

Upper Chain Guide Assembly - Design Change

Beginning with power turns produced on or after August 20, 2009; all Portec power turns will be manufactured with an upper chain guide assembly fabricated from steel. The steel upper chain guide assembly will replace the aluminum upper chain guide assembly that has been Portec's standard for several years. Portec believes that this design change will give all of Portec's customers the benefit of a rugged, heavy-duty construction that will require minimal attention over years of service.

The steel upper chain guide assembly will be welded to the offset in the slider bed. Our expectation is that the upper chain guide assembly will never have to be replaced, although the wear strips on the assembly will continue to be easily removed for replacement as operating conditions dictate.

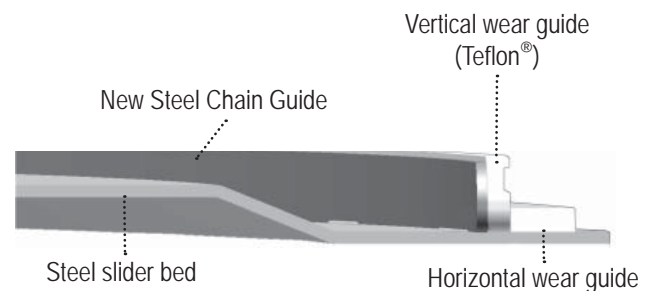
The wear strips attached to the horizontal and vertical surfaces of the upper chain guide assembly – in contact with the chain – will be the same material as always. The vertical chain guide wear strip is a Teflon® material that provides very low sliding friction against the chain. The horizontal chain guide wear strip, which the chain rides upon, is High Molecular Weight polyethylene. This polymer is resistant to abrasion and has a low coefficient of friction, making it an excellent choice for the constant contact with the chain.

The lower chain guide assembly design and materials will not be affected by this change.

There are several reasons that drove us to make this design change. In our customer site audits, we have noted a number of situations where, due to the inaccessibility of the power turns or due to reduced/stretched maintenance staffing, the upper chain guide assembly on Portec turns were not getting sufficient inspection and adequate maintenance. Particularly in applications with heavy loads, extensive operating times, and high conveying speeds, conditions can lead to the wearing out of not just the wear strips on the upper chain guide assembly but also the disintegration of the aluminum upper chain guide assembly itself. We believe that the durability of the steel upper chain guide assembly will provide greater assurance against catastrophic failures in these applications.

We have also noticed that a number of our customers order the aluminum upper chain guide assemblies whenever they order the wear strips. In conversations with these customers, it became clear that these orders were often for conveyors being used in the same kind of high-wear applications described earlier. The customers asked us for an alternative solution that would be more durable, require less frequent maintenance, and that would not necessitate ordering a complete upper chain guide assembly, which is bulky and expensive to ship.

While not every application necessarily dictates the use of the more robust steel upper chain guide assembly, we believe that it is simplest to make the change on all new Portec conveyors so that all customers can enjoy even more trouble-free operation. We have developed an offering of the steel upper chain guide assembly as a spare parts kit, which will be the subject of a future Technical Bulletin.



Steel Upper Chain Guide Assembly