NACHI developed the EXEO series alloys in company-wide combined and connected engineering system by first analyzing and determining necessary characteristics and then applying Nachi original alloy design and special melting technologies. EXEO-NPR1 is the best material for injection molding machine parts such as screws used for molding high-grade plastics.

- Joint development with an university analyzed the basic mechanism of corrosion by using a new method to evaluate corrosive wear by plastics.
- FM Alloy production facilities and alloy design technologies make superior resistance to corrosive wear as plastics injection molding machine parts.
- Proprietary heat treatment technologies give the products the very best heat treatment quality.

The Nachi evaluation of corrosion wear by plastic is available for many kinds of plastics. Please contact us for further information.
Corrosion wear by an engineering plastic [PA6T + GF 50%]

Pictures of screw surface after 600,000 injection shots

Roughness caused by corrosion wear is observed on surface of screw.

Electron microscope images of material surface after Nachi evaluation of corrosion wear by plastic

Roughness caused by corrosion wear is observed same as screw.

Applications

Parts of injection molding machine

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<th>Reinforcement</th>
<th>Other composites</th>
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<td>Glass-fiber reinforcement</td>
<td>Flame and oxidation resistance</td>
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<td>PA6T, PPS, PBT, LCP</td>
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<td>PEEK, POM, PC</td>
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