## **Bearing Aftermarket Bussiness**

he polymer seals market can be segmented by type of motion into rotating, reciprocating or static seals, or by customer groups into industrial, automotive or aerospace seals.

Industrial seals can be segmented into power transmission seals and fluid system seals. Most power transmission seals are made for rotating applications, with radial and axial shaft seals being the main product groups. Fluid systems seals include fluid power seals and fluid handling seals. The majority of the fluid power seals are made for reciprocating motion and are used in both mobile and stationary fluid power applications, for example in off-highway, mining and other heavy industries. The off-highway applications represent the largest part of the market. Asia represents a major share of the industrial seals market with the remainder almost equally split between the Americas and Europe.

The technology trend for dynamic seals in the automotive industry is shifting to powertrain and driveline applications, with customized solutions meeting more demanding requirements for reducing weight and friction, for more driving comfort and less fuel consumption. While China became the biggest car market globally, automotive original equipment manufacturers are still developing core technology in their mature markets in North America, Western Europe and Japan. In 2015, Asian markets, except for China, suffered from a challenging economic environment while the mature markets and China continued to grow slightly.

Seal are required to withstand extreme conditions and are often critical to the system's operational reliability. In order to meet such requirements, aerospace seals are custom designed with light weight and corrosion resistant material solutions. North America and Europe are still the most important markets, but the demand in Asia is growing. SKF is among the top global players with a strong offer in most applications across each industry. The German Freudenberg Group with its Automotive focused Japanese affiliate NOK (Nippon Oil Seal Co) is the largest supplier on the world polymer seals market across all industries. Trelleborg AB and Parker Hannifin are important players on the industrial seals market and Federal Mogul, Dana, ElringKlinger, Sabo and Bruss are significant suppliers of automotive seals. The aerospace seals market is fragmented and split between 8–9 companies. In addition to SKF the major players are Trelleborg AB, FNOK (Simrit), St Gobain and Greene Tweed. In addition, Aerospace Sealing Solutions manufactures precision

and helicopter applications. The Aerospace elastomeric vibration control market is split between 5-6 companies and in addition to SKF the major players are Lord Corp, Hutchinson, and ITT/Enidine.

elastomeric vibration control products. These elastomeric bearings, isolators, dampers, and mounts are custom-engineered solutions, specifically designed for each application in fixed wing