Hauzer is a technology leader for tribological coatings. In the 1990s automotive suppliers started to use plasma coatings to reduce wear and friction in their engines. From the beginning, Hauzer cooperated with the leaders in the market to develop the most productive coating concepts with the best coating performance. Nowadays Hauzer Flexicoat equipment produces the best diamond like carbon (DLC) and nitride coatings for many applications.

**Automotive Components**
Examples of automotive engine components that are being coated are fuel injection parts like injection needles, high pressure plungers and orifices valves. Piston rings, valve train components like rockerarms and tappets, piston pins, roller and sliding bearings, gears and many others. Lately, in order to reduce emissions even further, industry is investigating other engine parts as well, like dynamic seals (friction reduction) and batteries and fuel cells (electrification of powertrains).

**Bipolar plate coating solutions**
Hauzer has applied its long experience on carbon-based coating processes and technologies for fuel cell applications. In the past years Hauzer has developed a high quality coating on stainless steel bipolar plates. The so-called ta-C coating is generally seen as the best solutions to be used in PEM-type fuel cells. Good results in terms of adhesion, conductivity and corrosion resistance are obtained by implementing plasma surface cleaning and a metallic adhesion layer in the total coating solution. Cost of ownership values for pilot and high volume production are well in-line with industrial roadmaps.
GROW YOUR BUSINESS WITH OUR SOLUTIONS

Competence Center
Hauzer’s carbon coating for bipolar plates has been developed at its competence center in the Netherlands. Dedicated equipment is available to test various processes on customer products.

Job coating
Hauzer can provide coating services at partner facilities. This service can be used by customers who would like to coat a large quantity of products on frequent basis.

R&D and Pilot equipment
Hauzer is offering batch tools that can be used for R&D and for pilot scale production. The Flexicoat® 850 is the smallest tool that can be equipped with various deposition technologies for process and coating development. The Flexicoat® 1500 is the largest batch tool that can be used for pilot production – up the 350,000 bipolar plates can be coated annually (A4 size, both sides).

Production equipment
Hauzer Inline machines coat millions of components every day. They are built for 24/7 mass production of two or three dimensional components and can easily be integrated in highly automated factories. The equipment can be expanded whenever production growth is needed. The Metalliner® can produce 1 to 10 million bipolar plates per year depending on tool configuration. Platforms for steel coil coating will be launched in future when market demands have grown to substantial levels.

competence Center at Hauzer for customer services