



## How Motion Manufactures Differently

Motion Index Drives stands out from our competitors by our commitment to our customers and their applications. Each and every application is reviewed in detail to ensure the proper fit for the application. When you are working with one of our engineers or salesmen, they explore every possible solution to make sure they find the best product that efficiently and cost effectively fits your application. Motion Index Drives products are completely customizable, serviceable, cost competitive and come with standard multi-year warranties. For the standard line of indexing tables, we offer a very wide range of index tables sizes, which can provide a fixed or flexible indexing table to fit the application perfectly. With capabilities of manufacturing custom indexing cams that provide up to 108 fixed stops, we can provide solutions that many manufacturers do not offer.

In terms of mechanical variances, some manufacturer's indexers use globoidal cams opposed to barrel cams for smaller index tables. The use of globoidal cams can compromise load capacity and accuracy. Globoidal cams are better suited for extremely high speeds (several hundred RPM) and continuous running cam applications used in timing other apparatuses that don't require high accuracy. The cams Motion Index Drives manufactures are ALWAYS hardened (either induction or flame hardened), and finish ground to ensure a long life without wear, but also to provide a superior indexing accuracy.

Motion Index Drives Rotary index tables are supplied with externally mounted gear reducers, coupled with a motor (AC, DC, or Servo). The external reducers gives us the flexibility to pick the exact ratio required to meet our customers speed and torque requirements of the application. The external reducer also allows us to then pick a motor suited to match the speed requirement, so the motor never has to be oversized due to not enough reduction, saving on energy consumption. Many customers have found when they use an MID index drive, the motor size is smaller than most other indexing suppliers. The external reducer also allows for smaller size indexer housings, reducing footprint, while the internal housing of the indexer is optimized to hold the largest internal components between the cam and cam followers, and not wasting space on holding the gearing.



Our bearing structure differs in that we use a low friction four point contact bearing system for the rotating top dial to handle high axial loads while also supporting tilting moments, due to offset loading. Some manufactures use very thin axial and radial bearings. Their bearings are very thin, 3-5mm in thickness, and the preload to the bearing is only done utilizing the center flange of the index drive. This limits the ability of supporting tilting moments as well as greatly reducing the rigidity of the top dial at the outside diameter, as gravity is what is preloading their outer top dial bearing.

Overall, MID believes we can provide a superior indexing solution that is cost effective, reliable, reusable, and manufactured to meet the needs of the customer and the application.