

Buy Recycled with Recyclable Steel

Steel—the Natural Choice for Buying Recycled



◆ When you buy steel in North America, you buy recycled

Steel is a unique material because it always contains recycled steel. Each year, millions of tons of pre- and post-consumer steel products, including used steel cans, appliances, automobiles and construction materials, are recycled by North American steel mills into every ton of new steel produced.

In fact, with the exception of the earliest steelmaking methods, recycling has always been an integral part of the steelmaking process. Steel scrap is a vital ingredient in making new steel; melting the scrap to make new steel is fundamental to energy and emissions savings and resource conservation. What's more, all new steel products made from recycled steel can be continuously recycled at the end of their useful lives. Used steel cans are recycled into part of a guard rail, which may one day be recycled into an appliance. An infrastructure of ferrous scrap processors is widely available to prepare all types of steel products for recycling. Processors prepare and ship steel scrap to steel mills and foundries for remelting into new steel.

◆ Steelmaking is an inherent recycling process

Recycling is an integral part of the steelmaking process because the use of steel scrap lowers the environmental impact of steelmaking. The North American steel industry uses one of two types of furnaces to make new steel. Both furnaces recycle old steel products into new steel, but each is used to create different products for varied applications.

The basic oxygen furnace uses an average of 25 percent steel scrap to make new steel. The other type of steelmaking furnace, the electric arc furnace, melts more than 90 percent steel scrap to make new steel. Iron foundries also melt steel scrap to make new iron products, which contain about 75 percent scrap.

THERE ARE TYPICALLY 60 TO 80 MILLION TONS OF STEEL SCRAP RECYCLED PER YEAR INTO NEW STEEL PRODUCTS IN NORTH AMERICA.





By recycling one ton of steel, 2500 pounds of iron ore, 1400 pounds of coal and 120 pounds of limestone are conserved.

Stick with steel

Many states have instituted “buy recycled” mandates that require purchasing agents to buy products with recycled content when possible. As purchasing agents look for products with recycled content, they should recognize the recycled content and recyclability of steel. Bridges, guard rails, utility poles, fire hydrants, residential and commercial construction materials, appliances, cars, trucks, back hoes, desks, file cabinets and cans are some of the many steel products that contain recycled steel and, just as importantly, are continuously recyclable at the end of their useful lives.

When purchasing agents and consumers buy products made with recycled materials, they complete the recycling loop and help develop and maintain markets for recyclables. An ordinary magnet, which sticks to steel, can help determine if a product is made from recycled, recyclable steel.

RECYCLING IS AN INTEGRAL PART OF THE STEELMAKING PROCESS BECAUSE THE USE OF STEEL SCRAP LOWERS THE ENVIRONMENTAL IMPACT OF STEELMAKING, AS WELL AS THE TOTAL COST OF PRODUCING NEW STEEL.

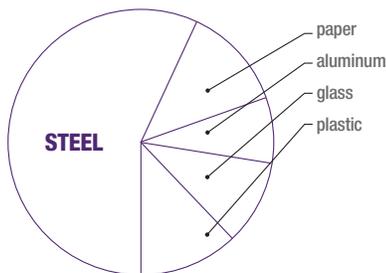
Environmental benefits of steel recycling

Recycling steel saves energy and natural resources. In a year, the steel industry saves the equivalent energy to power about 18 million households for a year. When one ton of steel is recycled, 2500 pounds of iron ore, 1400 pounds of coal and 120 pounds of limestone are conserved. By making recycling integral to steelmaking, the steel industry leads the “buy recycled” effort. There are typically 60 to 80 million tons of steel scrap recycled per year into new steel products in North America.

About the Steel Recycling Institute

The Steel Recycling Institute (SRI), a unit of the American Iron and Steel Institute, educates the solid waste management industry, government, business and, ultimately, the consumer about the economic and environmental benefits of recycling steel. SRI works to ensure the continuing development of the steel recycling infrastructure.

Steel Recycling vs Other Materials



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