Hägglunds helps Genan extend tire life – and productivity
Hägglunds drives help Genan extend tire life – and productivity

Cars and trucks are a vital and ever-growing part of the world’s infrastructure. As the number of vehicles rises, however, so does the number of end-of-life tires for disposal. Since the early 1990s, Genan has been keeping rubber out of landfills and in productive use – with the help of Hägglunds hydraulic motors and drive systems from Bosch Rexroth.

FINDING NEW PURPOSE FOR OLD TIRES

“Genan is the world’s largest tire recycler and producer of high-quality rubber,” says Daniel Pohl, Project Manager at Genan. Pohl is visibly proud of his company’s accomplishments, which is easy to understand. Genan’s plants take in tires that have reached the end of their service life and carefully separate them into their constituent parts: 75% rubber as granulate or powder, 15% steel and 10% textile fibers. This keeps tires not only out of landfills, where they degrade very slowly, but also out of incinerators, which waste the raw materials and add CO2 to the atmosphere. “For each ton of end-of-life tires recycled instead of being incinerated, the climate will be relieved of 1.1 tons of CO2 emissions at a minimum,” says Pohl.

HÄGGLUNDS AN INTEGRAL COMPONENT

Hägglunds hydraulic direct drives have been a part of Genan’s work since 1990, when the first Genan plant
opened in Viborg, Denmark, with an input capacity of 35,000 metric tons. With their built-in resistance to shock lock loads and their ability to start, stop and reverse as many times as needed, Hägglunds systems were a logical choice for recycling machines like tire shredders.

“We at Genan have designed all kinds of cutting machines ourselves,” says Pohl, noting how those unique machines create exceptionally clean and uniform products. The company’s recycled rubber can be used in industrial rubber products, paints, plastics and road paving, and its cryogenically milled rubber powder can even replace virgin material in new tires.

“We started up right from the beginning with Hägglunds drives,” Pohl says, “and we’re so happy with them that we never want to change.”

GOING GLOBAL WITH HÄGGLUNDS SOLUTIONS

Genan, with head office and production in Denmark, is now a multinational business, having expanded first to Berlin in 2003 and later to two other German cities, Dorsten and Kammlach. Houston, Texas, became Genan’s first non-European site in 2014, and operations in Portugal were recently added. In total, Genan now has six plants worldwide, creating a combined intake capacity of nearly 400,000 metric tons per year. Hägglunds motors and drive systems, which remain integral to Genan’s business, are used at all of Genan’s sites. The company now has more than 40 hydraulic drive systems in total, which are based on two different motors: the Hägglunds CA 100 and the Hägglunds CB 840. With their high power density, these motors deliver extreme and sustainable torque from zero speed.

“For us the main advantages of the Hägglunds drives are the compact and robust design,” says Pohl, “and the high torque right from the beginning.”

DRIVES AND PEOPLE TO RELY ON

Torque, however, is not the only appeal of Hägglunds systems for Genan. The high reliability of the drives is also crucial, especially as Genan’s business is highly automated. At a typical plant, there are only a handful of staff members supervising the recycling process, with just one maintenance operative per shift.

“Since we are producing 24/7, the reliability of all systems is needed at all times,” says Pohl. He praises not only the Hägglunds drive systems themselves, but also the strong support behind them, giving Germany as an example. “The Hägglunds service center in Bochum, Germany, supports all our German production facilities – with training our employees, short-time repairs within two weeks and spare parts. The relationship is excellent.”

All in all, Pohl sees Hägglunds drive systems as a major component of Genan’s continued success. He concludes simply: “Hägglunds drives ensure our productivity.”