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# STAINLESS IND

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'A VERY HUNGRY GOD', a 1,000 kg stainless steel skull is on display at Palazzo Grassi, in Venice



'A Very Hungry God', is made of 1,000 kg of stainless steel utensils

Indian artist Subodh Gupta has made an enormous 1,000 kg. skull made out of stainless steel utensils called 'A Very Hungry God'. This was first exhibited in the Nuit Blanche annual all-night festival in Paris in 2006 and is now in the collection of Francois Pinault. 'A Very Hungry God' is currently on view by the Grand Canal outside Pinault's Palazzo Grassi in Venice. Visitors flocking to Venice cannot miss the ferocious predatory grin by the Grand Canal.

For Subodh Gupta, from shining stainless steel tumblers, jugs, cups, plates and spoons, nothing is humble enough to be excluded from his massive welded installations.

In an interview on the Saatchi Gallery Blog, Gupta explains the forces that motivated him to craft this symbol of death out of objects that are used to sustain life: "My work was conceived to be shown in a church in Barbes on the outskirts of Paris which is largely inhabited by immigrant population. I made the work in response to the stories I read in the news about how soup

kitchens in Paris were serving food with pork so that Muslims would not eat it. It was a strange and twisted form of charity that did not continue for long but raised conflicting ideas of giving and the way we have become now.

Outside the church I served vegetarian daal soup as a form of "Prasad" (in India when you go to a temple or a guduwara you are offered food with the blessing). I liked the mix of the Catholic church and my intervention using a symbol that many artists have used before - the skull - and its many connotations.

'A Very Hungry God' is like a vanity, but also the idea of food and the utensils is very much part of my language dealing with ideas of the everyday and turning them into iconic symbols." Subodh Gupta is represented by Nature Morte in New Delhi.

Source: The Times of India, Mumbai, November 27, 2007, Web: www.eternallycoolnet and www.saatchi-gallery.co.uk

#### Foot over bridges fitted with stainless steel escalators ready for use



Stainless steel escalator installed at the Sri Venkateswara College foot over bridge

The wait for the state-of-the-art foot over bridges (FOBs) fitted with escalators has ended as the Public Works Department (PWD) has opened escalators for use at six of the FOBs on a trail basis. The escalators will be functional from 6.00 am to 10.00 pm.

The new escalators have been positioned at busy roads and are aimed at encouraging pedestrians to use the foot over bridges to cross the roads. PWD believes the move would bring down number of accidents at the locations.

Since the escalators are being put up in an open environment, where they are exposed to dust, water and heat, they need to be thoroughly tested. Officials said that each escalator needs to be kept running round the clock for one month to check their durability. Apart from the measures taken by PWD, the company which has

installed the escalators is going to deploy a guard at each of the six sites to ensure people use it safely. The guards will be trained to handle all sorts of emergencies that may arise when escalators are in use.

The six escalators – one each at ITO (near police headquarters), ISBT Kashmere Gate, Majnu ka Tila, Moti Bagh, Sri Venkateswara College and Maharani Bagh – have been put up on a build-operate-transfer basis. This means that the company is responsible for their installation and maintenance. It will also provide security for a period of five years.

The government has identified 31 more locations for FOBs with escalators, but the project will only be initiated if the concept works well at these six locations.

### New Executive Director for Salem Steel Plant



B B Singh

Shri BB Singh has assumed charge as Executive Director of Salem Steel Plant on November 10, 2007.

A graduate in Mechanical Engineering from Government Engineering College, Rewa in 1973, Shri Singh joined Steel Authority of India Limited's Rourkela Steel Plant in 1974 as Management Trainee (Technical). With rich experience in mechanical, refractories, steel melting and human resources, he

rose to the position of General Manager in 2003 and later became General Manager Incharge (Steel) in 2007. During his period, steel making at Rourkela Steel Plant reached unprecedented levels with significant improvements in techno economics. As a matter of fact, capacity utilisation in steel making crossed 100% for the first time in the history of Rourkela Steel Plant reaching 104.7% during

2006-07 with production of 1.99 million tonnes and recording a phenomenal growth of nearly 20% over the level achieved in 2005-06.

During the corporate level company-wide HRD intervention in streamlining and systematising the training efforts of SAIL with the appointment of British Steel consultants, Shri Singh has played a key role. He was personally instrumental in the development of training activities in a systematic manner at Rourkela Steel Plant. He is widely traveled and has visited UK, Germany, France, Singapore and Saudi Arabia.

At this significant point of time, when Salem Steel Plant is going for a major expansion and is in the process of adding the steel melting facility, the vast experience of Shri Singh will certainly benefit the plant in achieving timely commissioning and early stabilisation.

Source: Press release from SSP

# DISCLAIMER

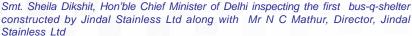
The September 2007 issue of STAINLESS INDIA was not published due to circumstances beyond our control.

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#### DTC's first modern stainless steel bus shelter ready for use







An image of DTC's new bus shelter

The Delhi Transport Corporation (DTC) is excited about its new source of income: its modern bus shelters that are expected to generate Rs 2.11 crore every month.

The first of 225 DTC bus shelters, to be built and fabricated by Jindal Stainless Ltd on public-private partnership model for the 2010 Commonwealth Games, was completed on August 2, 2007. Built in stainless steel, the shelters will have global positioning system and passenger information systems in place. "This is a record deal for the DTC. We will later decide whether to upgrade the number of shelters by 25 per cent, which would mean 55 more shelters," said DTC Chairman Anshu Prakash.

Chief Minister Sheila Dikshit inspected the first bus shelter,

opposite Hotel Hyatt Regency at Bhikaji Cama Place, on August 2, 2007. In the next 26 weeks, all 225 shelters are expected to be ready.

Built on build-operate-transfer basis, the shelters will dot Games venues across the city, including the Jawaharlal Nehru Stadium, Indira Gandhi Stadium, Games Village, ISBTs and railway stations. A tender for 300 more shelters, to be built along the same lines in Kashmere Gate ISBT, Civil Lines, Model Town, Azadpur and Dhaula Kuan areas, have now been opened. Unlike the 225 modern shelters in NDMC area where advertisements can be seen on the side panels, the DTC shelters will have rooftop advertising, which is being touted as more pedestrian friendly.

#### Mumbai to get 4,386 stainless steel bus stands







Different types of new bus shelters in Mumbai

Keeping pace with the changing face of Mumbai, Brihanmumbai Electric Supply & Transport Undertaking (BEST) has signed contracts with outdoor media agencies to replace the yellow-green bus shelters in the city with swanky stainless steel stands. The first of the new stands has already come up right next to Marine Plaza Hotel on Marine Drive.

The 2,300 bus shelters, an integral aspect of the Mumbaikar's commute will begin to be phased out within the next year. Wherever bus shelters are not feasible, stainless steel poles will replace the existing carbon steel poles and serve as bus stands. Thus 2,086 such bus stands will be visible in Mumbai. In all, the

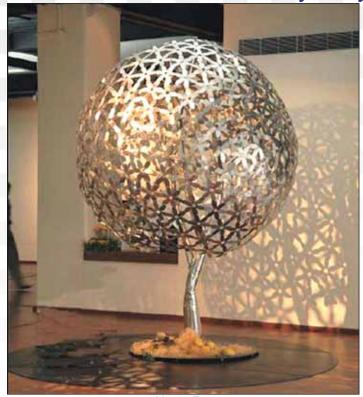
undertaking has singed contracts to set up 4,386 new, illuminated stands across the length and breadth of Mumbai.

The new stands are made of stainless steel, have a stronger roof and seating facilities too, which are missing in the existing stands.

The outdoor media agency will construct and maintain the bus shelters. The contracts will be for 10 or 15 years. Sources said each new bus shelter project would cost the agency about Rs 4 lakh and the construction work will be completed within three months.

BEST would earn close to Rs 485 crore over the next 15 years as its revenue share from advertising on these new bus stands.

The Stainless Gallery - 'My Lazy Forest' by Alex Davis







Champa Tree





The Stainless, a gallery that threw open its doors in New Delhi on 25 August 2007 with an exhibition of works by Alex Davis titled -My Lazy Forest, organized by Ms Deeipka Jindal, M/s Jindal Architecture Ltd.

#### Stainless steel production for first half of 2007 up - but slowing

Preliminary figures released by the International Stainless Steel Forum (ISSF) show that stainless steel crude steel production has increased in the first half of 2007 by 9.1% compared to the same period of 2006. Total production for the first six months of 2007 was 15 million metric tonnes (mmt). During the rest of 2007 ISSF forecasts that healthy demand from end users will remain, but production will slow down considerably due to de-stocking.

In Asia, stainless steel production grew by 20.2 % to 8.5 million tonnes. Driving forces were again China (+54%) and India (+7%). China produced 3.5 million tonnes of stainless crude steel and has increased its lead as the world's leading stainless steelmaking nation. The strong production increase is mainly based on new capacities. The growth will continue for the rest of 2007 as further new capacity is commissioned. Production in Japan has compensated for last year's losses.

The second biggest producing area, Western Europe/Africa reported a 3.1% decrease in stainless steel production during the first six months of 2007. Total production was 4.9 mmt in this period. In The Americas region, stainless crude steel production declined by 2.1% to 1.4 million tonnes in the first half of the year.

During the rest of 2007 ISSF predicts the use of stainless steel in fabrication will continue to grow. However, following the trend from the first half of 2007, apparent consumption (that is, shipments from the mills) will slow down considerably, showing negative

Table 1: Stainless and heat-resisting crude steel production (in '000 metric tonnes)

	Ful	l year		First ha		
Region	2005	2006	+/- %	2006	2007	+/- %
Western Europe						
/Africa	8,795	10,000	13.7	5,056	4,898	-3.1
Central & Eastern						
Europ	310	363	16.8	177	201	13.2
The Americas	2,688	2,951	9.8	1,504	1,472	-2.1
Asia	12,498	15,074	20.6	7,053	8,477	20.2
World Total	24,292	28,387	16.9	13,790	15,047	9.1

growth rates compared to the second half of 2006.

This is based on a stronger than expected need for de-stocking at stockholders and stainless steel fabricators. The de-stocking is influenced by the decrease in the price of nickel. Stockholders and fabricators are trying to reduce stocks of stainless steel that contain high-priced nickel.

As a result, ISSF has lowered its stainless crude steel production forecast to 1.1% growth for the whole of 2007. This would mean total production of 28.7 mmt in 2007. In May 2007, ISSF forecast growth of 5.1%, for 2007. The new forecast for 2007 is shown in

Table 2: Stainless and heat-resisting crude steel production (in '000 metric tonnes)

According to Mr PM Balasubramanian,

Executive Director, Salem Steel Plant, who has engineered this spectacular turnaround with a team of dedicated

employees, Salem Steel Plant is

capable of scaling even greater

heights. The plant has set higher

targets for 2007-08, with a production

and sales target of 1,40,000 tonnes

of stainless steel and 1,80,000 tonnes

of carbon steel products. Of this,

professionals and

Source: International Stainless Steel Forum (ISSF)

Region	1st half 2006	2nd half 2006	2006	1st half 2007		2nd half 2007		2007	
					+/-%		+/-%		+/-%
Western Europe/Africa	5,056	4,944	10,000	4,898	-3.1	4,552	-7.9	9,450	-5.5
Central & Eastern Europe	177	186	363	201	13.6	199	7.0	400	10.2
The Americas	1,504	1,447	2,951	1,472	-2.1	1,278	-11.7	2,750	-6.8
Asia	7,053	8,021	15,074	8,477	20.2	7,623	-5.0	16,100	6.8
World Total	13,790	14,598	28,388	15,048	9.1	13,652	-6.5	28,700	1.1

#### Salem Steel Plant records highest ever profit in 2006-07

motivated

SAIL's Salem Steel Plant is currently set firmly on the path of growth with a record net profit of Rs. 118.31 crores, highest turnover of Rs. 1299.27 crores, highest sales of 199,425 tonnes and highest saleable steel production of 183,391 tonnes. The plant has achieved an impressive turnaround from a net loss of Rs. 66.88 crores during the previous financial year 2005-06 to the highest ever net profit of Rs. 118.31 crores, more than five times the previous highest of Rs. 21.14 crores during 1994-95.



P M Balasubramanian

84,000 tonnes of stainless steel have been planned for exports. Explaining the success story, Mr Balasubramanian said some apt strategies coupled with rising market trend had helped achieve the financial turnaround during 2006-07. These included improvement in planning and procurement of raw materials in small lots in tune with market demand, improved performance in production and techno-economic fronts, streamlining the systems and procedures in marketing and thrust for disposal of arisings and non-moving items through e-auctions. Mr Balasubramanian acknowledged the support and guidance given by SAIL Chairman, Mr SK Roongta and support from Corporate Management. The whole plant is now vibrating with optimism.

An ISO 9001:2000 and ISO 14001:2004 certified firm, it also undertakes various projects under the Corporate Social Responsibility category.

#### Tensegrity – An award winning entry



Utssav Gupta, a final year student of architecture at the Sushant School of Art and Architecture, Sector 55, Gurgaon has won silver medal in architectural engineering category for his tensegrity entry at the 38th All India Student Design Competition organized by the National Design and Research Forum, the Institution of Engineers (India).

In the March 2006 and December 2006 issues of Stainless India, he had contributed article on 3.4 meter tall, vertical tensegrity structure and 4.5 meter long cantilever horizontal tensegrity structure made of stainless steel tubes and wire-ropes.

#### Railways prefer stainless steel for coaches and coal wagons





Painted 409M Stainless Steel coaches fabricated with LBH Design(Germany) at the Rail Coach Factory, Kapurthala

The Indian Railways is the largest railway system in the world under a single ownership. The Indian Railways is drawing up an ambitious Rs 1 lakh Crore modernization plan spread over the next five years. This amount will be spent on modernization of railway signaling, track and rolling stock so that modern services could be provided to passengers in their coaches and platforms and freight customers at low prices by bringing down the unit cost.

# RCF & ICF to produce all stainless steel coaches in 3 years' time

In next three years, the railways plan to convert all new production of railway passenger coaches at Rail Coach Factory (RCF) & Integral Coach Factory (ICF) (about 2,700 per annum) to stainless steel coaches. The present stainless steel coaches made at RCF use 409M (C 0.03 max, Cr 10.8 to 12.5, Ni 1.50 max), a ferritic grade, that needs painting. The roof and the trough floor are in 304 (C 0.08, Cr 18.00 to 20.00, Ni 8.00 to 10.50). In order to do away with the high cost of repeated painting, the Railways are considering 301LN (C 0.030, Cr 16.0 to 18.0, Ni 6.0 to 8.0) austenitic stainless steels for all exterior surfaces in order to eliminate the need for painting. This is feasible because of the superior corrosion resistance of 301LN to withstand the harsh tropical climate in India. Stainless steel is also specified for a good amount of furnishing inside the coaches.

#### Railways plans to use more stainless steel

With the Indian Railways proposing to increase the construction of LHB-stainless steel coaches and adopt stainless steel shells for ICF design bogies, the demand for stainless steel sheets is all set to see a massive spurt.

LHB coaches are used primarily in selected Shatabdi and Rajdhani trains, apart from some air-conditioned coaches in mail and express trains.

These passenger coaches – which are relatively longer, but lighter and maintenance friendly (they need less corrosion repairs) – improve passenger comfort, safety and operation.

The Railways started manufacturing stainless steel LHB coaches at Kapurthala-based Rail Coach Factory after a transfer of technology agreement with Alstom-LHB, Germany. The Railways had imported 24 coaches from Alstom-LHB before the agreement was signed.

The Railways has proposed to complete switch-over to LHB stainless steel coach production mode at the Rail Coach Factory, Kapurthala. It has also suggested increasing the manufacturing capacity at Kapurthala to 1500 from the present level of 1400 coaches per annum at a cost of Rs 37 crore.

This has been proposed in the Railway Ministry's supplementary demand for grants tabled in Parliament recently.

At the present, the production units for Railways annually manufacture about 100 LHB coaches as part of a total capacity of



Delhi-Lucknow Shatabdi Express

about 2,200 coaches. In its total fleet of about 35,000 coaches, the Railways has about 400 LHB coaches.

LHB design bogies use stainless steel shells, whereas ICF design bogies use carbon and corten steel shells. Now, stainless steel shells are longer in size and have corrosion resistance properties.

Additionally, stainless steel coaches have about 10-12 per cent higher passenger carrying capacity per coach and give a lower unit cost of transportation as compared to corten steel shells.

They also rank high on passenger comfort due to various features that include better design and lower noise levels.

In its supplementary demands for grants, Railways has also proposed to adopt stainless steel shell for ICF bogies.

"It is proposed to adopt stainless steel shell for the ICF bogies... It is therefore proposed to take up this work at an estimated cost of Rs 1145.68 crore," the Railways has stated in its demand document

Manufacturing each LHB coach costs an average of Rs 2 crore against Rs 83 lakh for a coach made of corten steel (which is used for the usual coaches in use). However, the Railways is considering a move to manufacture coaches with stainless steel body shells (of LHB design) without the "frills" to bring down the cost by about 35-40 per cent.

In terms of speed as well, LHB coaches can run at a higher speed – of up to 160 km per hour (kmph) whereas the other coaches can run at a maximum speed of 130 kmph. LHB stainless steel coaches have a life of "at least 35 years" while corten steel coaches have a life of 25 years after which they need to be scrapped.

#### Railways plan electrical coaches made of stainless steel

Railways infrastructure is set for yet another overhaul. The railway ministry is planning to introduce electrical multiple units (EMU) coaches constructed using stainless steel.

The use of stainless steel in the new coaches would solve two major problems for railways – that of increasing the life of its coaches and also carrying more passengers.

A Rail Bhawan official pointed out that "Not only will the coaches be corrosion resistant and have a longer life, they would also be able to carry more passengers as they would be lighter".

Being rust resistant would mean that the coaches would be easier to maintain and would reduce maintenance costs as well.

"Introduction of the new coaches would also help the Indian railways to get a least a part of its infrastructure at par with world standards," the official added.

The coaches would be slightly more expensive than the current crop used by the railways but the ministry hopes its advantages would be more than its cost.

\*\*Railways contd. on page 7 >> \*\*

#### >> Railways contd. from Page 6

Kick starting the plan, the railway ministry has decided to place orders for prototypes of two such coaches with Bharat Earth Movers Ltd, Bangalore. The ministry will then decide whether and how to introduce these coaches on a large scale.

#### Railways to exclusively use stainless steel for coal wagons

Railways have decided to use only stainless steel for production of coal wagons. About 80,000 MT of 409M is being tendered by the Indian Railways to make 7000-8000 coal wagons in 2007-08. Each of them uses about 10T of 409M. This quantity is likely to multiply in the years to come as Indian Railways is considering stainless steel options for ores, minerals, fertilizers, food grains, lime stone, fly ash, cement, oil tankers etc.

## Texmaco Ltd bags order for 1,442 stainless steel wagons for 2007-08

Texmaco Ltd has bagged its biggest-ever order from the Indian





Australian stainless steel coal wagon

Painted stainless steel coal wagon

Railways for 2,539 wagons. The value of the contract is Rs 283 crore. Out of 2,539 wagons ordered, 1,442 wagons will be in stainless steel (842 open wagons and 600 closed wagons) and balance in corten steel.

### Many cities lining up to follow the Delhi Metro Model

#### - Mumbai, Bengalooru, Hyderabad, Ahmedabad, Chennai, Ludhiana and Kochi -

Expansion of Delhi Metro's services and adoption of the Delhi Metro-type transport system, using all-stainless steel (301LN) coaches, is being replicated in other cities like Mumbai, Bengalooru, Hyderabad, Ahmedabad, Chennai, Ludhiana and Kochi. This will significantly add up to stainless steel tonnage. Each coach uses about 12 tonnes of stainless steel.

The Finance Minister, Mr P Chidambaram, has said that the Centre will provide required funds to the Tamil Nadu Government for implementing the Rs 9,757 crore metro rail project in the metropolis. The Centre would fund the project in Chennai on the lines of the financial assistance extended to the metro rail projects in Bengalooru and Hyderabad.



Delhi Metro Coach

#### Bombardier setting up metro coach factory in Vadodara

In a multinationals' first foreign direct investment in the metro coach manufacturing sector, Canadian firm Bombardier Transportation plans to set up country's first metro coach factory in Vadodara by May-June 2008.

Bombardiers' decision to set up this factory was driven by a \$590-million tender to supply 340 metro coaches to Delhi Metro Rail Corporation (DMRC). Deliveries of the trains are scheduled to begin in the last quarter of 2008, with the final deliveries expected to take place before the Commonwealth Games.

The factory would have a capacity to roll out 40 coaches per month at peak performance and 24 coaches per month usually. It can manufacture both broad gauge and standard gauge rolling stock. Apart from the metro rail market in India, Bombardier is likely to serve the South Asian countries like Thailand, Malaysia, Singapore, Indonesia from this facility. Bomabardiers' European facilities serve the business in these countries at present.

#### BEML bags Rs. 1,144 Cr Delhi Metro Order

Bharat Earth Movers Limited (BEML), a public sector unit of the defence department, has bagged a global tender for the manufacture and supply of 156 standard gauge stainless steel metro cars for the Delhi Metro Rail Corporation (DMRC). These cars are for the second phase of the metro. The coaches will be made at the Bangalore complex and will be delivered before the New Delhi Commonwealth Games of 2010. This would be the first time when standard gauge metro coaches would be manufactured in the country. Earlier orders of DMRC have been for broad gauge metro coaches



Interior of Delhi Metro Coach

This is the single largest historic contract BEML has bagged. The deal is worth Rs 1,144 crore. BEML has formed a consortium with Mitsubishi Electric and Rotem of Korea to execute the work.

BEML is looking forward to an additional order for 36 metro cars from the DMRC.

Would you like to feature your stainless steel products / services in STAINLESS INDIA? Send us your write-up along with attractive colour images.

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#### Mirror Mirror on the lake



A series of nine stainless steel floating petals on the lake provide a point of interest for residents

A new Stockland housing development on the Glod Coast has incorporated the use of art to promote outdoor living and community engagement. And, with a public lake the intended destination, artists Lubi Thomas and Adrian Davis knew stainless steel would best fit the bill.

The Highland Reserve development in Upper Commera, 40 minutes south of Brisbane, boasts a mountainous backdrop and sprawling native bushland. The additional inclusion of a lake within the development prompted Stocklands to commission a public artwork for the area. Following a process of concept pitches from various artists, Lubi Thomas and Adrian Davis of Davis-Thomas were successful in securing the project.

"They (Stockland) have always, until now, bought artwork off the shelf," Lubi Thomas says. "This time though, they wanted to do something site-specific."

After spending time in the area the artists discovered the most evident thing about the lake was its mirror-like quality. They were inspired by the lake's rippling responses to wind changes and wanted to convey this relationship to the general public.

The result was a series of nine stainless steel floating wind 'petals', each with their own anchor point and dispersed across the lake. The use of mirrored stainless steel meant the original concept delivery was met.

"We needed to find a material that was robust enough, as well as something that would reflect the lake itself," says Lubi. "That is what inevitably drew us towards mirrored stainless."

The pieces are made entirely of grade 316 in sheet, tube and flat bar to cater to the environment, and to ensure a life of 20-25 years. The added benefit is that ongoing maintenance is limited to removing the marks of nature.

ASSDA member and Accredited Fabricator Rocklea Pressed Metal supplied materials for the works, and was further engaged for part of the fabrication.

Troy Olive of Rocklea Pressed Metal said the CAD drawings were sent to them, enabling them to laser cut and roll the petals to the desired radius. In total, 12-15 sheets of stainless steel was used.

The use of mirrored stainless meant an additional relationship was explored between the lake and the sun. In the right conditions, the pieces react to the sunshine hitting the water, beaming light between the pieces.

#### Contact:

Davis-Thomas, Lubi Thomas, 2345 Mt Nebo Road, MT NEBO QLD 4520, Phone (07) 3137 1897

Rocklea Pressed Metal, Troy Olive, PO Box 984, Archerfield QLD 4108, Phone (07) 3275 1566, Website www.rockpres.com.au

Source : Australian Stainless, #40 Winter 2007

# Jindal Architecture Ltd. Wins Stainless Steel Architectural Installation Contract in Airport Modernization Project

Jindal Architecture Limited emerged successful in bagging prestigious contracts related to Stainless Steel Architectural Works in the airports modernization projects underway at Bangalore, Delhi, Hyderabad and Mumbai.

The contracts entail detailed engineering / manufacturing design, fabrication, construction and installation of internal and external stainless steel architectural elements like column claddings, fender-guards for trolleys, staircase glass railings besides other railing types at various airport locations.



Source: Stainless Post, 2007-08/2

#### **Welcoming New Members**

#### **Laxcon Steels Limited**

Laxcon Steels Ltd., Ahmedabad, is a flagship company of the Delhi based Gopal Group of Industries headed by its illustrious Chairman Shri S.P. Gupta and supported actively by his sons Shri Gopal Gupta and Shri Vinod Gupta. Gopal Group with factories in Delhi, Ahmedabad and Chennai, was established in the 1970s. Laxcon Steels was acquired by Gopal Group in the year 2002 from its original promoters when it was making just about 100 MT of steel per month which has since increased to over 2000 MT per month after its acquisition by Gopal Group.



Ladle transferring molten metal from AOD to continuous caster

The plant is located at Sari village at National Highway No. 8A about 30 km from Ahmedabad and has an installed melting capacity of around 50,000 MT for making stainless steel, alloy steel and mild steel ingots, billets and other castings. It has strategic outsourcing alliance with rolling and forging mills for producing other rolled and forged products i.e flat bars, rounds, rods, plates, bright bars, angles, hex, coils, strips and other forgings etc. Laxcon Steels is equipped with most modern plant and equipment which include induction furnaces of 20 MT capacity, AOD converter of 15 MT capacity and double strand 9/16 Mtr continuous billet caster. It has sophisticated laboratory with spectrometers and ultrasonic

testing facilities for quality control to make world class products to the fullest satisfaction of our customers in India and abroad.

Company's products are well received by the consumers and have earned the reputation of 'stain'less people for the group amongst the industry. The company is ISO 9001:2000 certified and has also acquired PED Certification for its products and processes.

Gopal Group has recently installed bright bar plant and is in the process of installing rolling mill also to take advantage of forward integration and synergies of operations among various group



Twin stand continuous caster

companies. With the completion of rolling mill, the Group will have fully integrated set-up for making bright bars and as rolled bars from casting to rolling, annealing, pickling and finishing.

Gopal Group's other plants manufacture a variety of products ranging from stainless, alloy and mild steel ingots, billets, rounds and flats in different sizes.

**Contact:** Mr. Gopal Gupta, Director, Laxcon Steels Limited, 235, Sarkhej Bavla N.H. No. 8A, Village Sari, Taluka Sanand, Ahmedabad – 382220, Tel: 02717-325046 / 47, Fax: 02717-252015 / 18, E-mai: <a href="mailto:laxconoffice@gopalgroup.com">laxconoffice@gopalgroup.com</a>



For over the past 25 years, Kumar Steels is engaged in the manufacturing of Stainless Steel flats and sheets of various AISI grades such as 304, 430, 409, 410 and Local utensil grade composition. We have state of art melting as well as rolling facility which enables us to manufacture quality steel.

#### Market

We supply stainless steel flats in the various North Indian markets in India. We also offer our products in the form of hot rolled sheets and cold roll sheets in some cases as per consumer demand.

#### Location of operations

Our head office is located in Jagadhari (Haryana) which is our main market for the supply of local grade stainless steel flat and sheet products. Our manufacturing facilities are located in the state of Himachal Pradesh, which is well connected to the National Highway-1 and is easily accessible.

#### **Future Outlook**

The main focus area of the group in the future will be to add more value added products to the company's product mix and adopting latest technology so as to ensure the quality of goods produced.



Rolling process

Stainless steel flats

#### Contac

Mr Gaurav Garg, Managing Partner, M/s Kumar Steels, Ambala Road, Jagadhri, Haryana – 135 003, Tel: 01732-242673 /973, Fax: 01732-242873, Email: <a href="mailto:gaurav\_garg@msn.com">gaurav\_garg@msn.com</a>, Website: <a href="mailto:www.kumarsteels.in">www.kumarsteels.in</a>

#### **Punjab Abrasives Ltd**

Punjab Abrasives Ltd. is a ISO-9001:2000 certified premier manufacturers of coated abrasives products including sanding belts, flap wheels, non-woven flap wheels for satin/brush finish, flap discs, velcro/PSA discs and rolls/ sheets.

The manufacturing facility is state of the art technology with backward integration of critical processes such as cloth stabilization and bonding resin manufacture which ensures total control over vital quality parameters.



Special Purpose Machine

Punjab Abrasives Ltd. products are used extensively in numerous reputed industrial units including dairy equipment manufacturers, chemical process equipment manufacturers, utensils manufacturers, cycle and motor cycles units, hand tools industry,



Since 1974, Mr. Govind Kabra, FCA from ICAI, promoter of Shriram Group of Companies, is well known in global steel, alloy and metal trade. We deal in Metals, Alloys, Ferro Alloys, Noble Alloys, all kinds of Finished, Semi Finished Steel and Steel Making Raw Materials, in any shape, size & specification.

Shriram Alloys, a member of family of Shriram Group, is a Govt. Registered Organisation and holding various licenses from the Govt. of India & State Govt., for carrying on Imports, Exports & Indigenous trading businesses, it's having head quarter at Jaipur, Rajasthan state, India.

The group has specialization in buying the products from world class manufacturers around the world and marketing them directly to largest steel, alloys steel & stainless steel plants of India

Shriram Alloys can offer an extensive range of products and services, and are committed to meet individual customer needs for product specification, delivery performance and technical assistance.

#### **Quality Policy**

It is the policy of Shriram Alloys to distinguish itself as the industry leader by building value, being world competitive and providing cost-effective quality products and services to its valued customers.

sanitary ware, plywood, shoes industry and many more. The products are preferred for their superior performance, better surface finish and price advantage. The quality, competitive pricing and services make Punjab Abrasives Ltd. the preferred prime vendor to some of the leading industrial houses in the country.



Abrasive Products

Punjab Abrasives Ltd. also manufactures special purpose machines for polishing and grinding automation. Details of products and operations is available on the website  $\underline{www.punjab-abrasives.com}$ .

**Contact**: Mr S.S. Aurora, Punjab Abrasives Ltd., 516 Phase 9 Industrial Focal Point, Mohali, Punjab, Mobile: 09814108034, Factory Phone: 0172- 6577516 / 2211243, E-mail: punjab abrasives@eth.net, Website: www.punjab-abrasives.com

Shriram Alloys are committed to provide exceptional customer value through:

- · Superior quality and service
- · Continuous improvement
- · Trained, skilled and motivated manpower
- On-time delivery & defect-free products and services

#### Infrastructure

Shriram Alloys are committed to implement measures aimed at achieving greater levels of customer satisfaction and quality. It has an in-house enterprise management system to make sure all business processes run smoothly and efficiently.

In response to the diverse customer requirement, Shriram Alloys has put in place a high quality logistical setup to provide its customers on-time delivery of goods in best possible condition. It has all quality systems and certifications in place and one can deal confidently with assured quality products & services.

#### **Corporate Governance**

Shriram Alloys respects and complies with each and every Law or regulation of its area of business in maintaining a true and fair business environment. An Internal Audit Department monitors the sanctity of all business activities and reports of any significant findings to the senior management. The committee meets quarterly to review the audit observation and suggest corrective actions. This code of conduct applies to all directors, officers and employees of Shriram Alloys.

#### Contact

Mr Govind Kabra, Proprietor, Shriram Alloys, C-1, Ambabari, Jaipur – 302 023, Tel: 0141-2336241 / 2336527/ 3110802, Fax: 0141-2336807/2337980, E-mail: <a href="mailto:shriramsteels@gmail.com">shriramsteels@gmail.com</a>, Website: <a href="https://www.shriramalloys.com">www.shriramalloys.com</a>

#### Steeled against the elements



Dark gray colored stainless steel tile roof in the Bahamas. After a direct hurricane hit at 160 miles an hour (256 Kmph), this roof suffered only a minor damage as can be seen in the picture above. All of the surrounding homes lost their roofs. This is a living proof of the capability of stainless steels to resist calamities. In Japan, large stainless steel storage tanks for water have been made to withstand earth quakes to ensure water supply to the stricken people.

Ref: Ms Catherine Houska, Consultant, NI

#### ISSDA Members' List: visit www.stainlessindia.org

#### I PRIMARY MEMBERS

Adhunik Metaliks Ltd Ambica Steels Ltd Chandan Steel Ltd Facor Steels Ltd

India Steel Works Limited (formerly

know as - Isibars Ltd) Jindal Stainless Ltd Laxcon Steels Ltd Modern Steels Ltd Mukand Ltd

Panchmahal Steel Ltd Rimjhim Ispat Ltd Shah Alloys Ltd Shyam Ferro Alloys Ltd Soni Ispat Ltd

Stainless India Ltd Steel Authority of India Ltd (Alloy Steels Plant + Salem Steel Plant)

Sunflag Iron & Steel Co Ltd Twenty First Century Wire Rods Ltd Valley Iron & Steel Co. Ltd Viraj Alloys Ltd

#### II PRIMARY MEMBERS-**INTERNATIONAL**

Arcelor Stainless India Pvt Ltd Outokumpu India Pvt Ltd

#### **II ASSOCIATE MEMBERS**

Aditya Forge Ltd Ador Welding Ltd Ampi Agencies Pvt Ltd Anand Arc Electrodes Pvt Ltd Apex Tubes Pvt Ltd Architectural Division - JSL Arm Innovations Artech Welders Pvt Ltd Autonix Auto Industries Pvt Ltd Bansal Wire Industries Ltd Batliwala Process Engineering BHP Billiton

Bhandari Foils & Tubes Pvt Ltd Bhansali Bright Bars Pvt Ltd Bharat Earth Movers Ltd Bhiwadi Metal Rollwell Pvt Ltd Bizcon Business Consultants (I)

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Neel Metal Products Ltd New Era Industries

Nevatia Steel & Alloys Ltd

Nuclear Fuel Complex

Ozone Overseas Ltd Pheonix Appliances Pvt Ltd

Prakash Steelage Ltd

Punjab Abrasives Ltd Quality Foils (I) Ltd

Raajratna Metal Industries Ltd

Rahul Industries Rajlaxmi Industries

Rajendra Mechanical Inds. Ltd Rail Coach Factory, Kapurthala Rampra Steel Industries Pvt Ltd

Ratnamani Metals & Tubes Ltd Ratnesh Metal Industries Pvt Ltd

Real Strips Ltd Ruby Steel SKM Steels Ltd

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#### **IV ASSOCIATION MEMBERS**

Indian Ferro Alloy Producers' Association Institute for Steel Development & Growth Nickel Institute Stainless Steel Rerollers Association