No more waste tires

New Technology Turns Used Carbon Black Reusable

Since rubber tires were invented in 1842 and widely used in vehicles, its continuous improvement and evolution in safety and functionality has generated revenues well over 100 billion US dollars annually across the globe. One staggering issue imminent to the world: where did all the ever-lasting waste resulting from the annual 30 million tons of discarded worn tires go? Stockpiles after stockpiles in incinerators or grinder, waste tires have simply accumulated into an environmental nightmare.

Every year in Taiwan, the discarded tires are enough to circle the Island four times, or stack up as high as 3000 Taipei 101 buildings. Fortunately, one Taiwanese manufacturer has mastered a critical technology while processing recycled tires that turns a pollution source caused by waste tires into eco-friendly new products.

Research teams around the world consider pyrolysis technology

As the best solution to recycling waste tires

As it completely breaks them down into various substances

Unfortunately, carbon black, one major output of tire pyrolysis

Cannot be fully reused

That’s where ENRESTEC steps in with the key technology.

Pyrolysis of waste tires can produce Pyrolysis Oil, steel wire, nylon fibers, and carbon black. Among which, pyrolysis oil can be turned into fuel; steel wire and nylon fiber can be re-applied. However, while 75% of worldwide output of carbon black is used to make new tires, it cannot be re-used and has remained a setback.

This Taiwanese manufacturer has spent more than a decade on the development of  "Continuous Waste Tire Pyrolysis Technology,” with a steady production chain including waste tire shredding, pyrolysis, carbon black processing and pyrolysis oil treatment, the most significant achievement being its ability to process used carbon black and turn it to reusable ingredient that stands strict quality and durability tests by tire makers. This technology is mature enough to dazzle international experts in numerous technology seminars.

In order to allow each eco-tire to meet the most demanding EU criteria, ENRESTEC has passed the ISO certification, with products that fit the requirements of minimal carbon footprint.  It has built an Eco-friendly factory park in Southern Taiwan, providing gas fuel and steam for neighboring plants. In the future, its plants will go beyond recycling and pyrolysis to become a complete supplier, connecting the tire industry’s up- and downstream, and creating a full cycle of economy from cradle to cradle.

We’re slated to build a manufacture park

That caters to both tire-making and waste tire recycling

We will provide the tire manufacturers with low-cost gas fuel

As well as Pyrolysis Carbon Black

Such an ecological integration will hopefully encourage

A low-carbon emission process

How do you turn a waste tire stockpile into an eco-friendly gold mine? This Taiwanese company asserts that with the foundation of sophisticated technologies, the most important business value lies in quality control and marketing, and the authentic irreplaceable soft power. ENRESTEC also sets to provide "whole factory export" solutions, currently in talks with countries in Europe and the Middle East. Seen 10 years ago as unprofitable, waste tire recycling industry is made known to the world as one of the most welcomed green gold industry.

Every day is a green day. Green trade project office reports.