



RULMECCA Motorized Pulley Helps Inertia Machine “Go Green” on Chicago-area Building Deconstruction

Faced with the challenge of moving from its two building premises to a larger facility next door, a major Chicago-area agricultural hardware retailer decided to “recycle everything” to maximize its investment value and minimize its impact on the community. From reinforced concrete to insulation material to building structures, the entire property was re-



used. Having never operated a crusher previously, the general contractor rented an Inertia Machine 5066 Tracker to process the concrete building foundations and parking lot. They liked its track-mounted feature, large horizontal impact crusher, and compact design because it matched the site’s narrow footprint and limited the construction schedule. They also appreciated its “one trip” mobilization capability. Concrete was crushed to 3” minus aggregate and stockpiled onsite in preparation for use by the property’s next owner. The two buildings were deconstructed and reassembled on two farms in the area.

Inertia Machine’s 5066 Tracker features Rulmecca Motorized Pulley model 400M at 15 HP to move up to 700 tph of crushed product on 42” belt at 300 fpm, using 460v/3ph/60Hz power supply.

Rulmecca’s 15 HP Motorized Pulley drives the 5066 Tracker’s 42” wide rear discharge conveyor at 300 fpm, powered with a 460v/3ph/60Hz supply voltage from the machine’s on-board generator. It transfers up to 700 tph of virgin stone or 300 tph of recycled concrete (or asphalt) from the huge horizontal shaft impact crusher beneath the self-cleaning magnetic separator to the discharge point. During the “green project” adjustable steel curtains within the horizontal impact crusher enabled the plant to produce good quality 3” minus product from the reinforced concrete feed without the need for any screening.



Rulmecca model 400M in 700 tph service

Initially selected because of its compactness, the Rulmecca Motorized Pulley quickly demonstrated its high efficiency and robustness when the discharge conveyor plugged during the recent “green project.” “We pulled off a couple two foot chunks of concrete and then fired up the conveyor,” said Tyler Burkholder, Inertia design engineer, “and were surprised that the drive ‘dug itself out’ without tripping.” He explained that motor/gearbox/V-belt drives, used previously, were prone to tripping under those conditions. He added, “We also encountered several eight foot long snarls of rebar, but the Rulmecca Motorized Pulley had the power to pull out the balled steel with no problem.”

Rulmecca president Mike Gawinski said, “We’ve been making Motorized Pulleys for more than 50 years and we’re very pleased to supply Motorized Pulleys to Inertia Machine for their 5066 Tracker plant. We’re sure their customers will be very pleased to use them.”

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In addition to having a powerful crusher, the 5066Tracker features compactness and portability. It is the only tracked plant of its size capable of being transported from jobsite to jobsite without disassembly. Offsite transport preparation is limited to inserting a triple axle bogey into the kingpin beneath the discharge conveyor and hitching a triple axle semi truck to the kingpin beneath the feeder. Inertia’s Burkholder said, “After the ‘green project,’ we sold the plant to a customer in Texas. We’re shipping it from Chicago to Texas without an escort. It’s neither over-width or over-height and that’s important.”



Burkholder continued, “Rulmecca’s compact and powerful conveyor drive is a natural fit with our plant design strategy and has improved our assembly efficiency. These drives give us a great alternative conveyor drive to expand our product line and stay with on-board electric power.”

Initially developed in 1953 for coal and stone conveyors in fixed plants in

5066 Tracker features quick and easy transport capability using built-in 3 axle bogey and requires no escort.

Europe, Rulmecca Motorized Pulleys now drive feed conveyors, cross conveyors, and discharge conveyors on portable plants throughout the world. Rulmecca’s Gawinski said, “We not only supply Motorized Pulleys on portable plants for domestic use, we recently supplied model 320M units for portable plants in Russia and Azerbaijan.”



Gawinski continued, “Now portable plant operators can enjoy high reliability and low maintenance because Rulmecca Pulleys enclose all drive components within an oil-filled hermetically-sealed pulley shell hiding them out of harm’s way.”



5066 Tracker diesel engine drives crusher, hydraulic pumps for tracks and clutch, and generator for all electric motors.

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