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RECYCLING FULL OR PARTIALLY FULL AEROSOL CANS PAINT CANS AND PAILS FROM FILLING PLANTS

Accumulate “reject” and “return” paint and aerosol cans

At paint and aerosol can filling plants, some cans may be damaged, improperly filled or otherwise unsaleable. Other cans may be outdated or damaged containers returned to the plant from retail distribution. Full and partially full “reject” and “return” aerosol cans, paint cans and pails may once have been simply disposed in a landfill. However, this is no longer an acceptable practice. The environmentally preferred option is to empty the full and partially full cans or pails, manage the recovered contents, and then recycle the empty containers themselves. While there are costs associated with purchasing, installing and operating aerosol can, paint and paint can recycling equipment, manufacturers should balance such costs against the costs of special waste disposal or hazardous waste management services.



Empty and flatten cans and pails to prepare for recycling

All “reject” and “return” paint cans and pails are taken to a collection area where they are emptied manually or mechanically. The “reject” and “return” aerosol cans are degassed, decanted and flattened using specialty equipment for batch processing. Product residuals from aerosol cans must be captured for reuse or appropriate disposal. Propellant gases will be typically captured and compressed for reuse or other disposition, such as flare-off or use as a fuel. When emptying the paint cans and pails, paint will be collected in tanks or drums for reprocessing and recycling as new or specialty product. Other unsaleable and off-specification paints may be blended together and donated to community improvement projects or charities. The remaining thin layer of paint on the inside of the containers must dry. While not necessary for recycling, flattening the emptied, dry paint cans and pails provides visual confirmation of emptiness and facilitates their storage and transportation.

Recycle empty paint and aerosol cans and pails with other ferrous scrap

The plant or warehouse operator may negotiate arrangements with a local ferrous scrap dealer for recycling the emptied and flattened aerosol cans, paint cans and pails — along with other ferrous scrap materials that may be generated on-site. Often, scrap dealers provide and service a roll-off container for ferrous scrap. A scrap dealer may accept all ferrous scrap commingled or may require empty, flat aerosol cans, paint cans and pails to be segregated in another bin, perhaps at added cost. Depending on the actual volume, the operator may also bale the empty cans and pails into bales or mini-bales, with or without interim flattening. If so, the material can be taken directly to a ferrous scrap dealer as ordinary steel scrap. In some rare cases, the material may even go directly to a local foundry or steel mill. Open communication with the scrap dealer is required to satisfy questions about paint and chemical residue and to provide practical assurance of the consistency and quality of the material supplied.

About steel can recycling

Steel food, paint and aerosol cans, steel closures, lids and other containers are recycled into new steel products such as cans, automobiles, appliances, construction materials, tools and toys. Steel’s magnetic attraction allows steel to be magnetically separated from other recyclables, or from the municipal solid waste stream. The consumption of incidental plastic components, paper labels and other minor, nonferrous matter during the steelmaking process has no effect on the quality of the new steel produced.

About the Steel Recycling Institute

The Steel Recycling Institute (SRI), a unit of the American Iron & 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.

For additional information about steel recycling, visit the Steel Recycling Institute’s website at www.recycle-steel.org.