

# ALL INDIA INDUCTION FURNACES ASSOCIATION



# AIIFA

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## What's Inside

- Circular Economy of Steel & Benefits of IF Steel Making Units
- Steel Sector News



हमारे सभी सदस्यों को  
बसंत पंचमी की  
हार्दिक शुभकामनाएँ

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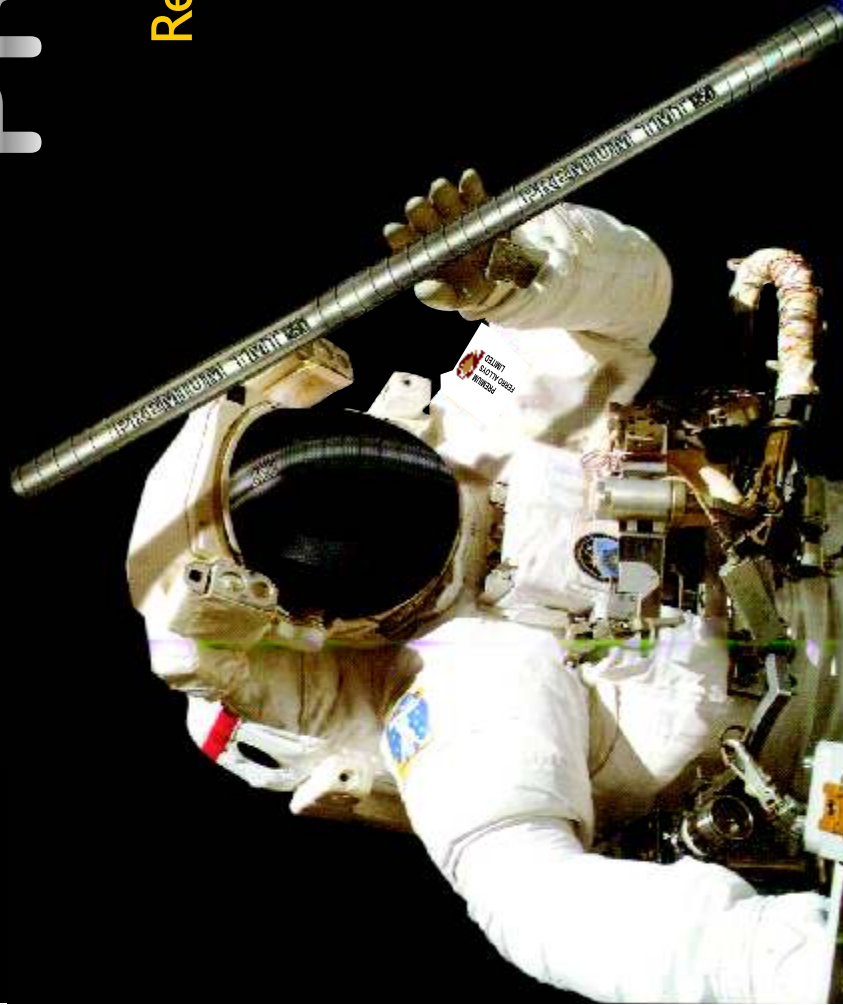
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ENVIRONMENT FRIENDLY STEEL

# धन्यवाद पत्र



श्री नरेन्द्र मोदी  
(माननीय प्रधानमंत्री)



श्री धमेन्द्र प्रधान  
(माननीय इस्पात मंत्री)

वित्त मंत्रालय द्वारा बजट 2021-22 में स्कैप पर आयात शुल्क घटाने की घोषणा की गई। इस उपलक्ष में सैकेण्डरी स्टील सेक्टर की ओर से आपको हार्दिक धन्यवाद देते हैं।

यह पहल राष्ट्रीय इस्पात नीति 2017 के लक्ष्य को पूरा करने की दिशा में सैकेण्डरी स्टील सेक्टर के उत्पादन को प्रोत्साहित करेगी।



**ALL INDIA INDUCTION FURNACES ASSOCIATION**

# Circular Economy of Steel & Benefits of IF Steel Making Units

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Srikumar Chakraborty, Consultant*

**Introduction:** In the present competitive global market, Indian mini steel plants try to conserve inputs as best possible ways driving resource efficiency of raw materials, manpower, operational excellences monitoring cost in each area minimizing any rejection or wastage in the process following lean process and circular economy model. This encourages total process more efficiently with fuller utilization of resources which are the critical need of the hour to address the acute resource shortage confronting the country. Steel is the only major material group in the world today that can meet tomorrow's challenge of a fully circular economy due to its high recyclability almost without any loss, whereby 85-90% of steel products are recovered at their end of life and recycled to produce new steel. Use of resources in steel industry has tripled since 1970, and could double again by 2050 if steel and steel related continue business as usual. Steel industry must urgently work to create a circular economy where waste and pollution are designed out, products and materials are kept in use, and natural systems are regenerated – leading to a more resilient economy.

**Scrap as Basic Raw Material :** Induction furnace produce steel only by melting ferrous scrap or scrap substitute so better scarp will produce better quality steel in economical way having a lesser negative impact on the environment compared to other steel making processes. This process records reduced emissions of gas, smoke, dust with greater control and produce steel in cleaner ways which will be the growing need of future.

In the long run, electric furnaces steel making process will have to replace basic oxygen furnaces [BOF] if we want to embrace the green footprint set by the Green New Deal. Let us stress that steel scrap from recycling saves about 58pc of CO<sub>2</sub> emissions and 72pc of energy consumption compared with the production of primary steel, and that Electric furnace can use up to 100pc of scrap to manufacture steel.

Scrap has a higher metallic iron value and a lower gangue/oxide content compared to DRI. This results in higher yield of liquid steel from scrap than DRI. Simply speaking, one tonne of scrap yields more liquid steel compared to one tonne of DRI. This will give the secondary steel producers the option of increasing the proportion of scrap in their charge mix, thereby reducing the overall metallic raw material cost. Increased scrap usage percentage in the charge mix will proportionately reduce production costs – viz. power cost etc. – as more steel scrap replaces DRI in the metallic charge mix for IF steel producers.

**Scrap Recycling:** Recycling ensures that the value of the raw materials invested in steel making lasts far beyond the end of a steel product's life, and that the steel remains a permanent resource for society. Current global steel production is three times higher than supply of available scrap, nearly all steel is recycled (87-90%), but even by 2050 scrap supply only will make up around half of the projected demand for steel (Global Scrap Supply Report- Pauliuk et al & Milford et al.). However, expectation is to reduce carbon footprint by using more scrap and yet virtually all available post consumer scrap is already being recycled, there is no

global carbon benefit from encouraging steel production to use more scrap, If more steel products become obsolete, can world produce more recycled steel.

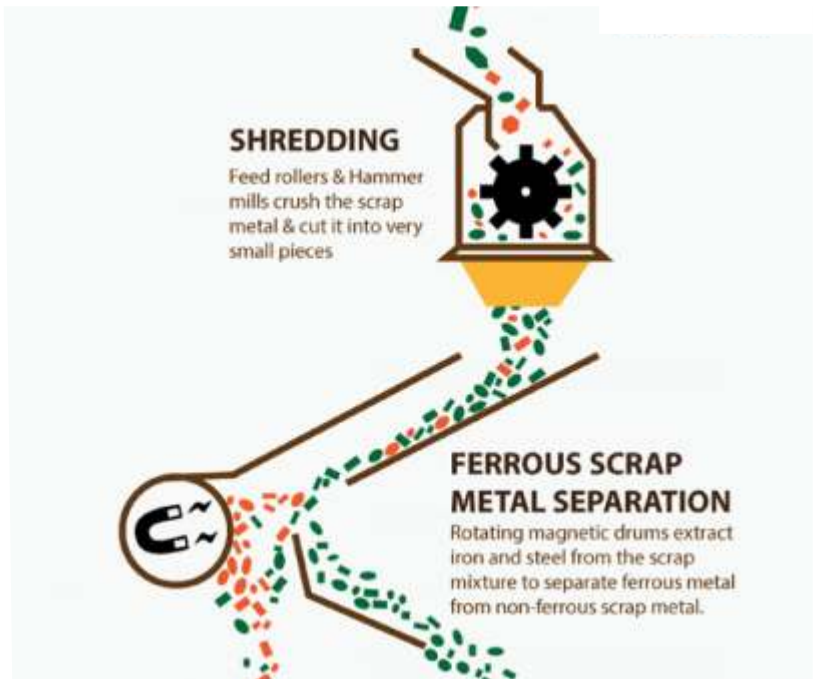
Industries engaged in the activities of scrap recycling are playing the key role in transforming this post-production scrap into new material that can be used to create steel. Scrap metal recycling for both the environment and the economy. The growth in industrial scrap is a key component of its success. Most metals are infinitely recyclable—they can be recycled over and over again without losing any of their properties. That means scrap metal can be repeatedly transformed into new material

suitable for manufacturing and construction. In the traditional steel making route BOF process of turning ore into usable material requires significantly more energy consumption than recycling.

The recycling process is not just recovery of steel and other ferrous material from discarded automobiles, white goods, industrial and domestic items, it is also about enriching the recovered ferrous material by getting rid of rust, soil and other unwanted materials that cling on to the steel. The process of shredding and shearing cleans up the steel scrap as well. It is a huge benefit that steel makers particularly electric furnace look for with a discerning eye. Around 1,000 kg of clean steel scrap can replace about 1,107 kg of coal-based DRI because of its higher metallic iron content. It can also save natural resources that are consumed in DRI production.

Being one of the world's leading steel economies, India is already now one of the largest markets for vehicles. The amount of passenger cars in India is expected to grow rapidly in the next few years. While new vehicles continue to flow in as the economy grows, India is facing the challenge of getting old vehicles off the roads. The metal recycling market in India is thus driven by the country's urgent need to organize the recycling sector. This entails meeting the demand for automated and faster methods of processing scrap as the country develops its capabilities and economy. At the same time, the waste import bans in China have resulted in the U.S. and Europe finding a more established market in India (CISA). A lot of scrap—both ferrous and non-ferrous—now comes in from Europe and the USA. Sustainability and climate change are increasingly being focused on by the various states and central government in India.

In 2019, Tata Steel launched its initiative to build India's first steel scrap recycling plant with a shredder and a downstream separation units which has the beginning of a very interesting time for the whole metal recycling industry in India helping induction furnace steel making units particularly in northern zone. Govt. has started to limit the life of commercial vehicles to a maximum of 20 years, private cars being left out of the legislation for now which indicates the amount of metal scrap will increase, opening opportunities for those who are able to handle and reprocess the material efficiently.



In the context of secondary steel makers in India, who rely heavily on scrap and coal-based DRI, full utilization of available and prospective steel scrap sources in the country is therefore of utmost importance. The increased usage of steel scrap will benefit the steel makers with lower energy consumption, lower flux consumption, lower CO2 emission, etc. Natural resources of the country, namely iron ore, coal, limestone, etc are also conserved to the extent that scrap replaces DRI (India is a major production centre for coal-based DRI). However, it may be highlighted here that DRI will always have its rightful place and importance as a raw material for steel making.

Commercially, the country will save foreign exchange due to proportionate reduction in imports of scrap and non-coking coal. The infrastructure for scrap recycling in the country is still at its infancy. A major drive is required to develop and modernize it. There is a requirement of capital investment for establishing the supply chain of scrap recycling which will also generate employment in the country. Entry of the organized players in this sector would streamline the currently unorganized scrap supply chain by making available quality processed scrap, enhance transparency and lower the dependency on imports. It would enhance the traceability and statutory compliances. Organized players will bring about mechanization in scrap processing through state-of-the-art plants and equipment like balers, shredders, shears, material handlers etc. This will reduce manual operations and ensure safe work environment for the workforce. The resulting high quality scrap will help satiate long-standing demand for quality scrap by EAFs/IFs/foundries.

Reputed scrap suppliers sources build robust scrap recycling software at their recycling station offering their focal attention to streamline scrap recycling operations in achieving gain good mileage out of scrap recycling process which is designed to guide the recycling unit to perform all relevant tasks with ease, and to save time reducing cost in the bargain. The recyclers can gain control over several aspects of their trade, where the tool enables recycling units to manage customer relations, manage selling and procuring processes managing inventory levels among other significant components of this business.

### Equipment Recycling Rate & Life Span

(Source: Data mentioned below from study of Arcelor Mittal.)

Items/ Equipments	Recycling Rate	Life Span-Year
Vehicle	95	20
Industrial Equipments	97	60
Claddings	85	40
Reinforcement Steel	50	50
Infra-Structure	80	60
Structural Steel	95	50
Packaging	60	1
Appliances	95	14
Others	85	20



**Scrap Availability Status:** India has emerged the world's second largest scrap importer toppling South Korea even as the country is in the process of drafting a comprehensive metal recycling policy. Govt. of India has taken up the issue with various sectors including steel, automobile, construction and white good etc. seeking their views on the draft metal recycling policy released early 2019. It is also the view of industries that Indian system of generating scrap is not geared up for consuming internal scrap. India's first legal car-shredding operations will begin soon to generate shredded steel scrap but this additional material will not prevent a rise in the volume of the country's scrap imports after 2019, according to Metal Bulletin Research. .

The Indian scrap market is highly unorganized and fragmented where operations are mostly manual strictly based on safety and environmental issues. The long and complex supply chains employ more than 1 million workers who are not in the social security ambit. The scrap changes multiple hands with little or no value addition. The resulting scrap is of low quality and low value-add. Imports are an option which entail long lead times, higher costs and loss of crucial foreign exchange. Despite being a ~USD 10 billion industry (and it is expected to grow @ 7% y-o-y), the sector does not have an industry "status" and lacks a robust governance framework.

Classification of scrap is considered mainly according to its source and distinguished from steel plants hot or cold working units. New scrap is generated during the initial manufacturing processes when composition of scrap is well known and do not need pre-treatment during melting except sizing. Old scrap is collected after a use cycle, either separately or mixed, and it is often contaminated to a certain degree, depending highly on its origin and the collection systems used. Another way to classify scrap sources is according to the products in which the metal was used before it became a waste. The main iron and steel scrap sources in this sense are vehicles (including ships and aeroplanes), metal products for construction, machinery, electrical and electronic equipment and packaging.

Tata Steel Group, one of the top global company with annual capacity of 27.5 MT(milion tones) operating steel business in 26 countries with their commercial presence in over 50 countries has teamed up with one industry (Ludhiana based) to put up first scrap recycling plant in Haryana (Rohtak) with a capacity of 5 lakh tonne/year in concept of BOO (Built, Own, Operate) with a total investment of about Rs 150crores which will be coming in production by mid of financial year 2021-22. This unit will provide support to scrap based steel making units which has current demand of scrap 30MT with 5MT import every year generated from ship breaking, auto and construction sectors but availability of clean scrap is at very low level.

**Scrap Quality:** Physical property, density and size of scrap are the not important factors for the acceptability in electric furnace steel-making process. In the case of scrap in the form of vehicle or equipment or appliances are characteristically bulky, the volume must be reduced to achieve the maximum density possible, though simply crushing the scrap vehicle is unacceptable. This would make it necessary for the car to be taken apart manually before it is baled. High wage costs would make the outlay on preparation unacceptably high.

Scrap quality i.e. chemical composition is also the limiting factor for increased scrap use. Certain types of scrap contain high quantities of un-tolerable trace elements as high-quality or even low quality steel requires a low trace element content specified in National & International standards. However, in the current practice, scrap used for lower quality steel grades, such as reinforcement bars may allow certain percentage of trace

elements.. However, electric induction furnace steel producers are gradually moving toward the production of higher quality products of both lean alloy, medium alloy, high alloy grades as well as high strength low alloy grades (HSLA). In the longer run, declining steel scrap quality and increasing steel quality may pose serious challenges for recycling.

The lower the scrap quality, the lower the yield along with variation in physical properties from standards and thus the higher the energy requirement per ton of desired output in specific grades. Since prompt scrap is a waste product of the industry itself and does not replace raw material inputs, increases in prompt scrap use or quality will not noticeably improve energy efficiency. Only expansion of obsolete scrap use can lead to an overall reduction of energy requirements to the extent that obsolete scrap substitutes for steel production from ores. To increase productivity when using scrap and to replace high-cost electric energy with lower cost fuels, some electric furnace have adopted scrap preheating before furnace charging. Scrap usage in steel making also has its limitations. When compared to pure and fresh steel manufacturing, steel manufacturing from scrap leads to variations in its quality due to the presence of other metals in the input not specified as trace elements which can not be completely removed during steel melting and influence the final quality of the steel produced. For example, presence of copper, usually coming from obsolete vehicle, in steel scrap beyond a minor percentage of weight creates problems in the processing of the final alloy leading to the cracking of steel surface during the hot rolling process. Such steel are normally made as basic low grade products like bars and rods. These are utilized in the construction and infrastructure sector as the demand from these sectors can accommodate a low-quality of steel.

Further, high-quality steel products like forgings, bars, flats, plates and coils require high-quality feed inputs as raw material for subsequent production of finished items. The demand for low-quality steel products is currently the highest in countries where the infrastructure and construction sectors are growing rapidly. This primarily puts emerging and frontier economies as the highest demand sources for these grades of steel. A high-quality steel is used to manufacture durable goods and capital goods, which distributes its demand globally, generally, based on the dynamics of consumption and economic growth in a country. It has been observed that among the great leaders, world witnessed a downturn in the Chinese economy, which claimed another unwitting victim – the scrap metal industry. Thus, the US started looking for new markets for their scrap metal, as iron ore prices were falling continuously.

As China's demand fell, its eyes turned to the one place with enough population and development to fill that gap in India. Indian metal scrap generation is still at very low levels, and rules for minimum recycled content in products would help to stimulate greater scrap volumes across the country. However, country's scrap sector should be considered an essential industry. The circular economy in this line intends to keep materials and products in use as long as possible by reducing waste in following three common practices - First, plants need to rethink how they design and carry out operation in steel making and shaping, Second, plants may need to change how they interact with their suppliers and customers, Finally, in order to realize the full potential of the circular economy, plants may need to collaborate more with peers both inside and outside of their own plants..

Not only does scrap metal recycling create environmental benefits, it also reaps economic benefits because the recycled materials are significantly less costly for manufacturers to use. Right measures need to be taken in steel industry in a highly efficient and innovative ways fully control over the supply and operational aspects to ensure guarantee on quality, productivity and profitability of steel making and shaping industry. Long term

growth of industry depends on built on two foundations: innovation, and recognizing steel's central role in the circular economy which includes the production, consumption, re-use and recycling of materials (**below**

		
<p>Scrap Recycling</p>	<p>Scrap from Ship Breaking</p>	<p>Scrap from Auto Shredding</p>
		
<p>Scrap Recycling</p>	<p>Bailing of Scrap</p>	<p>Scrap Shredding</p>
		
<p>Shredded Scrap Separation by Different Processes</p>		
		
<p>Mill Return Scrap</p>	<p>Machine Shop Scrap</p>	<p>Scrap from Rly Products</p>

Innovation in the process means continuous improvement in efficient ways both process and product involving supply chain management and customers who can guide for improvement. At the same time, domestic steel units put continued efforts to reduce impact on the environment and find new and beneficial uses for by-products as the second foundation for the future of plant as circular economy. Because of unique properties and industrial use and also 100% recyclability, steel is economically best fitted in the closed loop approach of the circular economy projecting industry's wider value to society. The tightening of environmental laws in industrialized countries, as well as the cost of waste management and disposal, has escalated issues in the developed economies.

**Undesirable Elements in Scrap:** Scrap metal recycling industry, a global industry recycling scrap into a usable feed material for creating newly manufactured products, at the end of life of raw material used, often, face problems of tramp elements in ferrous scrap as the same pose problem for steel product manufacturers. Recycling may not be able to control the amount of undesirable elements that show up in the recycling process as such they use handheld analyzers like XRF (X-ray Fluorescence) for element analysis providing guarantee for quality of scrap.

With growing concerns about the occurrence of tramp elements in incoming raw materials as recycled scrap metal use increases, and the catastrophic effect tramp elements can have if they change the overall composition and qualities of the final product, manufacturers are becoming more diligent in inspecting all incoming metals to ensure they meet the specifications.

Determining the purity of metal and percentages of any alloying elements present is a very important quality control step for both the scrap metal recycler, steel makers and manufactures of products to satisfy customers with specified composition and properties. In the competitive environment, if a scrap recycler fail to verify their material shipments as per standard, they could potentially lose business, and drop out of the industry "without a trace."

**Recycling of Steel in China – the Global Leader :** The use of IF for steelmaking has been banned by steel producing giant China since 2017 ostensibly on the ground of more pollutive process and producing substandard steel products (CISA Report). The combination of scrap policies seems to have been put in place to support increased electric arc furnace (EAF) steelmaking capacity being put in place in China. The EAF method is gaining favor both because China is generating more of its own ferrous scrap, and as a way to phase out integrated production as China tries to lower its carbon emissions level. Emissions of major pollutants are high and environmental pollution is still serious in China. In recent years, the country's environmental situation has continued to deteriorate.

Many steelmakers intend to import as much as 1 million metric tons of ferrous scrap in 2021. Before the Chinese government began restricting scrap imports, it often turned to suppliers from Japan and Australia, and is likely to do so again. Ferrous Division of the Brussels-based Bureau of International Recycling (BIR) has indicated as Japan exported less than 7.7 million metric tons of ferrous scrap in total in 2019 while Australia exported about 2.3 million metric tons. That same year, China was not even among the world's 12 largest importers of ferrous scrap. Whether Chinese mills buy ferrous scrap off the United States Pacific Coast or not, the increased presence in the global market will likely place additional upward price pressure on ferrous scrap in 2021. Ferrous scrap prices in the U.S. closed out 2020 with an \$80 per ton increase.

Scrap trader and consultant says a large-volume re-entry of China into the global market "is not good news" for steelmakers, "as it will create a shortage of scrap amongst the current pool of scrap buyers." As a result it will

push scrap prices further up and also usher in higher steel prices. As goes scrap, so goes steel. However, unprocessed scrap will not be permitted for import. This feedback procedure is one of the final and most significant steps before China issues custom codes and allows imports of ferrous and stainless scrap that falls within the new standards. If the timeline for the ferrous standards mirrors that taken between the time it took China to reclassify non-ferrous scrap as recycling material and launch the new import policy, China would potentially allow ferrous scrap imports in the final quarter of 2021.

But the swiftness with which the scrap standard development has progressed in the past month has created the potential for a faster roll-out of new specifications, particularly now that the non-ferrous standards are already in place. Impact of new steelmaking facilities on net capacity to slow as relationship between new and replacement tons becomes closer. Electric arc furnace development to ease as market share left by removal of induction furnaces in 2017 has mostly been covered

S&P Global Platts (Ref) estimates China's crude steel capacity reached 1.21 billion mt/year in 2019, of which around 155 million mt/year was electric arc furnace or EAF steelmaking capacity. Net crude steel capacity expansion reached 42 million mt/year in the year, but is set to slow to 14 million mt/year in 2020. From 2023, China's crude steel capacity will gradually stabilize. However, some market sources suggest China's EAF steel capacity has reached at least 185 million mt/year as a number of induction furnace steelmakers transformed into EAF steelmakers over 2018-2019 -- induction furnaces were largely removed by mid-2017 on government orders. Technically, these new EAFs are illegitimate, and may not be accounted for in official statistics, market sources said.

Nonetheless, China's EAF capacity expansion will largely slow from 2020 as the market share that was freed up by the removal of induction furnaces in 2017 has already mostly been taken up by new EAF capacity. Chinese steel capacity has been expanding due mainly to three factors: Replacement of long idled capacity, improved technology and unapproved expansions. Firstly, part of the old capacity that steel companies had to shut down before they could build new capacity of a similar size had already been idled or closed long before 2019. Therefore, some of the new facilities that have come on stream from 2019 have added to net capacity. Last year, 34.96 million mt/year of new capacity was commissioned, replacing 34.54 million mt/year of "old" crude steel capacity. But Platts estimates that some 32.71 million mt/year of that old capacity was closed long before 2019, leaving a net capacity expansion of 33.13 million mt/year.

This kind of expansion will largely slow down from 2020 as most of the old capacity targeted for closure in 2020 is still in operation. Secondly, capacity has expanded due to improved iron and steelmaking technologies, as well as from sales of capacity quotas to more efficient and advanced mills from less advanced mills. New iron and steelmaking facilities are generally around 10%-25% more efficient in terms of production per cubic meter than old ones, according to market sources. Moreover, market sources said some of these new facilities are in fact larger than their approved capacity, leading to a third kind of expansion.

**Conclusion :** The steel industry is an integral part of the global circular economy where final products are manufactured from raw materials and then discarded at the end of their useful lives as part of circular business models where intelligent design leads to products being repaired, reused, returned and recycled ,4Rs (World Economic Forum ). It rebuilds capital in the form of ways like financial, manufacturing, human, social or natural enhancing the flow of products and services optimizing well allocation and resource efficiency in a competitive ways. The circular economy ensures interplay between environmental, social and economic factors.

Mini steel plants producing alloy & special steels has the powerful leverage arising from long value chains across a range of economic activities in industries like Transport & Shipping, Rlys, Construction, Automotive, Defense & Aerospace, Engineering & Manufacturing, Aeronautics, and Electronics. Circular economy encourages electric furnace steel makers and their products to take discarded or rejected materials for remaking or reselling after necessary conditioning or treatment coming out from economic dead struggling with raw material costs and volatility in business.

# STEEL SECTOR NEWS

## Indian iron & steel industry performance in Jan'21 - Roundup

### \* Indian iron ore prices soften as domestic supplies improve

Domestic iron ore supplies in India are seen improving with auctioned mining leases in Odisha raising their output. Odisha's iron ore production increased by 10% m-o-m to 11.4 mn t in Dec'20. Also, India's largest iron ore miner – NMDC recorded a y-o-y increase of 16.7% in output to 3.86 mn t in Jan'21 which is company's highest ever January production since inception. In another major boost to supplies, Karnataka Government could be soon extending NMDC's Donimalai iron ore lease for 20 years, now that the PSU has agreed to a provisional 22.5% premium.

SAIL sold 700,000 t of iron ore through auctions in the merchant market in Jan'21 from its captive mines. State owned- OMC booked nearly 1 mn t iron ore lumps in Feb'21 auction, registering decline in bids by upto INR 2,200/t against Dec'20 auction.

Monthly average of SteelMint's benchmark Odisha iron ore fines (Fe 62%) index fell by 2% m-o-m in Jan'21 to INR 6,030/t ex-mines (inclusive of Royalty, DMF & NMET). Market expects domestic iron ore prices to fall further in the near term.

### \* Indian pellet makers relieved over unchanged export duty structure

Indian Govt. has kept duty structure unchanged in the 2021 Budget. Export duty on pellet and low-grade iron ore fines (less than Fe 58%) continues to remain nil. Domestic pellet trades remained limited on sharp decline in sponge prices and preference to iron ore lump. Domestic pellet offers observed a sharp decline in 2nd half of Jan'21. Thus, pellet makers are likely to remain active in export market post Chinese holidays in Feb'21.

### \* Customs duty reduced by 1.5% on coal imports

Indian Government has cut BCD on coal imports from 2.5% to 1%. However, it has also introduced AIDC (Agriculture Infrastructure Development Cess) of 1.5% on imported coal (to be charged on CIF value of

imports), having negligible impact on the imported cost of coal. AIDC is not applicable on coal imports from Indonesia under a free trade agreement.

#### **\* Removal of customs duty on ferrous scrap import yet to boost trades**

In a welcome move, import duty on ferrous scrap was removed in the Indian budget presented on 01 Feb'21. The duty, that had been set at 2.5%, has been exempted up to 31st Mar'22. This is expected to cut down the landed cost of imports roughly by around \$10. However, it is yet to boost imported scrap trades in India as buyers were seen preferring domestic substitutes – scrap & sponge iron. Although imported scrap prices in India have fallen by ~\$70 m-o-m in Jan'21, trades have remained subdued.

Also, a voluntary vehicle scrapping policy has been announced, to phase out old and unfit vehicles. Vehicles would undergo fitness tests in automated fitness centers after 20 years in case of personal vehicles and after 15 years in case of commercial vehicles.

Around 90 ship recycling yards at Alang in Gujarat have already achieved HKC-compliant certificates. Efforts will be made to bring more ships to India from Europe and Japan. Recycling capacity of around 4.5 mn LDT will be doubled by 2024, Finance Minister announced in the recently presented budget.

#### **\* Spot steel prices move south on poor off take**

SteelMint's price assessment for sponge iron & billet has narrowed down since the second week of Jan'21. The downtrend was on account of limited demand as well as improved supply.

Sponge iron supply has remained strong with smooth movements of raw materials. Also, billet supply improved on lessening export inquiries and weak demand of finished products as most of hot charging plants started offering billets in spot market rather than finished products owing to piled-up stock.

As per assessment, sponge iron & billet prices fell upto INR 7,000/t (\$95) from second week of Jan to till 31st Jan'21. Following the constant drop in prices, the manufacturers margins (conversion spread) also dipped by INR 2,000-3,000/t, m-o-m, in Jan'21.

In context to finished steel, the rebar prices, produced through induction grade billets, have dropped by upto INR 7,000/t (\$95), as per SteelMint's assessment.

#### **\* Indian finished steel prices fall on demand-supply mismatch**

India's crude steel production was recorded around 9.9 mn t in Jan'21, up 1.9% m-o-m against 9.7 mn t in Dec'20, according to recent data released by Joint Plant Committee. However, demand in the traders/secondary segment has weakened on increased inventories resulting in a price drop in both flats and longs segment. SteelMint's benchmark HRC price assessment for Mumbai has come down by around INR 2,500/t. Similarly, for that of BF grade rebar price has fallen by INR 2,100/t, in Jan'21.

Custom duty on steel imports (including Flat Products of iron or non-alloy steel and alloy steel) was reduced to 7.5 % from 12.5%. However, there is no immediate impact expected of it in the market. We expect steel prices to remain under pressure in the short term.

Prices of key steel commodities -

## Prices of key steel commodities -

Commodities	Prices (in INR/t)		m-o-m change
	As on 30 Dec'20	As on 30 Jan'21	(in INR/t)
Iron Ore Fines (Fe 62%), ex-mines Odisha	6,150	5,900	-250
Pellex (Fe 63%), DAP Raipur	12,175	12,100	-75
Sponge P-DRI (FeM 80%) exw Raipur	25,700	23,500	-2,200
Pig iron (Steel grade), exw Raipur	35,500	32,800	-2,700
MS Billet (100*100mm) exw Raipur	39,550	33,900	-5,650
Rebar (IF grade, 12-25mm), exw Mumbai	47,600	42,200	-5,400
Rebar (BF grade, 12-25 mm), exy Mumbai	55,000	53,400	-1,600
HRC (2.5-8mm), exy Mumbai	55,250	55,500	+250

Iron ore prices are inclusive of Royalty, DMF & NMET

Prices are excluding GST

Source: SteelMint Research



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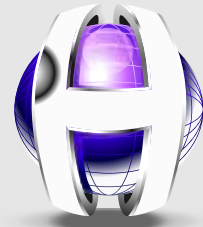


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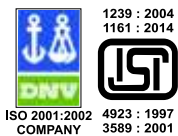
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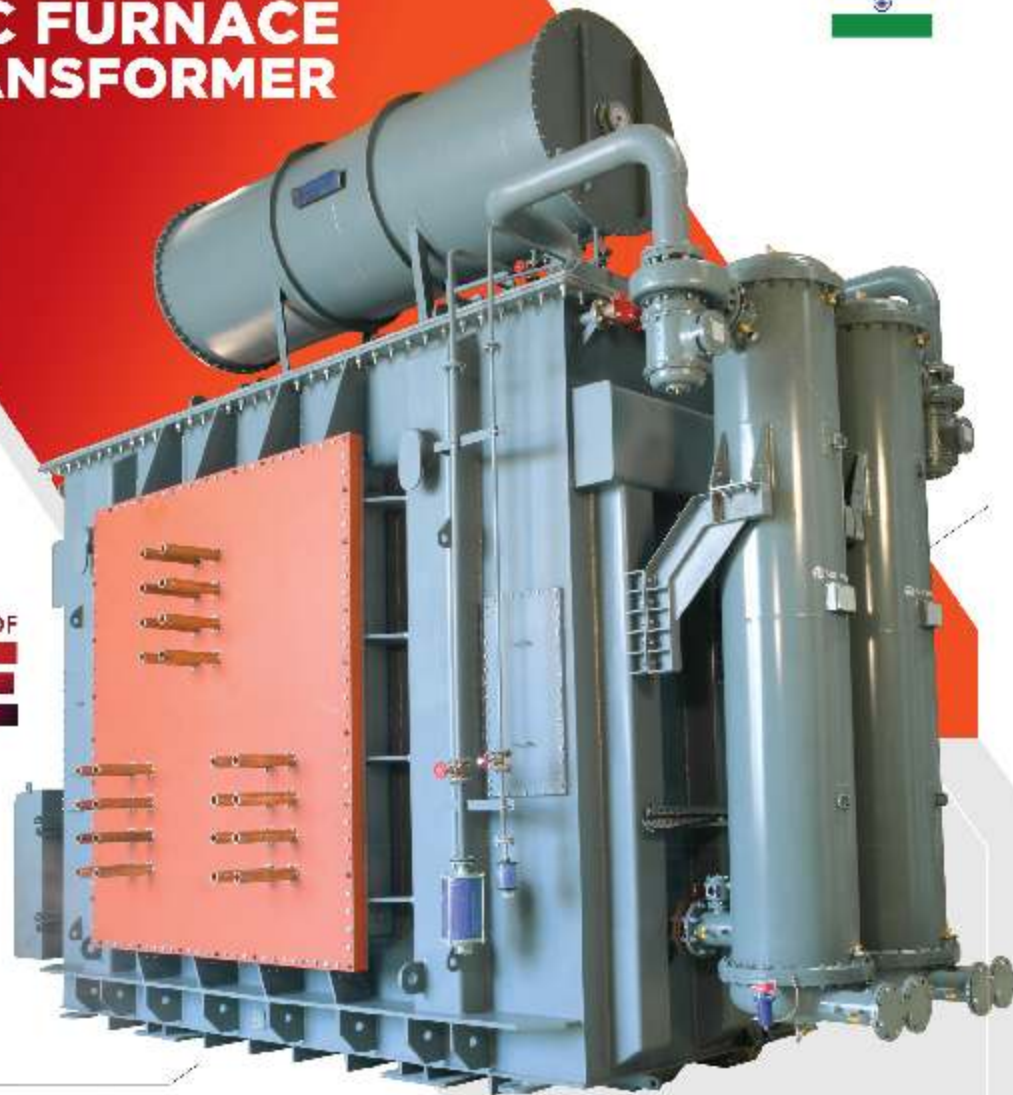


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## HANDBOOK ON INDIAN STEEL INDUSTRIES

(a directory of units producing steel through electrical route)

2020-21



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