

Steel Packaging Production - Just the Facts

- Packaging steel is one of the highest quality types of steel.
- Steel cans contain up to 30 percent recycled steel.
- There are several main types of packaging steels for different container applications. Tinplate derives its name from the microthin layer of tin that is electrolytically applied to the steel for protection.
- The tin used has an average purity of 99.99 percent. Other packaging steels include electrolytic chromium coated (or "tin-free") and blackplate.
- North American member companies of the American Iron and Steel Institute (AISI) annually produce four million tons of packaging steels. The estimated annual worldwide consumption for packaging steels is 13 million to 15 million tons. While total surface area sold has continued to grow, reduction in average gauge of packaging results in static or decreasing annual consumption by weight.
- The North American steel industry
- Since the early '80s, North American steel producers have invested more than \$35 billion in capital improvements, which contribute to world-class quality packaging steels.
- Over the past 25 years, average tinplate thickness has been reduced by 30 percent, from 0.20 mm to 0.14mm. Technological developments in gauge control are further reducing thicknesses to 0.12mm. Thickness will continue to be reduced through more advanced canmaking technology and higher quality steel.
- Production of a steel food can is energy-efficient. It requires about half of the energy used to make a comparable aluminum can.
- Steel cans, often called "tin" cans because of their micro-thin tin coating, comprise more than 90 percent of the food can market.
- In 1995, more than 32 billion steel cans were shipped in North America. These containers are used to package food, juices and other household products in more than 600 shapes, styles and sizes.

has greatly improved its productivity in the past two decades. In fact, the time required for producing and shipping one metric ton of steel in an integrated mill has decreased from 12.5 to 4.3 hours since 1975.

- Steel beverage cans, popular in Europe, are losing weight rapidly. Typical can weight is 25.3 grams, and some cans weighing less than 20 grams became available in 1996.



State-of-the-art
steelmaking facility:
technological innovations
lead to improvements in
the quality of packaging
steel.

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World-Class Steel Packaging

Virtually every home in North America contains a variety of steel cans, ranging from food and beverage containers to paint, aerosol and household product containers.

First produced more than 100 years ago for commercial distribution, the steel container has become an indispensable package because of its long shelf life, protection of contents, convenience and versatility.

Today, more shapes, styles and sizes exist than ever before for consumer convenience in packaging. Although almost everyone uses steel cans, some background about steel packaging production, use and recycling may come as a surprise to consumers.

Canned food constitutes 17 percent of non-perishable dry grocery products in North American grocery stores and supermarkets.

Canned foods are represented in all of the five food groups of the Food Guide Pyramid, and canned food provides a wide assortment of options to help people meet the 5-a-Day goals for fruits and vegetables.

The canning process, which takes place quickly after the harvest, preserves the nutrients and taste of the fruits and vegetables.

What's in a Can Will Surprise You!

The four million tons of packaging steels shipped annually by North American producers are primarily distributed for the following products:



Packaging Steels Usage

Beverage

7%

Juices

General Packaging

12%

Aerosols

Paints & Varnishes

Automotive/Other

Products

Food

81%

Baby Foods

Coffee

Dairy Products

Fruits

Meats & Poultryes

Seafoods

Vegetables

Soups

Pet Foods