

What is steel used for?

Steel is both the most widely used and most recycled metal material on earth. Steel applications can be divided into five sectors.

■ Construction

The majority of steel goes into the construction industry. Sustainable steel structures can be built quickly at a low price. Steel, in its various forms and alloys, can be designed to meet the requirements of unique projects, which allow it to be incorporated into the infrastructure of any environment. Depending on the conditions that the structure is exposed to, steel can be alloyed or surface treated differently for protection. Steel can be found in: low and high-rise buildings, education and hospital buildings, sports stadiums, stations, bridge deck plates, piers and suspension cables, harbours, and tunnels.



■ Transport

Engineering steels are wrought steels that are designed to have certain specific levels of elasticity, strength, ductility and corrosion resistance. They are used in the general engineering and manufacturing sectors, but the bulk goes to transport vehicles. Steel accounts for over 50% of the weight of an average car. Advanced high-strength steels (AHSS) are used in vehicles and different types of steel are used for the car body, doors, engine, gearbox, steering, suspension, wheel axles, and interiors. Besides the automotive market, steel is found in transport materials such as trucks, trains, rails, ships, aircraft and jet engine components.

■ Energy

All segments of the energy sector, including nuclear, wind power, electric, and natural gas, demand steel for infrastructure. Steel is also used for resource extraction, such as in offshore platforms, earth-moving and quarrying equipment, cranes and fork-lifts. Due to the demanding environments, carbon, micro-alloyed, high strength and stainless steels are all used in the production of offshore platforms and pipelines. In addition to these, many other energy projects rely on large amounts of steel: oil and gas wells and platforms, pipelines, electricity power components, wind turbines, and transmission towers.

■ Packaging

Steel packaging protects goods from water, air and light exposure and is fully recyclable. This method of storage has been around for over 200 years. Steel allows for high-speed filling and lightweight, easy to open packaging. The majority of steel packaging goes into food and beverage containers, aerosols, and closures (e.g. bottle caps).



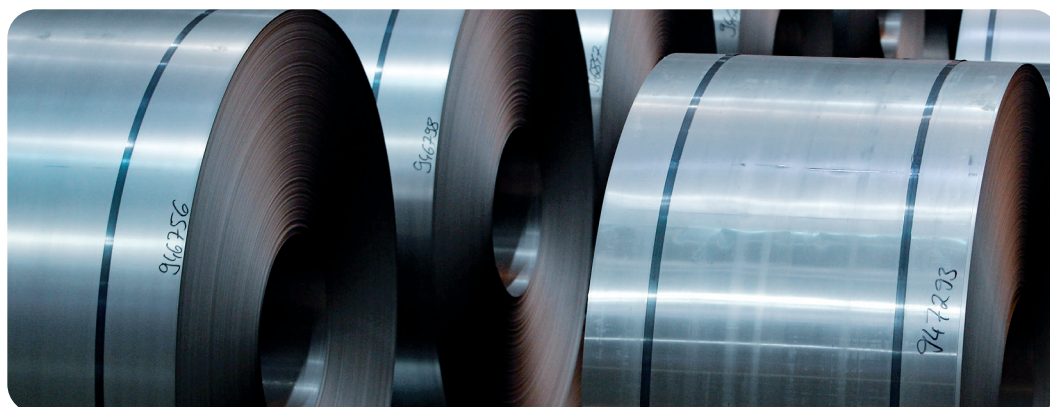
■ Appliances and industry

About 75% of the weight of typical **household appliances** comes from steel. Steel is found in appliances like fridges, washing machines, ovens, microwaves, sinks, **cutlery**, etc. Steel is also used in many industrial goods like farm vehicles and machinery, storage tanks, tools, structures, walkways, and protective equipment.



- 1   Read the text again and complete the following table putting the different applications of steel into the appropriate sector.

Construction	Transport	Energy	Packaging	Appliances Industry



to allow for: *consentire*

bulk: *il grosso*

crane: *gru*

cutlery: *posateria*

due to: *a causa di*

earth-moving: *movimento a terra*

fork-lift: *montacarichi, muletto*

gearbox: *cambio*

harbour: *porto*

household appliance:

elettrodomestico

to meet the requirements:

soddisfare i requisiti

offshore platform: *piattaforma in*

alto mare

pier: *molo*

plate: *lastra*

quarry: *estrazione*

to rely on: *avvalersi*

surface treated: *trattato in*

superficie

steering: *sterzo*

sustainable: *sostenibile*

truck: *camion*

well: *pozzo*

wheel axle: *asse della ruota*

wrought: *lavorato*