

Perfect companion for wear protected chains

The RKO knock out tool, one of Ramsey's latest innovations, is specially designed to help connect and disconnect Ramsey wear protected chains.

With the RKO tool, jobs that were once frustrating and time-consuming can now be done simply, in only minutes (figure 1).

CHALLENGING TO CONNECT

In recent years, glass producers around the world have switched to Ramsey wear-protected conveying chains, such as Allguard FX and Lifeguard. These chains offer recognised benefits, including improved ware handling, reduced maintenance and improved chain life. They also allow chains to be run in direct contact with lateral guides, without the pin head wear that is common in other chains. Despite these advantages, connecting and disconnecting wear-protected chains is a challenge.

Wear-protected chains are particularly difficult to disconnect due to the pin heads being recessed below the chain link surface. This feature, which is designed to protect pin heads, also makes it difficult to remove them during chain disconnection. The usual methods for removing a pin head, such as grinding or hammering, are quite difficult with the pin heads so well protected. Often, efforts to remove the pins with usual methods will result in damage to adjacent parts of the chain; this results in even more repairs. Meanwhile, during this repair process, machines are down, conveyors are not running and productivity suffers.



Figure 1: The RKO knock out tool.



Figure 3: Connecting chain.

SOLVING MULTIPLE PROBLEMS

The RKO tool makes chain disconnection simple and fast (figure 2). Simply slide the tool under the chain, align the pin to be removed with the stage one extraction screw and turn the screw handle until the pin head breaks. Usually, there is a distinct popping sound when the pin head breaks. After that, slide the tool over so the pin is in line with the stage two extraction bore and the pin can be easily pushed out of the chain.

Ramsey's patented tool also greatly simplifies chain connection. In typical plant production settings, it is difficult to align the links in the two ends of a chain so a connection can be made. It is especially difficult if spacers, also called bushings or washers, are inserted between links. The RKO tool includes toothed guide blocks that serve to accurately align links and spacers in the joint being connected. With the chain components properly in line, a connecting pin can be effortlessly inserted in the chain. The tool can then be removed, allowing the end of the connecting pin to be peened and secure.

Another chain connecting option is also available with the RKO tool,



Figure 2: Disconnecting chain.

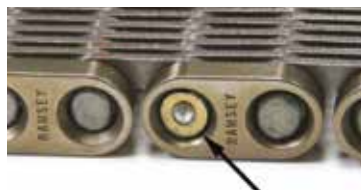


Figure 4: Completed drive pin connection.

Ramsey's drive pin connection (figure 3). With this method, Ramsey supplies a special predrilled connecting pin and drive pin hardware, which is sized to fit the exact chain being connected. During connection, the RKO tool is placed under the chain, the chain ends are aligned, the pre-drilled pin is inserted in the chain and the chain is shifted so the drilled pin is opposite the insertion rod at stage three of the tool. Using the insertion rod, a drive pin with a washer is easily pushed into the drilled pin end. The result is a tough, hardened, long lasting connection without the need for hammering, welding or other potentially damaging methods (figure 4).

WORKS WITH MANY CHAINS

RKO tools can be ordered to fit most styles of Allguard and Lifeguard chain. The tool's toothed guide blocks are modular in design and can be stacked to accommodate a wide range of chain widths and chain guide types. When a customer orders a tool, Ramsey's customer service personnel help select the exact module configuration to fit the chain at hand. But the RKO tool is also very adaptable to changing needs. Modules can be easily removed and re-oriented at any time to fit different chain widths and guide types. For the customer, this means one tool can handle many different chain styles.

The RKO tool's features have earned a US patent (US Patent 9,174,269 B2), and are also covered by patents pending in Europe. The combination of an RKO tool with one of Ramsey's wear-protected conveying chains provides a state-of-the-art conveying system, which provides long life, easy maintenance, greatly reduced downtime and increased productivity. ■

FURTHER INFORMATION:

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