Recycling Used Oil Filters

at the Shop

Introduction
Used oil filters are recyclable because they are made of steel, North America’s number one recycled material. They are being recycled today into new steel products, such as cans, cars, appliances and construction materials. 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. Recycling all the filters sold annually in the United States would result in the recovery of about 160,000 tons of steel, or enough steel to make 16 new stadiums the size of Atlanta’s Olympic Stadium.

Federal guidelines for used oil filters
While most used oil filters were thrown in the trash a short time ago, today we know they are recyclable. Some states have banned used oil filters from the landfill, while others have placed restrictions on how they can be discarded. The U.S. Environmental Protection Agency (EPA) requires used oil filters be drained of all free-flowing oil before they are discarded or recycled. Most states follow federal requirements for used oil filter disposal. Currently, U.S. manufactured oil filters are exempt from hazardous waste regulation if the oil filter is:
- punctured through the dome end or anti-drain back valve and hot-drained
- hot-drained and crushed
- hot-drained and dismantled
- hot-drained using an equivalent method to remove used oil
What is hot-draining?

Hot-draining is defined as draining the oil filter at or near engine operating temperature, but above 60 degrees Fahrenheit. In other words, remove the filter from the engine while it is still warm, then puncture or crush and drain the filter. The EPA recommends hot-draining for a minimum of 12 hours, although specific state requirements may vary. Most of the oil is removed from the filter during hot-draining. WARNING: Use caution when hot-draining filters to avoid being burned. Protective equipment such as safety glasses and gloves should be worn to prevent injury.

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Steps to recycling oil filters

The three steps to recycling used oil filters are:

1. collection and transportation
2. processing
3. recycling by a steel mill into a new steel

If your business changes oil commercially, it is a good idea to voluntarily collect used oil filters from Do-It-Yourselfers (DIYers). Businesses currently collecting used oil filters include auto parts stores, quick lubes and other service outlets. As state agencies see businesses voluntarily collecting filters, there will be less need for mandatory regulations.

In addition, accepting used oil filters from DIYers can be used as a tool to market your business. Studies have shown consumers are more likely to patronize businesses that offer sound environmental management practices.

Before collecting used oil filters, you should arrange for a special waste collection company to pick them up from your shop. Alternatively, if you crush them with your own on-site equipment, you can take them to a ferrous scrap processor.

Once the filters are processed, they are sent to a steel mill or foundry. Some steel mills produce flat-rolled steel products by combining scrap products and hot metal from iron ore to make products such as steel cans, cars and appliances, while others use virtually 100 percent scrap to make products such as rebar and I-beams.

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.