for a new NYSDOT-designed highway bridge. The bridge will be on the Belt Parkway, over the Ocean Parkway, in Brooklyn, NY. Fort Miller pre-cast the modules in a climate-controlled facility and then completely assembled the structure on their property. After inspection, the bridge will be disassembled, moved to the site and reassembled quickly and efficiently. The modular approach and the use of stainless steel rebar helped meet the two main objectives specified by NYSDOT: to erect the bridge in a busy urban area with minimum disruption to traffic and the surrounding neighbourhoods; and to erect a bridge that will last a lifetime with minimal maintenance. Carpenter Technology believes this to be the first major use of stainless rebar in a pre-cast application in the USA. The use of stainless steel rebar added only about 1% to the total project cost and it will greatly extend the bridge lifetime.

Source: Stainless Steel World, May 2004 issue;
www.stainless-steel-world.net

SASSDA is 40 years old

This year marks the 40th Anniversary of the South African Stainless Steel Development Association (Sassda), a body that represents the local stainless steel industry from production to fabrication, supply and beneficiation. When it was established in 1964, Sassda supported the growth of the local stainless steel industry acting, inter alia, as a source of technical information and helping to develop a range of new applications for the product. Sassda's achievements at the forefront of the local stainless steel industry will culminate with the biennial Stainless Steel Awards on 12 December this year.

Issued on behalf of: Sassda,
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Fax: +27 11 803.2011, Internet: www.sassda.co.za
E-mail: sassda@onwe.co.za

Contact: Dr. Oliver F.R.A. Damm

For further information, please contact:

Brooke Browde Communications, P O Box 28879,
SANDRINGHAM, 2131, Tel: (011) 483.1823,
Fax: +27 11 483.2194, E-mail: mail@bbcomms.co.za

HCL Technologies uses stainless steel

Stainless steel handrails, column cladding, covers for switch boxes and support bars for windows have been used at HCL Technology Ltd, Ambattur, Chennai. About 2.5 tonnes of 1 mm thick SS 304 sheets were used for the column cladding and about 950 running metres of tubes were used for the handrails.

Contact details of the stainless steel fabricator: VELAR ENGINEERING WORKS PVT LTD, # 435, Middle School Road, V V Puram, Bangalore – 560 004; Tel: 080-2661 3979, 2662 1406; Fax: 080-2662 1406; E-mail: velar@satyam.net.in



A close-up view of the handrails (right) and the elevator cladding (below).



Ratan Jindal heads ISSF committee

The International Stainless Steel Forum (ISSF) serves as a world forum on various aspects of the international stainless steel industry. Its aim is to enable stainless steel producers to meet and discuss common issues, to promote rapid development of the use of stainless steel worldwide, to increase shareholder value and to give the industry a common proactive international voice. ISSF members include producers of stainless steel (integrated mills and rollers) and national or regional stainless steel industry associations. ISSF has three standing committees (1) Market Development, (2) Health and Environment, and (3) Economics and Statistics. In December 2003, Mr Ratan Jindal, Managing Director, Jindal Stainless Ltd was nominated as the Chairman of the Committee on Economics and Statistics and was formally elected at its meeting in February 2004. The Economics and Statistics committee focuses on delivering

economic and statistical information required for other ISSF committees / projects. (**Source: Stainless Post 2004 / 1**)



Quilted pattern column cladding



Stainless steel Quilted & Cambridge pattern sheets have been used for column cladding at M/s Radico Khaitan Ltd's office in Mathura Road, Delhi. Four columns of height 2.4 m are clad with RIMEX's special finish sheets. M/s Kothari Associates, Delhi were the architects who specified the special finish stainless steel sheets. The Rimex sheets were supplied by M/s New Era Industries and the column cladding was fabricated by M/s New Era Furnishers Pvt Ltd. About 200 kg of stainless steel 304 of 0.8 mm thick was used for this purpose.

Contact details of the architect: KOTHARI & ASSOCIATES, 6, Siri Fort Road, New Delhi – 110 049; Tel: 011-2625 7849; Fax: 011-2625 7090; E-mail: kotharis@vsnl.com

Contact details of the supplier of RIMEX sheets: NEW ERA INDUSTRIES, 51, Adhchini, Sri Aurobindo Marg, New Delhi – 110 017; Tel: 011-2696 9410 / 9411; 2685 4673; Fax: 011-2686 3573; E-mail: newera@del2.vsnl.net.in

Contact details of the fabricator: NEW ERA FURNISHERS PVT LTD, 2-19-1, WHS, Kirti Nagar, New Delhi – 110 015; Tel: 011-2593 0552, 2541 4665, 2546 4285; Fax: 011-2541 4665.

3rd Alloy Stainless Steel Long Products Conference

The STEEL & METALS MARKET RESEARCH GmbH (SMR), Austria is organizing the above conference in the Czech Republic. The conference will have 8 separate sessions on forgings & seamless tubes; pumps, valves & seals; stainless steel producers' perspectives; automotive; technology; wires & fasteners; tooling; distribution. **The conference will be held at Hilton Hotel, Prague, Czech Republic on September 22-23, 2004.**

For more details regarding participation, please contact: Mr David Bentley, Conference Manager, SMR GmbH, Innovation Center, A-6600 Reutte, Austria;
Tel: +43-5672-72737-0 Fax: +43-5672-72737-1;
E-mail: conference@smr.at Web: www.smr.at

Welcoming New Members

M/s Grind Master Machines Pvt Ltd, Aurangabad, supplier of grinding and polishing equipment have joined ISSDA as an Associate Member.

Arm Innovations

ARM INNOVATIONS, Delhi, creates the necessary awareness on surface finishing amongst the manufacturing fraternity. The company works very closely with the shop floor personnel to absorb current processes and then evaluate the most suitable options for the product. In this activity, Arm Innovations tries to involve more and more of hands-on- personnel to device convenient, cost competitive and better end quality solutions for your surface finishing needs.

Arm Innovations works on a variety of stainless steel products amongst other metals to achieve the correct finishes using the most appropriate methods.

Arm Innovations, have with them, world renowned names from the surface finishing industry, from machine to abrasive manufacturers and strive to offer total and complete solutions. The company represents the following organizations:

- Suhner India Pvt. Ltd. – manufacturers of portable finishing machines and a wide variety of consumables used for surface finishing from Switzerland;
- Saint Gobain (Norton) – manufacturers of a vast range of coated, bonded, non-woven and micro finishing products;
- VSM Abrasives – manufacturers of quality coated abrasives from Germany;

- Lippert Unipol – manufacturers of mirror finishing mops and compounds from Germany;

- Grind Master Machines Pvt. Ltd – manufacturers of SPM's for a wide variety of finishing requirements and automation for auto components, tubes and straights, builder hardware, utensils, kitchen sinks, micro finishing heads and many more.

Ajay Madan, ARM INNOVATIONS,
MAILING ADDRESS: B-5/23 AZAD APARTMENTS,
SRI AUROBINDO MARG, NEW DELHI 110 016.

MEETING OFFICE: 308 Galleria Complex, Phase IV, Gurgaon 122 002, Haryana;
Tel: 0124-505 8175 (95-124 from NCR);
E-mail: ajay@arminnovations.com

PHONE: Mobile: 0-98111 37745, Fax: 011-2651 0283,(R): 011-2696 4727.

Crystal Interior Products

An ISO 9001:2000 certified company, M/s Crystal Interior Products, based in Surat (Gujarat) manufacturing high grade AISI 304 stainless steel nickel-chromium plated household utility products and accessories under the brand name of "Evershine". Evershine offers excellent options designed for specific functions like storage of dishes, pull-out for utensils, multipurpose baskets, revolving carrouseles, magic corners, cutlery trays, hangings accessories, tall and round units, corners, accessories...the list is endless and under constant evolution.

Striking a balance between beauty and utility, the company brings to the customer the solution with Evershine, the sensuality of stainless steel at its aesthetic best in kitchen, wardrobe, and bathroom utilities. The exciting range of products is a culmination of exhaustive R&D keeping in mind the different requirements of our end users and their usage value with the changing scenario in lifestyle. It is stylish and doesn't have any maintenance paraphernalia attached to it. According to the company, its products are the ultimate declaration of stylishness because it's all about the most reliable metal sporting a whole new appeal, one that has durability along with exceptional finish.

The company has now launched new products to its existing exquisite range with multi purpose pole systems, wardrobe unit and corner organizer. Multi purpose pole system is an added bonus to an attractive, well-planned kitchen and the first of its kind amongst Indian manufacturers. It comes in customized and knock down installation condition to enhance the attractiveness and practicality of your kitchen. It can be best used as a breakfast bar (if your table is not near the cooking area), wherein

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MULTIPURPOSE POLE SYSTEM



SINGLE CORNER

W 225mm D 225mm H 180mm



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separate racks can be attached as per individual requirement. Another innovation is wardrobe unit having racks, tie sliders, cloth and trouser hanger and other accessories, which are ideal for space saving and styling up your wardrobe. Above all Evershine has also come up with the wonder product called corner organizer, which is developed on the runner technology, and is meant for easy access to reach dead and difficult corners in your kitchen.

Evershine is represented in attractive kitchen studios throughout the nook and corner of the country by its vast stretching dealer panels located over 200 outlets nationwide.

Some of the company's other products are:

Corner Organizer: A real remedy to make the best possible use of dead unused corners of your kitchen. The product works on runner technology and entirely on channels i.e. when you pull the first set of drawer the inside pull out baskets will not automatically come

instead it can be brought outside as per your requirement by moving the first one horizontally along the channel and the pulling the inside basket out. Thus this product can be used in both left and right corners and products can be arranged as per their usage frequency.

Recipe book holder: The rack fitted above your kitchen top allows you to hold your recipe book firmly on to the page you are working on thus make it much more hassle free from hunting onto the your next step in the book.

Wrapping rack: Fix in your foil sheets onto this rack and ensure much more speedy work in those morning busy hours of packing tiffin / lunch.

CRYSTAL INTERIOR PRODUCTS, Plot 41, GIDC Ichhapore, Sachin – Hazira Road, Opp. ONGC, Bhatpore Village, Surat 394 510, Gujarat; Tel: 0261-284 1530 / 1532; Fax: 0261-284 0008; E-mail: evershinecrystal@hotmail.com Web: www.crystalinterior.com

Esab India Ltd

ESAB 100 Years 14 Innovations 1 Organisation

Origin of the company

In 1903, Oscar Kjellberg, was working as a Chief Machine Engineer, on Dan Brostrom's boats in Gothenberg, Sweden. The boiler was in poor condition and it was in conjunction with its repair that Oscar Kjellberg conducted the experiments which led to the invention of the world's first covered electrode. This invention made the transition from riveted to welded ships possible. In 1904, Oscar Kjellberg founded Elektriska Svetsnings Aktie Bolaget (ESAB).

R & D

Today, ESAB employs around 6,700 people of which more than 600 are involved in Research and Development at centres in Sweden, Holland, UK, Germany, USA, Brazil and India. The ESAB Group is owned by the Charter plc. Group, UK, which is listed on the London Stock Exchange.

A century of ESAB innovations

From the Coated Electrode (MMA Welding) 1904, Unionmelt (Submerged - Arc Welding) 1937, Gravity Welding, 1938..... to Leser-Bevel Cutting 1997, fourteen new technologies / processes were developed by ESAB technologists during the century.

Esab India Limited

Esab India Limited, is a member of the ESAB Group. The company started its operations in 1987, by acquiring Philip's welding division, which was followed by the takeover of Indian Oxygen Limited's (IOL) welding operations in 1991, Flo-tech Welding and Cutting Systems in 1992 and Maharashtra Weldaids in 1994.

Quality initiative

ESAB India's initiative on Total Quality Management has resulted in

ISO 9000 and ISO 14000 certifications for all its manufacturing facilities located at Kolkata, Chennai and Nagpur.

Main product lines

The company manufactures all types of welding electrodes, wires and fluxes, arc welding equipment, welding automation products, complete range of reclamation consumables, gas welding and cutting products, small cutting machines and optical / CNC profile cutting machines.

All India network

Through five regional sales offices and a wide dealership network ESAB India maintains an all India sales and service network.

Exports

The company exports its products to neighboring countries viz. Sri Lanka, Bangladesh and Nepal. Besides, it has started exporting arc welding equipment to group companies in Europe and US.

Image in the Indian market

ESAB India is one of the forerunners in the Indian industrial market and ESAB products are now an integral part of industries, such as shipbuilding, petrochemical, construction, transport, offshore, energy and repair and maintenance.

Outlook

ESAB India is in the process of establishing itself in the international welding market besides trying to develop as an important strategic sourcing point for the group.

ESAB INDIA LTD, Karumuttu Centre 6th floor, New 634 (Old 498) Anna Salai, Nandanam, Chennai -- 600 035; Tel: 044-5204 0292 / 93 / 94 / 95; Fax: 044-5204 0289 / 0288; E-mail: esabdw@vsnl.net Web: www.esabindia.com

Manashi Interiors

Manashi Interiors, Delhi is an established firm of interior designers and executors with a national presence and are forerunners in the field of retail, entertainment, health, biotech, software and corporate interiors for over a decade have now developed stainless steel fabrication to cater to the emerging market of stainless steel for architecture, interiors, building and construction in India.

The state of the art manufacturing facilities and process have enabled Manashi to achieve excellence in design development, manufacture,

installation and after sales service of stainless steel hand rails, railings, grills, furniture, display units to match international standards.

Some of the prestigious work done by the company countrywide are INOX Multiplex – Forum and Salt Lake in Kolkata, Rave 3 Multiplex in Kanpur, Citi Plaza Multiplex in Jaipur, The Plaza Mall in Gurgaon, Sahara Mall in Gurgaon, MGF Corporate Office in Gurgaon, PriceWaterHouseCoopers in Delhi office, Jubilant

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Organosys in NOIDA, Nestle DLF Square in Gurgaon, Café Coffee Day outlets at Kolkata, Times of India – Planet M, Apollo Clinics, International Hospital in Noida etc.

MANASHI INTERIORS, Mr Abhik Roychoudhury (Partner) and Mr Vikas Aggarwal (Partner) Corporate Office: B-212, C R Park, New Delhi – 110 019; Tel: 011-2627 3118, 2627 2500, Fax: 011-2627 6302; E-mail: manashicorp@vsnl.net; Contact person: Ms Malini

Chatterjee, Manager (Business Development) Mob: 0-98710 94946

Head Office: 40 / 184, C R Park, New Delhi – 110 019; Tel: 011-2642 8323

Factory: A-27, Sec-59, NOIDA, Uttar Pradesh.

Kolkata Office: 3, Orient Row, Park Circus, Kolkata – 700 017 Tel: 033-2287 3410; E-mail: manashical@vsnl.net

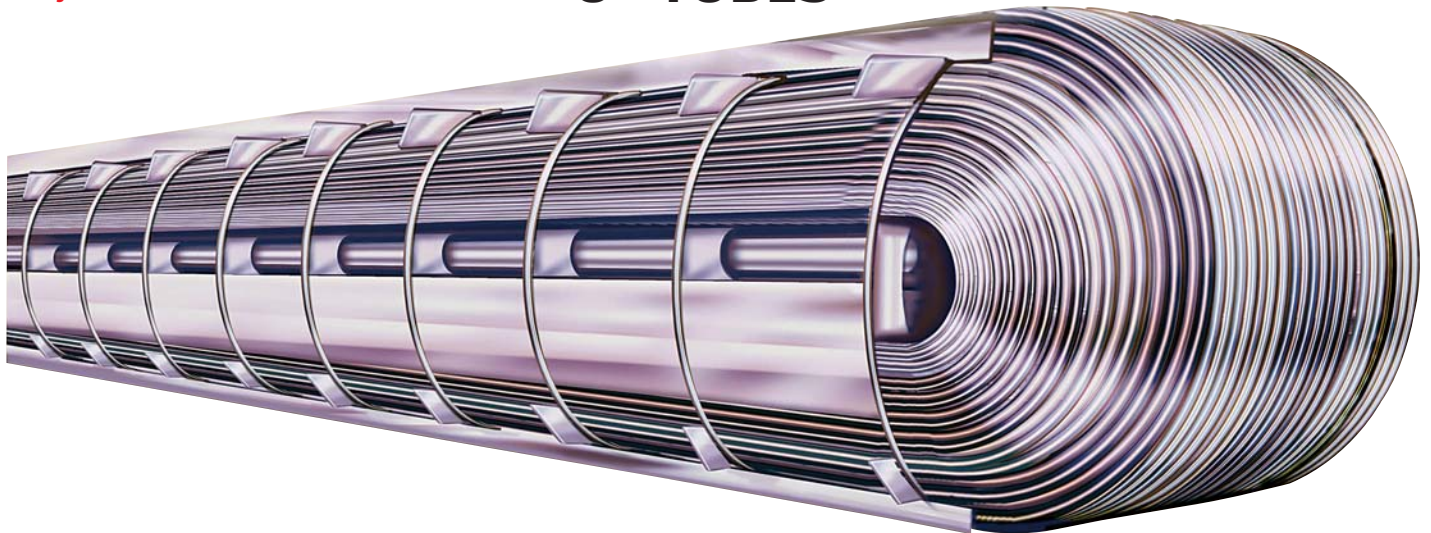
Mumbai Office: Mr Vivek Patel, Mob: 0-98207 43144



The Plaza Mall, Mehrauli Gurgaon Road, near IFFCO Chowk, Gurgaon - 1,800 running metres of handrails of AISI 304 stainless steel in Brush Finish.

Suraj Stainless Ltd

"U" TUBES



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Suraj Group was established in 1967 under the able guidance of Mr. Tarachand B. Shah and with dynamic leadership of Mr. Ashok Shah Chairman & Managing Director. The business has shown tremendous growth rate of 50% per annum. The Company started its manufacturing activities in 1996.

Suraj Stainless Ltd. is a leading Manufacturer exporter of austenitic stainless steel seamless and welded pipes, tubes and "U" Tube in various sizes, grades and specifications as per ASTM and also conforming to other international grade / standards equivalent to ASME, DIN, NFA, and JIS etc. Suraj Stainless has specialisation in tubing for heat exchangers, heater, condensers, heating elements and instrumentation with facility of annealed, pickled, cold rolled and weld bead removed tubes upto 18 meter long tubes.

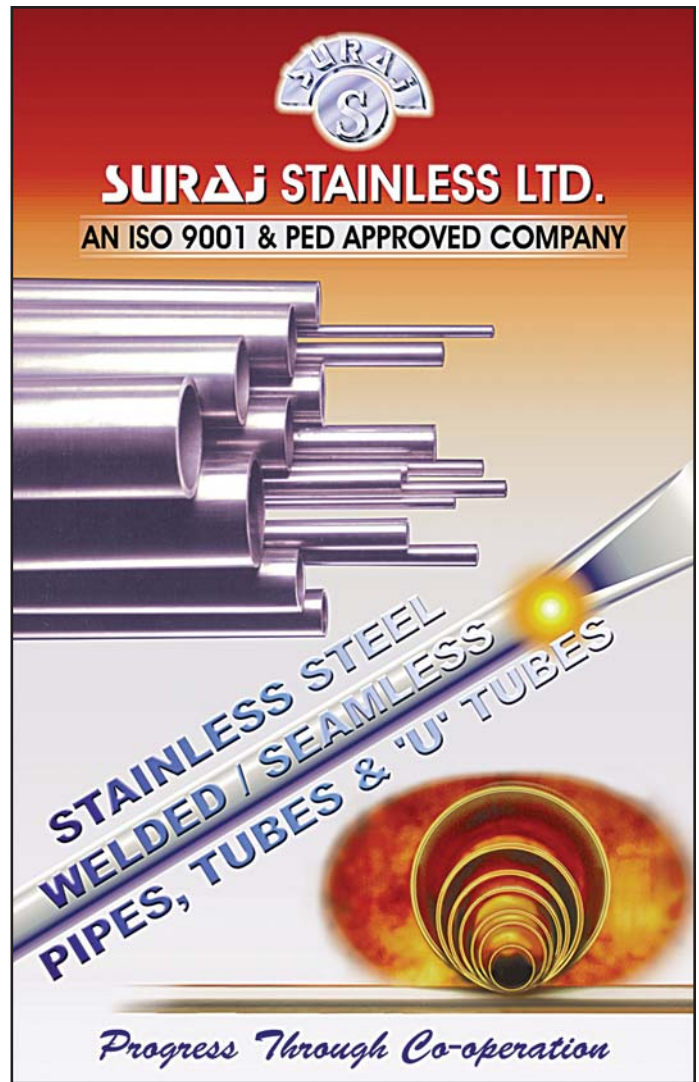
Suraj Stainless has been approved by all national / international Inspection agencies like LRIS, BUREAU VERITAS, DNV, SGS and also supplying under customers / third party inspection. The quality system is certified / approved from ISO-9001-2000, AD-2000 MERKBLATT W0, and PED 97/23/EC. Suraj has competent and well-qualified staff and engineers whose objectives are customer satisfaction, quality control, and product innovation.

Suraj Stainless is a government of India recognized export house and is selling its premium products in India and abroad to more than 53 countries in all over the world.

Corporate Office: SURAJ STAINLESS LTD, 6th floor, Kalpana Complex, Near Memnagar Fire Station, Navrangpura, Ahmedabad - 380 009;

Tel: 079-2791 1050, 2791 1052; Fax: 079-2791 0277;
E-mail: suraja@surajgroup.com Website: www.surajgroup.com

Branch Office: 7, Laxmi Nivas, 2nd Parsiwada, Mumbai -- 400 014;
Tel: 022-2389 1649 / 1758; Fax: 022-2385 4979;
E-mail: surajm@surajgroup.com



The advertisement for Suraj Stainless Ltd. features a red and white background. At the top, the company logo is a circular emblem with 'SURAJ' and 'S' inside. Below it, the text 'SURAJ STAINLESS LTD.' is written in a bold, sans-serif font, followed by 'AN ISO 9001 & PED APPROVED COMPANY' in a smaller font. The central image shows several stainless steel pipes of varying diameters, some with flared ends, arranged in a stack. A diagonal banner across the middle reads 'STAINLESS STEEL WELDED / SEAMLESS PIPES, TUBES & "U" TUBES'. To the right of the banner is a stylized graphic of a spiral tube with a glowing yellow and orange center. At the bottom, the slogan 'Progress Through Co-operation' is written in a cursive font.

Tayal Furniture

Tayal Furniture was first established in 1990 with the pioneering effort of Mr Rajesh Agarwal, manufacturing all kinds of interior furniture products. It as grown over the years and now specializes in SS products including column wall cladding ,false ceiling, railings, signages, spaceframes, all kinds of furniture for schools, cafeteria, banks etc .with wide varieties of finish i.e brush finish, mirror finish etc .We undertake customized and tailor made fabrication and turnkey installations.

The company is closely associated with all the top architects builders and designers and their main clients are ITC Hotels, Reserve Bank of India, ABN Amro bank, Forum(shopping mall), Space Circle & Resorts (a club), Addidas, Ocio At Bevedre (a club).

Mr Rajesh Agarwal, Proprietor, TAYAL FURNITURE, 121, J N Mukherjee Road, Ghusuri, Howrah -- 711 107; Tel: 033-2655 8680 / 2439; Mob: 0-98300 30649; Fax: 033-2655 8680; E-mail: rajeshag@onlysmart.com tayalfurniture@yahoo.co.in



Stainless Steel for Smoking Zone !



Godfrey Phillips India Pvt Ltd is protecting the non-smoking public from smokers, by providing a smoking zone for smokers at Chandigarh. The outlet has been designed by Architect *Manish Gulati* of M/s Hues Unlimited.

M/s Kaushal Engineers have fabricated many stainless steel items for the Smoking Zone like: glass table which has been suspended by stainless steel tubes from the ceiling and supported by stainless steel wire ropes at the floor; ash

trays using hydro forming technology; dustbin-cum-spittoon; glass shelf fused with stainless steel flanges to the wall mounted bracket; and poster frames.

Contact details of the fabricator.
Mr G S Rathore, KAUSHAL ENGINEERS 18-A, Satbadi, Near Chhatarpur Temple, Adjoining Tiwoli Garden, Gaushala Road, New Delhi; Tel: 011-3093 8481; Mobile: 0-98100 21405, 0144-310 2173.

Works: F-89, M I A, Alwar -- 301 030, Rajasthan;

Tel: 0144-288 1989, 288 2322;

E-mail: kaushal_engineers@rediffmail.com

Web: www.kaushalengineers.com

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for contact details of members, please visit www.stainlessindia.org

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Chandan Steel Ltd
Ferro Alloys Corporation Ltd
Haryana Steel & Alloys Ltd
Isibars Ltd
Ispat Industries Ltd
Jindal Stainless Ltd
Mukand Ltd
Rathi Ispat Ltd
Rimjhim Ispat Ltd
Panchmahal Steel Ltd
Shah Alloys Ltd
Stainless India Ltd
Steel Authority of India Ltd
(Alloy Steels Plant + Salem Steel Plant)
Viraj Alloys Ltd

Associate Members

AV Alloys Ltd
Ador Welding Ltd
Ampi Agencies Pvt Ltd
Apex Tubes Ltd
Arcelor Stainless India Pvt Ltd
Architectural Divn. – JSL
Arm Innovations
Bansal Wire Industries Ltd
Bhandari Foils Pvt Ltd
Bhansali Bright Bars Pvt Ltd
Bharat Earth Movers Ltd
Bhiwadi Metal Rollwell Pvt Ltd
Bizcon Business Consultants (I)

British Super Alloys Ltd
Cavalier, The
Choksi Tube Co Ltd
Crystal Interior Products
D-Art International
Doshi Tubes Pvt Ltd
Esab India Ltd
Flow Link Systems Pvt Ltd
Glencore India Pvt Ltd
Grind Master Machines Pvt Ltd
Heavy Metals & Tubes Ltd
Hisar Metal Industries Ltd
Inco Europe Ltd
Jyoti (India) Metal Inds. Pvt Ltd
KEI Industries Ltd
Kamdhenu Ispat Ltd
Kaushal Engineers
Kirtanal & Sons
Krishna Industries
Kundan Industries Ltd
M N Dastur & Co Ltd
Macro Bars & Wires (I) Pvt Ltd
Magppie Exports
Manashi Interiors
Merloni TermoSanitari (I) Ltd
Metallic Bellows (I) Pvt Ltd
Metco Marketing (I) Pvt Ltd
Modi Arc Electrodes Co
Nevatia Steel & Alloys Pvt Ltd
New Era Industries
Nuclear Fuel Complex
Ornamental Stainless Steel Pvt Ltd
Phoenix Appliances Pvt Ltd
Prakash Steelage Ltd
Process Pumps (I) Pvt Ltd
Quality Foils Ltd

Raajratna Metal Industries Ltd
Rahul Industries
Rail Coach Factory
Rajendra Mechanical Industries
Ratnamani Metals & Tubes Ltd
Real Strips Ltd
Sahu Refrigeration Industries Ltd
Sandvik Asia Ltd
Saw Pipes Ltd (Swastik Foils Divn.)
Shah Metal Industries
Sharp Engineers
Simple Enterprises
Southern Iron & Steel Co Ltd
Sreevatsa Stainless Steel Fabricators (P) Ltd
Stallion Systems Pvt Ltd
SteelRX Corporation Pvt Ltd
Suhner India Pvt Ltd
Suraj Stainless Ltd
Surface Innovators
Tata Iron & Steel Co Ltd - FAMD
Tata SSL Ltd
Tayal Furniture
Thainox Steel Ltd
Trivedi Ind'l. & Research Associates Pvt Ltd
VSL Alloys (I) Pvt Ltd
Velar Engineering Works
Venus Wire Industries Ltd
Vishal Tubes & Pipes Pvt Ltd
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Indian Ferro Alloy Producers' Association
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Nickel Institute
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