

## **Press Release**

December 2, 2011

### **Akebono Brake to Set up Ferritic Nitro-carburizing (FNC) Production Capability at Its North American Plant, Introducing Industry First FNC Rotor**

Akebono Brake Corporation, North American subsidiary of Akebono Brake Industry Co., Ltd. has completed development of disc brake rotors treated with FNC\* and is readying to operate FNC process for mass production, which is the first as a brake manufacturer. FNC treatment is applied to resolve roughness (judder) concerns caused by corrosion build-up on rotor braking surface. At Akebono Brake, Clarksville Plant (ABCT) in Tennessee, production equipment will be installed to apply FNC treatment to rotors. Production parts will be shipped to a major North American customer, starting the end of 2012.

FNC process diffuses Nitrogen and Carbon into ferrous material, producing hard layer called compound layer, which improves corrosion and wear performance. In North American market, car dealerships hold large inventory of vehicles and leave them in their parking lot months at a time, in some cases. This causes rotor braking surface to corrode and induces brake roughness. With introduction of FNC rotor, corrosion performance is expected to improve nearly five times over the regular rotor, thus, improving the initial quality performance of rotor. By processing the FNC treatment in-house, Akebono aims to improve production efficiency as well as profitability.

It has been verified that FNC treatment improves the wear, fatigue and heat resistance performance, helping brake performance improvement other than corrosion performance. Additionally, Akebono is investigating the application of FNC treatment to other brake components in order to further increase the value of brake assembly.

\* FNC: Ferritic Nitro-carburizing