

Powder Metallurgy

Powder Metallurgy comprises: GKN Sinter Metals and Hoeganaes

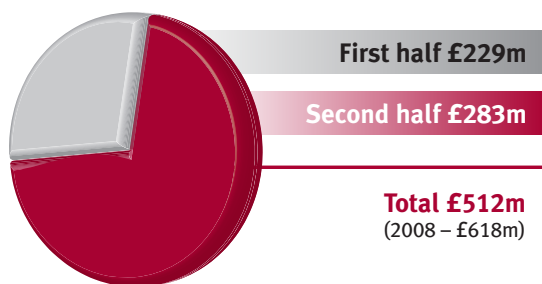
GKN Sinter Metals is the world's largest manufacturer of sintered components. It uses powdered metals to manufacture precision automotive components for engines, transmissions, and body and chassis applications.

It also produces a range of components for industrial and consumer applications, including power tools, bearings, white goods and garden equipment.

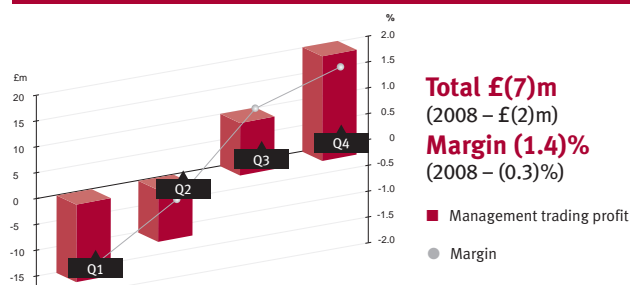
Hoeganaes produces metal powders, largely ferrous based, used in the manufacture of sintered components. It is the largest powder metal producer in North America.



Management sales



Management trading profit and margin



Achievements in 2009

Powder Metallurgy responded to the significant decline in its end markets by reducing operating costs and lowering its break-even point, implementing flexible working practices and plant shutdowns. These actions helped to accelerate improvements in profitability for both GKN Sinter Metals and Hoeganaes across all regions in the second half.

Increasing trends to improve fuel efficiency and reduce emissions, such as variable valve timing in engines, high performance gear sets in transmissions and differential gears, are driving the demand for products made by powder metallurgy. GKN Sinter Metals had a successful year in winning new programmes with approximately £75 million of business awarded in the period. In addition, a further £25 million of annualised sales on existing programmes was won from competitors.

New product launches included the first application of GKN's innovative planetary pump as an integral part of the double clutch transmission on the Ferrari California, and a number of powder metal parts for the Tata Nano, a low cost vehicle for the Indian market.

Technology continues to play an important part in Powder Metallurgy and the business achieved another breakthrough with its high performance gear programme with the award of a contract to produce the world's first powder-forged differential gears.

Technology Trends — Variable Valve Timing



The increase in Variable Valve Timing (VVT) systems in automotive engines is a major area of growth for powder metallurgy. Some 80% of VVTs are expected to be produced using the powder metallurgy process by 2014.

From operations in Germany, China and North America, GKN already produces sprocket, stator and rotor assemblies for VVTs for global vehicle manufacturers. Increased volumes for programmes in production together with new programme wins yet to be launched support a significant increase in GKN VVT system sales in the next three years.