

BEARINGS

Bearings are essential mechanical components used in a large number of applications where relative motion is needed between parts. High-Speed Steels have played an important role in the development for high performance bearing used in aerospace applications, typically hybrid bearings with ceramic rolling elements. However, these High-Speed Steel grades have been limited to low alloying contents due to the dangers of stress risers such carbide bands and large blocky carbides seen in High-Speed Steels.

Our powder metallurgical High-Speed Steels, ASP®, have the benefits that they are cleaner than regular High-Speed Steel and segregation free giving them extremely good fatigue life. As they can be alloyed to a higher degree without any segregation or large blocky carbides we can also offer grades with higher load bearing capabilities, while maintaining a good fatigue resistance.

ASP® grades such as ASP® 2062 (AMS 6558) is used in motorsports, medical equipment and aerospace with great success. ASP® finds success in special applications where its performance, reliability and loadbearing capabilities are unmatched by more common bearing steels.

FUEL INJECTION SYSTEMS

A fuel injection system is the part of a modern engine which is responsible for delivering fuel to the combustion chamber. This is done by spraying the fuel under high pressure through nozzles to atomize the fuel. By doing this the efficiency, power output and reliability can be increased, while decreasing environmental effects and cost. As emission regulations have gotten stricter there has been a need to improve the performance and reliability of these systems, which has led to higher demands on the materials used for making components such as injection nozzles and needles. ASP® is an excellent choice for these applications due to its combination of high cleanliness, strength, toughness and fatigue performance for this high demanding application. Contact our technical team to learn more about which grade might be suitable for your application.

MOTORSPORTS

For a long time the motorsports industry has been pushing the envelope in material development in order to increase performance. Because of this there are many applications in motorsports where leading manufacturers have turned to ASP® for the excellent fatigue properties, toughness and wear resistance. Applications include bearings, shafts, camshafts, finger followers, tappets and more. Contact our technical team to get recommendations on what grades are correct for your application.