SUCCESS STORY

Eco Green Equipment's Krumbuster Revolutionizes Crumb Rubber Production and Quality with the Help of Parker Hydraulic Pumps

CHALLENGE

Eco Green Equipment, a tire recycling equipment manufacturer, was looking to meet the stringent demands of the crumb rubber and rubber powder markets. Due to rubber use in artificial turf, playground surfaces, and other applications, crumb rubber and rubber powder are in greater demand with higher quality expectations.

Existing cracker mill technology could produce crumb rubber in reasonable quantities. However due to their friction ratios, mills could not produce it at a high enough quality or a low enough mesh crumb rubber.

As a result, Eco Green wanted to achieve both volume and high-quality of crumb rubber in one machine. To fill this gap in market, Eco Green's Krumbuster was created.

The following design specs were set for Eco Green Equipment's Krumbuster:

- Produce up to 4,000 pounds an hour of smaller than 6 mesh crumb rubber
- Produce up to 2,000 pounds of smaller than 30 mesh rubber powder with the same machine and set-up
- Decrease horse power usage by 20% or more
- Achieve a smaller equipment footprint than traditional mills
- Create a high-performance hydraulic grinding mill that remains highly responsive with:
  - Changes in friction ratios
  - High shock loads
  - Constant changes in pressure and pressure spikes

Market
Recycling

Customer
Eco Green Equipment, Industrial Tire Recycling Equipment & Shredder Manufacturer

Application
Rubber Recycling

Solution
Parker P24 Gold Cup, P6 Gold Cup, T67DCB Vane

Results

- Smaller Footprint
- Higher Production
- Higher Product Quality
- Greater Energy Efficiency

Parker

ENGINEERING YOUR SUCCESS.

SOLUTION

With Eco Green Equipment collaborating with Parker Hydraulic Pump and Power Systems (HPS) and a Parker distributor, a high-performance, reliable hydraulic system for the Krumbuster was designed. Key hydraulic components for the Krumbuster, included Parker P24 and P6 Gold Cups and T6 Vane Pumps.

These Parker pumps were chosen to complement the hydraulic motor due to their reliability, responsiveness, and ability to handle a high shock load. The Gold Cup pumps were especially critical for this demanding application and the ability to maintain them through authorized repair centers throughout the world.

Gold Cup Series Pump

T67D Vane Pump

RESULT

The results of the Krumbuster's hydraulic system have revolutionized rubber mill technology. The Krumbuster's higher production and quality in comparison to traditional mills, has been achieved, along with a smaller equipment footprint and less energy consumption.

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