PBC Linear™ and Miller Weldmaster® Cut Down Assembly Cost

Miller Weldmaster®, an Ohio-based manufacturer of thermoplastic fibers, has turned to PBC Linear's new, cost saving Integral V™ Technology (IVT) for a simplified linear guide system on their extreme performance 112 cross-seaming weld machine! Using a specially designed Integral V™ rail and carriage, Miller Weldmaster dramatically reduced system assembly time, eliminated components, and increased precision on their heat sealed cross-seaming machine.

Utilizing extreme heat to weld a wide variety of thermoplastic fabrics, Miller Weldmaster provides innovative products to a range of industries, including: inflatable materials, truck covers, banners, lawn furniture and more. These fabrics are seamed together using Miller Weldmaster's line of high performance cross-seamers. Due to a painstaking alignment process for overhead linear guide systems, Miller Weldmaster approached PBC Linear for a simplified solution.

The versatility of the IVT design was the answer. IVT can be mounted in either upright or inverted position without losing load capacity, and ideal for many applications. Mounted inversely, the Integral V rail allows the cross-seamer to travel along a highly accurate linear path for very precise welding. Standard rail systems are typically more expensive and require careful alignment and quality assurance for optimum performance. They also require several mounting components and fixtures along the rail for precise mounting, leading to additional production costs and alignment time.

Inverted IVT linear guide assembly.

Custom IVT extrusion reduced mounting components by half.

Integral V™ technology circumvents the pitfalls of the older linear guides with new design improvements and machining techniques. PBC Linear's proprietary SIMO™ process ensures flat surfaces, tight tolerances and rigid guidance. Using concurrent milling, SIMO™ machines all critical edges of an aluminum extrusion in one quick pass—eliminating the extrusions natural inaccuracies of bow, warp, twist and camber. Hardened steel inserts are embedded into the specially designed extrusion for smooth, repeatable travel of the IVT carriage. The end result is the next generation of linear guide systems, IVT significantly reduces mounting components, fasteners and alignment installation time while ensuring precise linear motion travel at a lower total installed cost.

Armed with PBC Linear's new Integral V technology, Miller Weldmaster has been able to cut assembly time by 60%, reduce labor and production costs, and increase accuracy in their new product line of cross-seamers.