



JINDAL STAINLESS  
**PASSIONATELY  
REDEFINING  
POSSIBILITIES**

# Various Applications of Stainless Steel

We supply Stainless Steel to over 32 industries in the country

Transport



Process Industries



Architecture & Buildings



Modular Kitchens



Railways



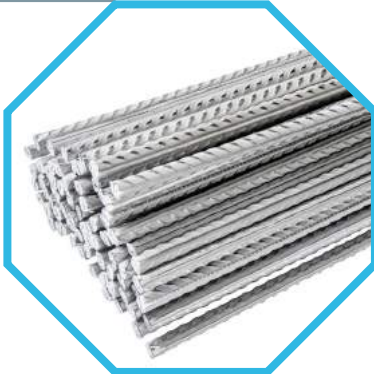
Footover Bridge



Gates



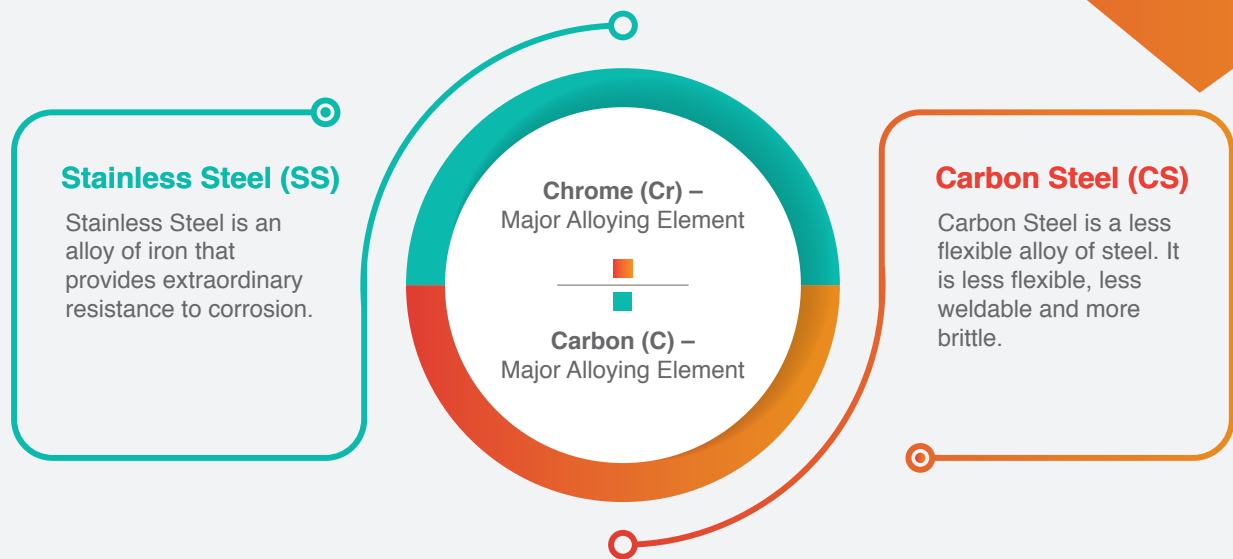
Rebars



Railings



# Steel Types

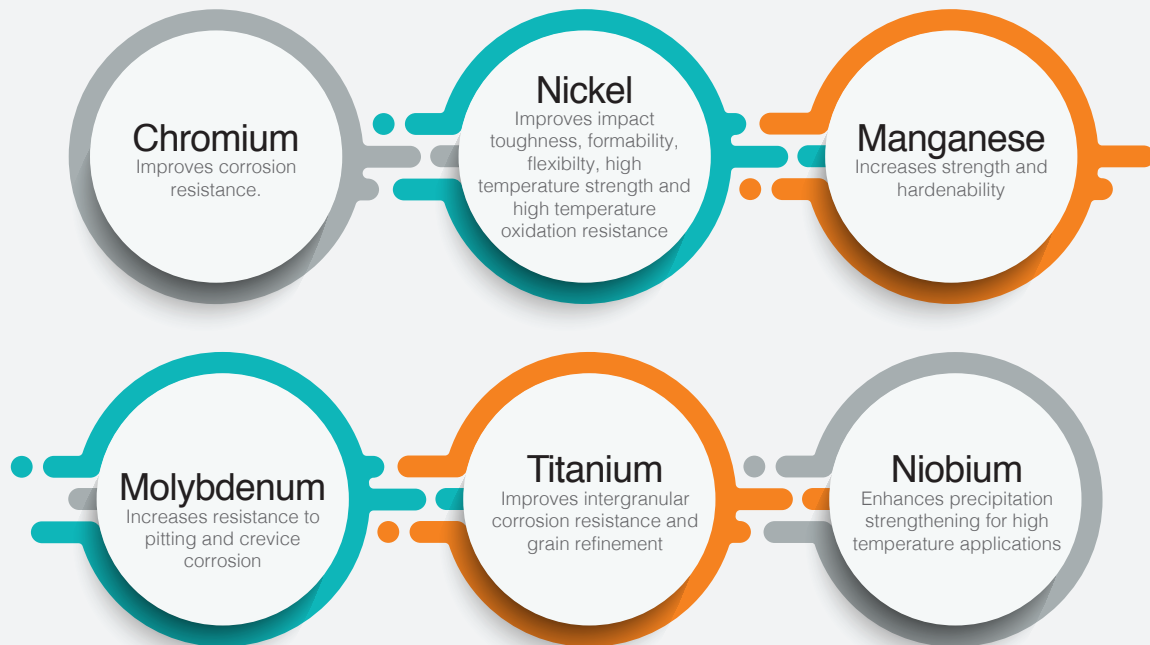


## Stainless Steel offers a great combination of strength and long life

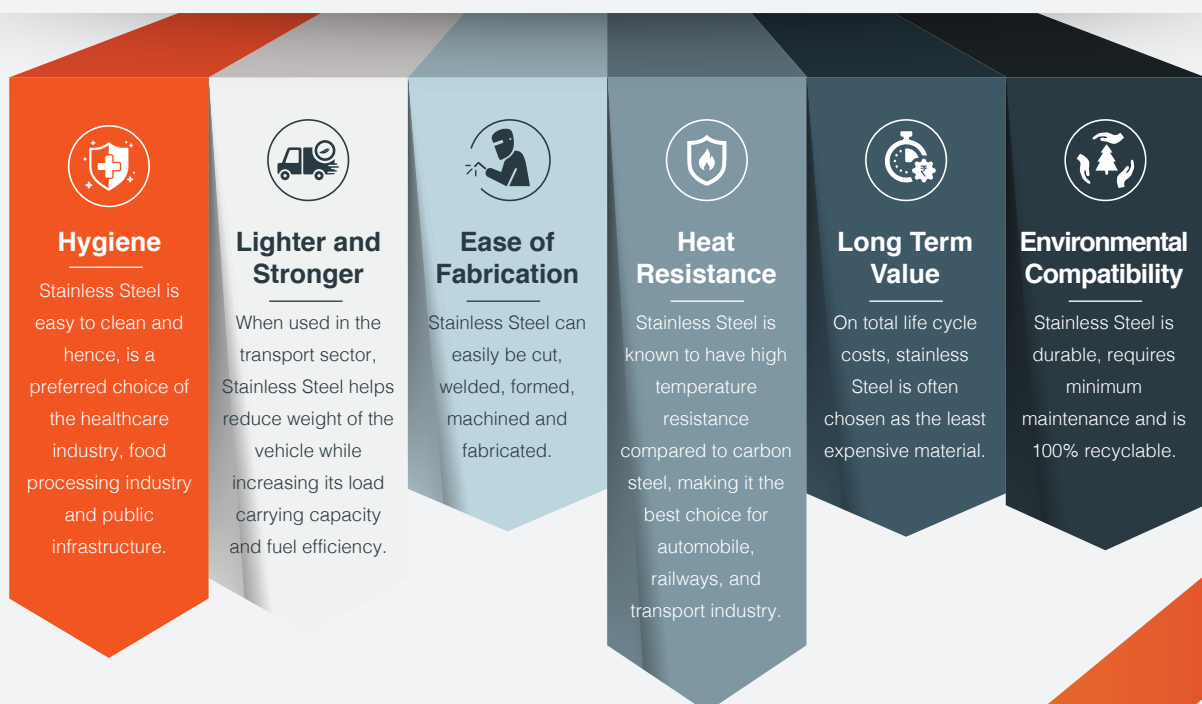
Stainless Steel	Key Parameters	Carbon Steel
Good combination of strength and pliability	Structural Strength	Pliability goes down when strength increases
Nil	Maintenance	High, frequently required
Much higher than CS (~5X)	Avg. Product Life	Less than SS (X)
Excellent	Hygiene	Poor (owing to corrosion)
Nearly 100%	Eco Friendly	Partially Recyclable
Excellent	Scrap Value	Low

Stainless Steel has a distinct edge over Carbon Steel and thus is preferred by the end users.

Stainless Steel also includes many elements in different proportions which provide their own unique characteristics to the alloy, making it an obvious choice. The various elements present in Stainless Steel are:

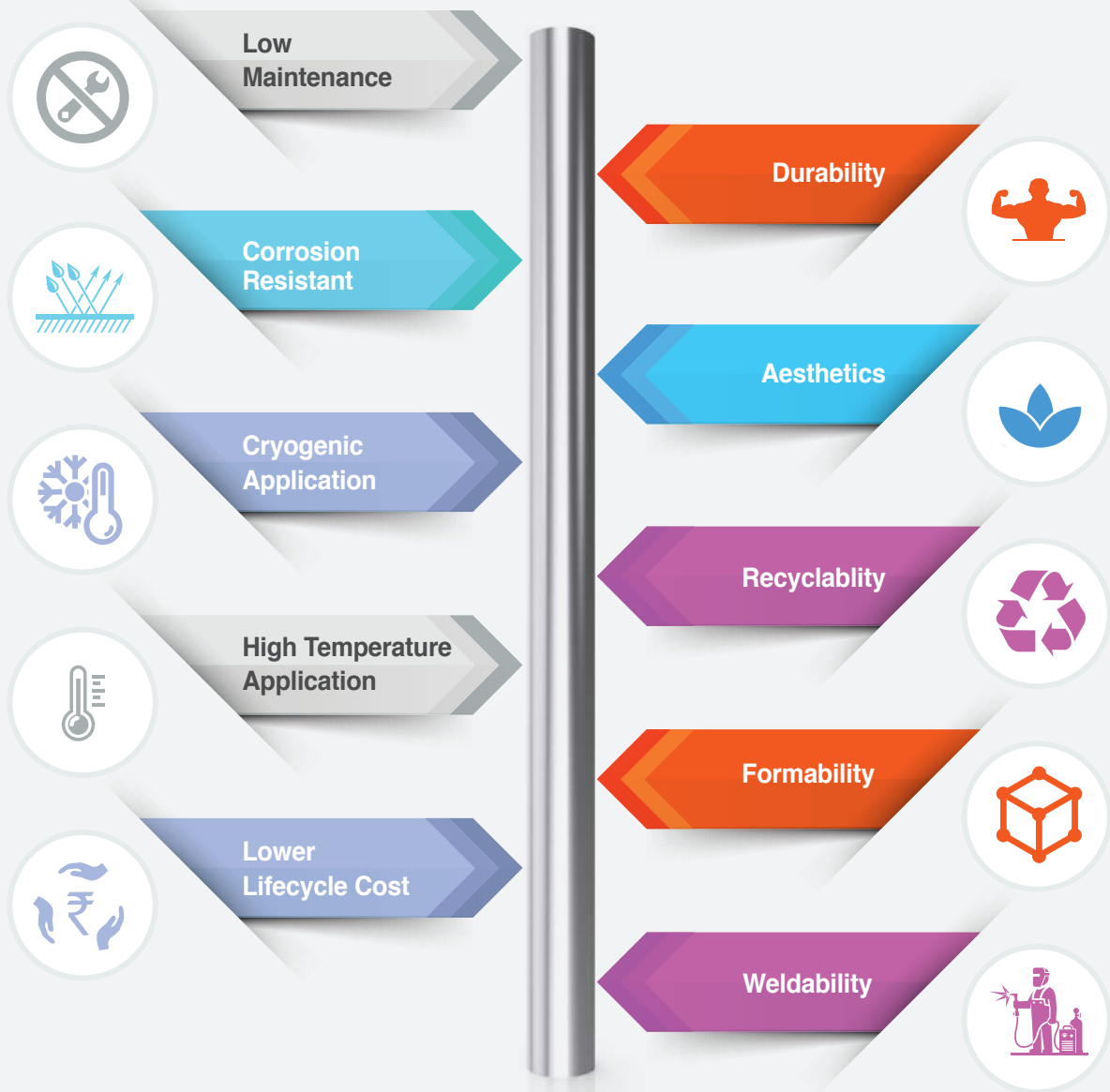


Due to the addition of a variety of alloying elements in it, Stainless Steel has diverse properties, apart from corrosion resistance. This allows the metal to lend itself for a variety of applications, making it a preferred choice across industries, and a clear winner over other alternatives.





# Unlock the potential of your idea with Stainless Steel



- Stainless Steel is one of the fastest growing value-added materials in the country.
- It is the most affordable material option when total life cycle costs are considered.
- It provides a modern and aesthetically appealing look.
- According to the Indian Stainless Steel Development Association (ISSDA), coaches made of Stainless Steel are stronger and can absorb more energy during collision. This ability to withstand impact reduces the chance of casualties during an accident. It's for this reason that Indian Railways is targeting to replace its carbon steel coaches with those of Stainless Steel.
- Stainless Steel contains at least 10.5% of chromium by mass and is generally produced in an electric arc furnace with other alloying elements such as nickel and molybdenum. These are added to achieve desirable properties of hardness, corrosion resistance, strength, machinability etc.
- Rest assured Jindal Stainless Steel never fails to fetch higher scrap value.

Depending on the alloying element used, Stainless Steel is broadly classified into different categories viz. 200, 300, 400, duplex and PH grades.

## An 'inside look' at the composition of Stainless Steel

Series	Series	Series
		
200	300	400
Chromium (Cr)* 13-20%	Chromium (Cr)* 16-26%	Chromium (Cr)* 10.5-25%
Nickel (Ni)* 1-4%	Nickel (Ni)* 6-28%	Nickel (Ni)* 0.5% Max
Manganese (Mn)* 6-11%	Manganese (Mn)* 2% Max	Manganese (Mn)* 1% Max
Copper (Cu)* 1-3%	Copper (Cu)* None	Copper (Cu)* None
Iron (Fe)* Remaining	Iron (Fe)* Remaining	Iron (Fe)* Remaining

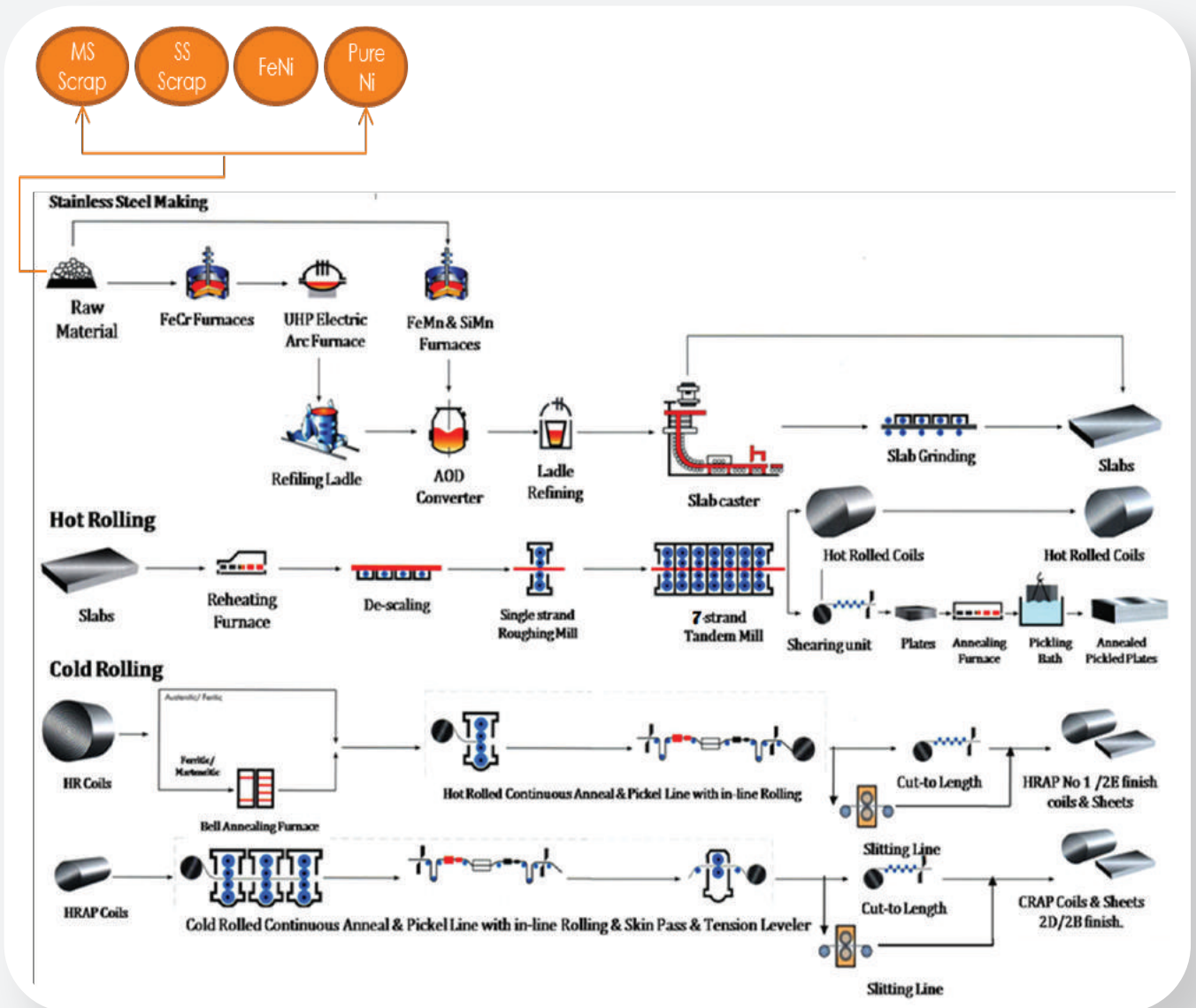
Source: Industry

\*Added to enhance the structure and achieve desirable properties of corrosion resistance, hardness, strength, machinability, etc.

**Note:** These are the broad and general composition, for certain grades the composition may vary.

Due to its superior properties, Stainless Steel is also the chosen material for high-end applications such as seamless tubes in process industries, thermal power plant (in boiler tubes etc.), nuclear reactors, automobiles, building & construction, and railways.

# Our Stainless Steel Manufacturing Process



The Stainless Steel business process is highly specialized, right from sourcing raw material till sales and distribution.

**Sourcing:** Multiple raw materials are brought in from various sources to generate the best value.

**Manufacturing:** Stainless Steel manufacturing process requires R&D expertise. Every grade of Stainless Steel is custom made using R&D expertise to cater to its usage in different fields.

**Sales and Distribution:** An extensive distribution network spread across the globe meets just-in-time deliveries for customers. Our salesmen also educate the buyers about the multiple benefits of using Stainless Steel.

## Take a look at the multiple applications of this wonder metal!

### Applications

	Series 200	Series 300	Series 400
			
Utensils, Household goods and Kitchen Applications	✓	✓	✓
Tubes & Pipes	✓	✓	✓
Architecture/Decorative	✓	✓	✓
Automobiles/Railways/Transportation	—	✓	✓
Oil & Gas Sector	—	✓	✓
Nuclear Applications	—	✓	—
Pharmaceuticals	—	✓	—
Dairy	✓	✓	—
Power Plants	—	✓	—
Consumer Durables	✓	—	✓
Blades	—	—	✓

Source: Industry

**Note:** These are the broad and general composition, for certain grades the composition may vary.

Every day, we work tirelessly to bring our vision of a world of stainless to life. We are keen to partner you in your vision, combine your passion with ours to create new and wondrous possibilities from Stainless Steel. Call us and be inspired today!





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