

Difference Between Hot Rolled And Cold Rolled Steel

Subjects: **Business**

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Sonic Steel is a leading manufacturer, supplier & exporter of Rolled Steel. Hot and cold rolled steel are different because of their processing methods. Steel heated and rolled at high temperatures is called hot rolled steel. In contrast, cold rolled steel is simply hot rolled steel that's been through extra cold treatment steps. This involves cooling, then either annealing or tempers rolling. You can roll different grades and specifications of steel, either hot or cold. By knowing the differences between hot rolled and cold rolled steel, you can choose the right type for your use.

Rolled Steel

differences between hot rolled and cold rolled steel

Hot Rolled Steel

Sonic Steel

Cold rolled steel

1. What is Hot Rolled Steel

Hot Rolled Steel is made through a method called hot rolling. This takes place under high heat, usually more than 1700°F. This heat is higher than steel's recrystallization temperature, so it's perfect for molding, shaping, and expanding the steel easily. Once it starts to cool, hot rolled steel often shrinks unevenly. This means the final size and shape can't be controlled as well as with cold rolled steel.



2. What is Cold Rolled Steel

Cold rolled steel is essentially hot rolled steel, but with a little extra refinement. You see, cold rolled steel undergoes another round of processing, where it gets to cool off at a comfy room temperature and then gets annealed or temper rolled. The result? Steel that's more dependable in terms of measurement accuracy and comes with a broader variety of smooth finishes. What's more, it flexes an extra muscle, being about 20% stronger than its hot-rolled counterpart, thanks to its strength-hardening step.



3. Application of Hot Rolled Steel

Hot steel and cold steel vary in their cost. Hot steel usually costs less than cold steel. This is because it's made without any pauses in the process and doesn't need to be reheated like cold steel. We often use hot steel when the exact shape and size aren't crucial.

3.1. People also search for

hot rolled steel, cold rolled steel, hot and cold rolled steel, hot rolled coil, astm a1008, cold rolled steel prices, rolled steel, hrc steel, cold rolled coil, hot rolled coil price, hot rolled coil steel price, cold rolling mill, cold rolled, 1018 cold rolled steel, cold formed steel, cold rolled steel plate, hot rolled steel coils, astm a1011, hrc prices, hr coil, hrc steel price, cold rolled steel sheet price, cr coil, cold rolled stainless steel coil, cold rolled sheet metal

Cold rolled steel is used in applications where tolerances, surface conditions, concentricity, and straightness are factors. Other applications include:

| Industry | Hot Rolled Steel Applications | Cold Rolled Steel Applications |
|----------|-------------------------------|--------------------------------|
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|---------------------|---|---|
| Construction | Structural components, building frames, bridges, infrastructure | Roofing, wall systems, light gauge framing, interior panels |
| Automotive | Frames, chassis components, wheels | Body panels, door panels, interior components |
| Manufacturing | Heavy machinery, industrial equipment, agricultural equipment | Precision parts, electrical appliances, furniture |
| Railway | Tracks, rails, structural components of trains and wagons | Precision components, interior fittings |
| Shipbuilding | Hulls, decks, offshore platforms | Marine hardware, precision parts |
| Energy | Wind turbine components, pipelines, power plant structures | Electrical cabinets, battery enclosures |
| Storage | Storage tanks, silos, warehousing systems | Shelving units, storage bins, cabinets |
| General Fabrication | Metal buildings, sheds, industrial shelving, workbenches | Office equipment, metal furniture, decorative components |

For top-quality rolled steel products and expert advice, contact **Sonic Steel** at **+91 992-096-4999** or email us at sales@sonicsteels.com. We are committed to meeting your steel needs with exceptional service at **Wholesale price**.

Sonic Steels is a market leader in supplying and exporting high-quality **Stainless Steel Foils** in different specifications and dimensions. Become a leader in the market, we manufacture these SS Foils using premium quality raw materials and modern machinery. Our Stainless Steel Foils are more popular among our existing customers.

304 Stainless Steel Foil is austenitic chromium-nickel-manganese stainless steel with the addition of molybdenum, increased the corrosion resistance and high tensile strength. The **Stainless Steel 316 Foil** offers a wide range of silent features such as thermodynamic properties, electromagnetic properties and Young's Modulus of elasticity. **Stainless Steel 310 Foils** are broadly used in the construction industry, aviation companies, hard engineering machine manufacture and many more.

We also supply these **Stainless Steel 904L Foils** to automobile industries for manifold and exhaust applications. **Hot Rolled Stainless Steel 321 Foils** are obtained from hot rolling billet and slabs. These hot rolling processes improve the strength and toughness of foil products. **Cold Rolled 347 Stainless Steel Foils** are manufactured using a cold roller and material is passed through a roller. Our Stainless Steel 410 Foils are best for various industries like medical, chemical processing and food industries.

Furthermore, we offer these **SS Foils** in standard as well as customized dimensions as per the client's requirements. If you want to learn more or to know the price of these products then **Contact Us today** and we give you a FREE estimation as per your products requirement. So Don't Wait Just **CALL**.

3.2. Stainless Steel 304 2B Finish Foils, UNS S31600 Stainless Steel Foils, Stainless Steel Foils Price, Stainless Steel Foils, Stainless Steel Foils for Hot Tub, Stainless Steel UNS S317008 Finish Foils, Flat Stainless Steel Foils, Spring Stainless Steel Strip Manufacturer

3.3. Stainless Steel Foil Updated Price List:

Request the latest **Stainless Steel Foil** List. Please click on the request a quote button or **click here** to request the updated price list and ready stock information along with your requirement. Sonic Steel maintains stock of all standard items and can export them at **best price for Stainless Steel Foil**.

3.4. Exporting Stainless Steel Foil to following countries

Afghanistan, Albania, Andorra, Austria, Bahrain, Bangladesh, Bhutan, Brunei, Belarus, Belgium, Bulgaria, Cambodia, China, Cyprus, Croatia, Czech Republic, Denmark, Estonia, Egypt, Finland, France, Germany, Greece, Georgia, Hungary, Iceland, Ireland, Italy, Indonesia, Iran, Iraq, Israel, Japan, Jordan, Kazakhstan, Kuwait, Kyrgyzstan, Lebanon, Latvia, Latin America, Liechtenstein, Lithuania, Luxembourg, Malta, Moldova, Monaco, Malaysia, Maldives, Mongolia, Myanmar (Burma), Nepal, North Korea, Netherlands, Norway, Oman, Poland, Portugal, Pakistan, Palestine, Philippines, Qatar, Russia, Romania, Russia, San Marino, Serbia and Montenegro, Slovakia, Slovenia, Spain, Sweden, Switzerland, Saudi Arabia, Singapore, South Korea, South Africa, Sri Lanka, Syria, Taiwan, Tanzania, Tajikistan, Thailand, Turkey, Turkmenistan, Ukraine, United Kingdom, United Arab Emirates (UAE), Uzbekistan, Vietnam, Yemen

3.5. SS Foil supplier in following cities

Mumbai, Delhi, Kolkata, Chennai, Bengaluru, Hyderabad, Ahmadabad, Pune, Surat, Jaipur, Kanpur, Lucknow, Nagpur, Ghaziabad, Indore, Coimbatore, Kochi, Patna, Kozhikode, Bhopal, Thrissur, Vadodara, Agra, Malappuram, Thiruvananthapuram, Kannur, Ludhiana, Nashik, Vijayawada, Madurai, Varanasi, Meerut, Faridabad, Rajkot, Jamshedpur, Srinagar, Jabalpur, Asansol, Vasai Virar City, Allahabad, Dhanbad, Aurangabad, Amritsar, Jodhpur, Ranchi, Raipur, Kollam, Gwalior, Durg-Bhilainagar, Chandigarh, Tiruchirappalli, Kota

3.6. Industries and applications where our SS Foil is used.

Chemicals, Petrochemicals, Oil & Natural Gas Organization, Fats, Fertilizers, Sugar Mills & Distilleries, Cement Industries, Ship Builders, Paper Industries, Pumps, Automation, Paints, Steel Industries, etc.

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