

### Tire Recycling Since 1918

With almost 100 years of leadership and in-depth experience in the tire recycling industry, Lakin Tire provides environmentally-friendly products, derived from the millions of discarded tires that we process annually.



# Recycled tire materials

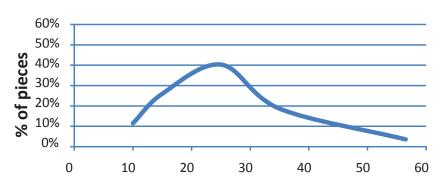
From Tire Derived Fuel to Tire Derived Aggregate, Crumb Rubber Feedstock, and even Whole Tires, Lakin Tire can produce tire shreds for a variety of applications.



## **One Pass Tire Shreds**

Shredded once, through 4.9" blades



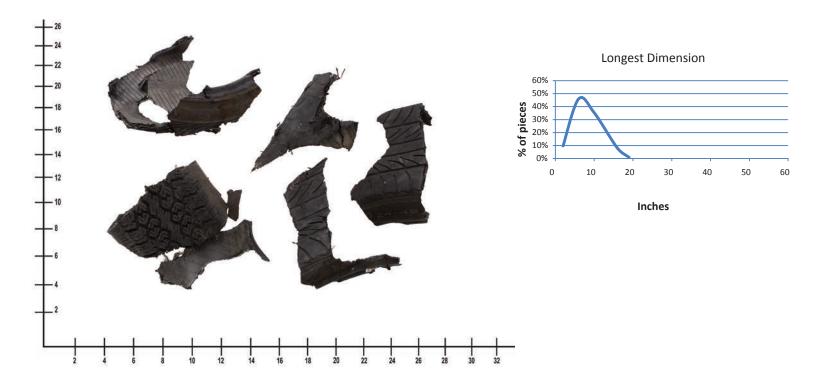


Inches



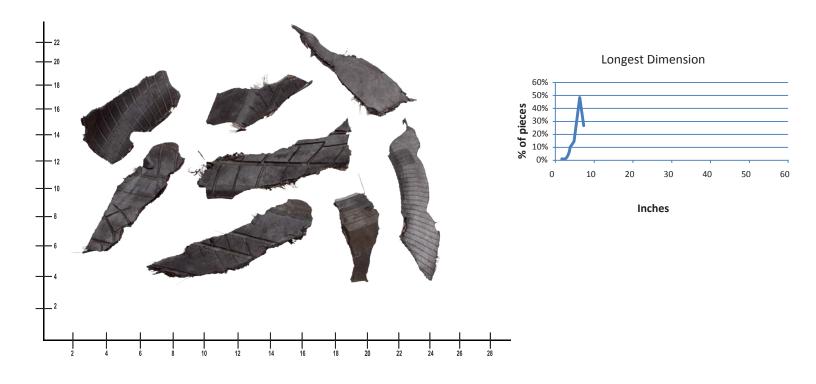
## **Two Pass Tire Shreds**

Shredded once, through 4.9" blades and once through 2" blades

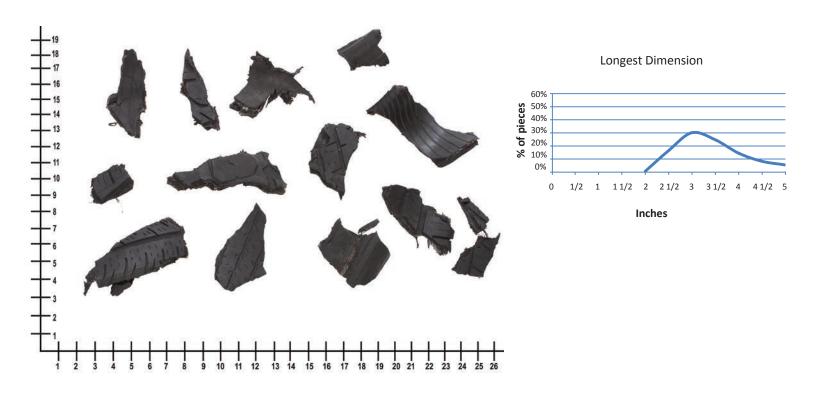


## **Three Pass Tire Shreds**

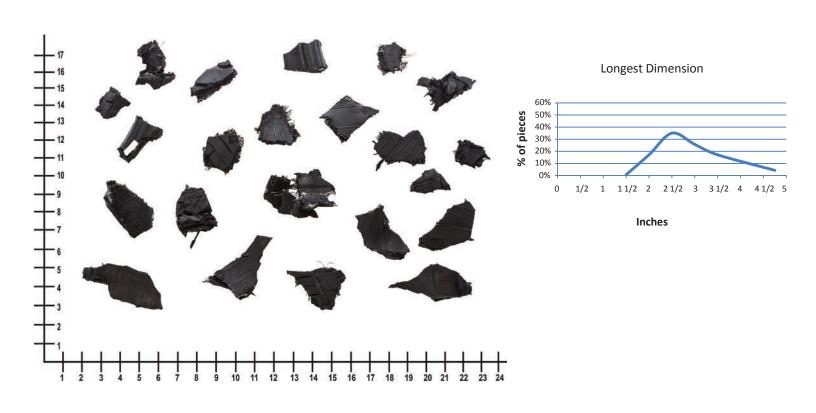
Shredded once, through 4.9" blades and twice through 2" blades



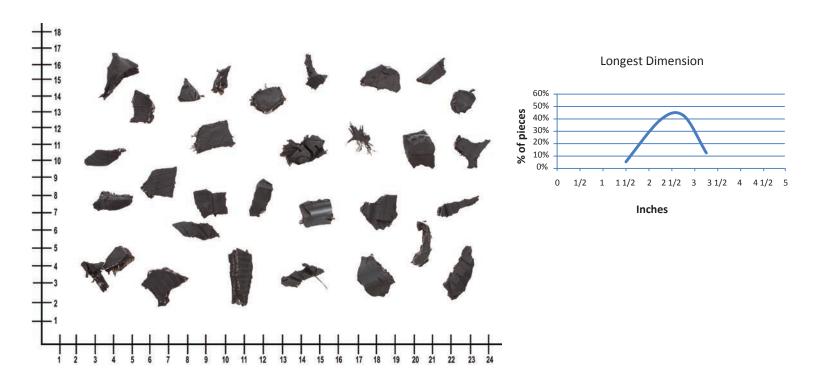
## 3" Nominal Tire Chip



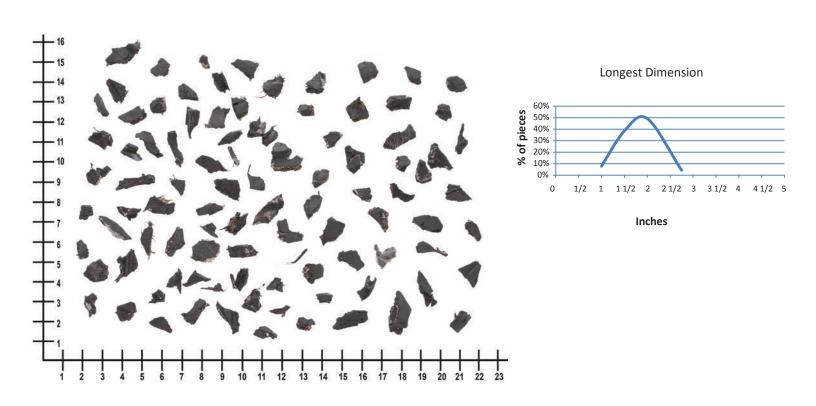
## 2" Nominal Tire Chip



# 11/2" Nominal Tire Chip



# 1" Nominal Tire Chip



#### TIRE DERIVED AGGREGATE (TDA):

Tire Derived Aggregate (TDA) is size-reduced, scrap tire pieces that are used for a variety of civil engineering applications.

The beneficial properties of TDA include: lightweight, low earth pressure, good thermal insulation, good drainage, compressible, vibration mitigation and low cost, compared with other materials.

TDA is used as a lightweight fill to limit settlement and increase slope stability in highway embankments. It is also used for landslide stabilization and as a sub-grade for roads constructed over weak soils. Tire Derived Aggregate limits frost penetration, when used as an aggregate layer under roads in cold climates.

Light-rail construction has benefited from the use of TDA as well. It is used under tracks that run adjacent to homes and businesses, to reduce vibration and noise mitigation from passing trains. Residential and home construction projects have also benefited from TDA, as it provides a low-cost, lightweight backfill material along foundation walls.

## TIRE DERIVED FUEL (TDF):



Tire Derived Fuel (TDF) is fuel derived from scrap tires, both whole and reduced-size.

Cement manufacturers use Tire Derived Fuel to supplement their primary fuel for cement kilns. The metal wire contained in TDF is captured as a raw material in the cement making process, reducing the amount of iron ore that cement manufacturers have to purchase. Studies have shown that the use of TDF can reduce certain emissions, such as sulfur dioxide, or SOx and nitrogen oxides, or NOx.



The Pulp and Paper Industry uses Tire Derived Fuel as a supplement to wood waste, as a fuel in pulp mill boilers. The heat content of wood waste averages between 7,900-9,000 BTU/pound compared with TDF, which has a heat content of up to 15,000 BTU/pound. Pulp and paper mills use TDF to decrease fuel costs while improving emissions and combustion efficiency, due to the low moisture content of tires.

#### CRUMB RUBBER FEEDSTOCK

Lakin Tire produces feedstock for crumb rubber manufacturers. Crumb rubber is finely ground rubber produced from waste tires. Steel and tire cords are removed from discarded tires, and the remaining rubber is reduced to a granular consistency. These granules are passed through a screen, further reducing their size, based on the end users' specifications.

Some of the applications for crumb rubber include:

- Rubberized asphalt Ground tire rubber is blended with asphalt to improve its properties. The benefits of rubberized asphalt include: longer lasting road surfaces, less road maintenance, reduced road noise and even, improved vehicle braking distances.
- Playground and athletic surfaces Crumb rubber is formed into tiles and other surfaces, under playground equipment and athletic fields, providing high impact resistance and less stress on athlete's legs.
- Molded and extruded products Garden and interlocking pavers, tree rings, curbing, welcome mats, portable speed bumps, anti-fatigue mats, vehicle mud guards, and a variety of other products have been made with the use of crumb rubber, and the applications are growing.





#### **CLEAN INDUSTRIAL FEEDSTOCK**

Crumb Rubber Feedstock can reduce the production costs of a variety of products, by replacing higher cost raw materials. Lakin Tire can provide a clean feedstock for a variety of uses, with virtually no limitations. We can produce material to a variety of specifications and we can ship to any destination, domestic or international. We welcome all inquiries.

#### Lakin Tire West, Inc 15305 Spring Avenue Santa Fe Springs, CA 90670 TEL (800) 488-2752

Lakin Tire East, Inc. 220 Frontage Road West Haven, CT 06516 TEL (800) 368-8473

www.lakintire.com

