

Volume 2



# BEARING SOLUTIONS

## Exercise Equipment Get Its Own Cardio Fitness with Hartford Bearings



**One-way Hartford ball bearing technology provides optimum compatibility with adjacent components**, and it is an excellent alternative to clutch needle bearings, which demand stringent shaft and housing tolerances.

This bearing allows free rotation in the overrunning direction, and prevents rotation in the opposite direction. The generic term for this type of bearing is "CSK", a sprag-type design where the wedging of the sprags transmits torque between the races for anti-rotation. This wedging action occurs when relative rotation of inner and outer race forces the sprags to a more perpendicular position.



These bearings are lubricated for life and are available with seals for grease retention and protection from contaminants.

**At the end of the day, the manufacturer gets a cost effective solution, reducing assembly and maintenance costs.**

There are many applications for this bearing design. For example, they are used in throwing machines in skeet shooting to prevent backward movement of the shooting arm after each stroke.

Hartford Technologies has incorporated this bearing design into their core product line, and made it part of many integrated assemblies that reduce costs for installation and tolerance stack-up.

For more on Hartford ball bearing technology, see [www.hartfordtechnologies.com/custom-ball-bearings.htm](http://www.hartfordtechnologies.com/custom-ball-bearings.htm)

## Hartford's Quality Commitment

Hartford Technologies follows AIAG standards for APQP – Advanced Product Quality Planning. This comprehensive process ensures, among many other things, that product design not only meets customer expectations, but promotes collaborative strategies that help design-out potential problems, boost productivity and optimize quality.

***The End Result? Your Prototype or Production Launch Executes Precisely as Planned.***

Hartford Technologies can assist with all levels of the APQP process, from design recommendation, to rapid prototyping, pre-production parts and tooling, and full production. **Hartford's commitment is to help you get your product to market in the shortest time.** For more on Hartford's Quality Commitment, see [www.hartfordtechnologies.com/quality.htm](http://www.hartfordtechnologies.com/quality.htm)



***Delivering to Two or More Continents?***

**As a global, high-capacity producer, Hartford is the leading choice for managing logistics, without raising costs.**