

Recycling Redefined



In today's global scenario of increased environmental awareness, recycling has become extremely important as it promotes lesser consumption of primary raw materials, which are extracted from the earth. Recycling not only helps to conserve



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natural resources but, also helps to reduce greenhouse gas emissions.

Recycling 1 tonne of steel scrap saves 1.2 tonne of iron ore, 0.7 tonne of coal, 0.5 tonne of limestone, 287 liters of oil and 2.3 cubic meters of landfill. Recycling further saves about 74% energy by using recycled material versus virgin ore for iron and steelmaking and reduces CO₂ emissions by

about 58% for iron and steel scrap. Therefore, it has been rightly said - "Metal Scrap is a mine above earth and any wastage of scrap or impediments in recycling is a crime against future generations." (Source: <http://www.mrai.org.in>)

Scrap usage in stainless steel manufacturing

Stainless steel is a generic term for a family of corrosion resistant alloy steels containing 10.5% or more chromium and in which varying amounts of nickel, molybdenum, titanium,

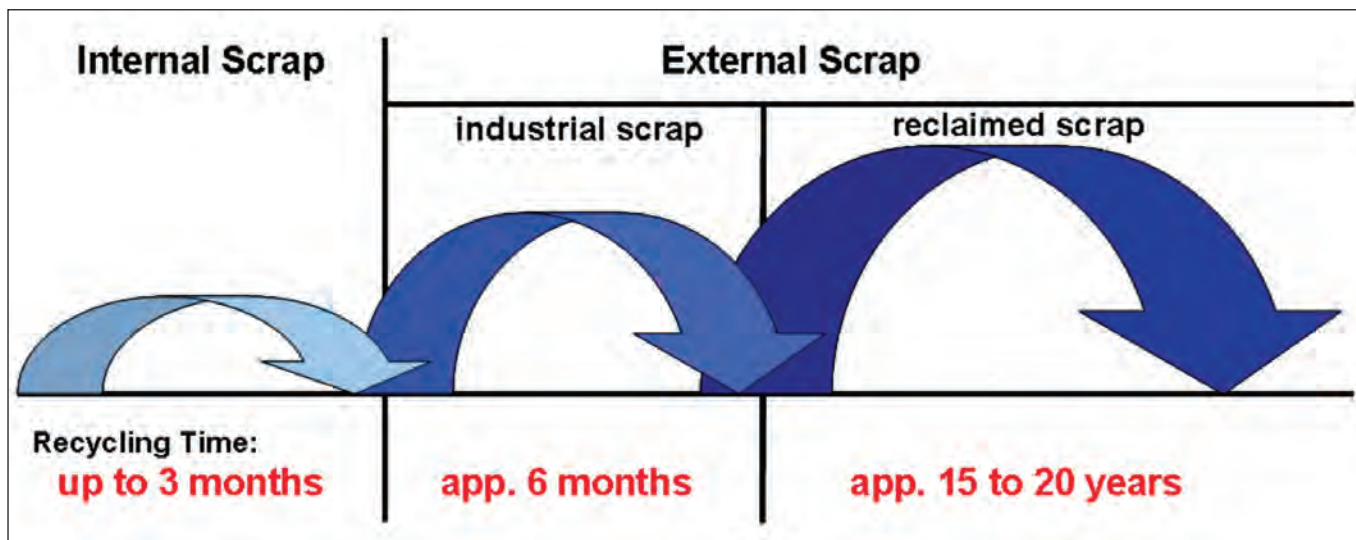
niobium as well as other elements may be present. Stainless steel's long service life, 100% recyclability and its valuable raw materials make it an excellent environmental performer. With rapid economic growth and increase in per capita consumption of steel in India, the country is likely to become the largest recyclable material generator over the next decade.

Stainless steel industry has given importance to recyclability which can be gauged from the fact that, every stainless steel product contains at least 50% of recycled scrap. Stainless steel also contains valuable raw materials like chromium and nickel and molybdenum, which also get recycled.

Various types of SS scrap

- **Internal Scrap:** Reclaimed scrap generated during stainless steel rolling.
- **Reclaimed scrap (old scrap):** Reclaimed scrap includes industrial equipment, tanks, washing machines and refrigerators that have reached the end of their service life.
- **Industrial scrap (new scrap):** Industrial scrap includes industrial returns or production off cuts from manufacturing by industrial engineering and fabrication sources.

We, at Jindal Stainless realise the importance and advantages of recycling and have thus, increased our scrap usage (from mere 35% to 65% over the last two years), and remain committed towards making a greener tomorrow for the generations to come.



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What might be a stainless steel wagon today might turn up as a surgical blade or part of a nuclear reactor tomorrow. Surprised? Well, that's the magic of stainless steel, almost 90% of stainless steel gets recycled into new products. Simply, because unlike most other metals stainless steel suffers no material degradation during recycling. And, that's not all; recycling one ton of steel saves 1,100 kilograms of iron ore, 630 kilograms of coal thereby, saving crucial natural resource and benefiting the environment. Now that's called- "Recycling Redefined".

At Jindal Stainless we are proud to be India's largest producer of this green metal that is redefining recycling.

To know more about stainless steel and its applications log on to www.jindalstainless.com

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Shaping a Stainless World