# 5500-Series API Coupler

## Application
- Combined with API adapters, these couplers are suitable for rail car and tank truck loading or unloading.

## Features
- Locking five-cam design provides easy alignment and tight connection.
- Modular design allows various face seal combinations to be compatible with different alternative fuels, performance levels, and applications.
- Replaceable nose seal can be changed without removing coupler from loading arm.
- Fully interlocked collar prevents fitting from opening when disconnected and from being disconnected while opened.
- 4” TTMA inlet mounting flange connection.
- Ball-end handle for easy and comfortable operation.
- No special tools needed for maintenance.

## Materials
- **Body:** 356 T6 aluminum anodized hard-coat
- **Cam:** stainless steel
- **Poppet:** 356T6 aluminum anodized hard-coat
- **Seals:** FKM-GFLT standard; Baylast, EPDM, Fluoroelastomer, FKM-B, HiFluor®
- **Link, shaft, pin, crank:** hardened 17-4PH stainless steel
- **Handle:** aluminum, stainless steel

## Specifications
- **Seal operating temperature:**
  - Baylast: -35°F to 212°F (-37°C to 100°C)
  - EPDM: -20°F to 250°F (-28°C to 121°C)
  - FKM-B: -10°F to 400°F (-23°C to 204°C)
  - FKM-GFLT: -30°F to 400°F (-34°C to 204°C)
  - Fluorosilicone: -50°F to 350°F (-45°C to 176°C)
  - HiFluor: -15°F to 400°F (-26°C to 204°C)
- **Flow rate:** 600 GPM at 3 PSI pressure drop; max flow rate: 1,000 GPM
- **Fully compliant with API RP1004:2003 specifications**

<table>
<thead>
<tr>
<th>Description</th>
<th>Part #</th>
</tr>
</thead>
<tbody>
<tr>
<td>5500 API rack coupler FKM-GFLT aluminum handle</td>
<td>5500G</td>
</tr>
<tr>
<td>5500 API load coupler FKM-B seals with aluminum handle</td>
<td>5500B</td>
</tr>
<tr>
<td>5500 API rack coupler Baylast aluminum handle</td>
<td>5500BL</td>
</tr>
<tr>
<td>5500 API rack coupler EPDM aluminum handle</td>
<td>5500E</td>
</tr>
<tr>
<td>5500 API rack coupler Fluorosilicone aluminum handle</td>
<td>5500F</td>
</tr>
<tr>
<td>5500 API rack coupler HiFluor with aluminum handle</td>
<td>5500H</td>
</tr>
</tbody>
</table>

*Normal wear and tear items (including seals) not covered.*
New Design Features

Seal Design

**Improvement**
- Removeable seal design is keyed in place and tested to **450 PSI** without seal ejection.

**Benefit**
- The new nose seals will handle a higher burst pressure of **450 PSI** in comparison to the **150 PSI** bonded nose seal.

Coiled Stainless Steel Springs

**Improvement**
- 10 stainless steel coiled springs have been added. Coiled springs put more pressure on the nose seal-to-truck API adapter to help prevent leaks.

**Benefit**
- This will solve the occasional rusting and breaking issues that occurred using the carbon steel wave washer.

Two-Piece Handle

**Improvement**
- Two-piece handle is attached to the coupler with two separate cross pins.

**Benefit**
- Should the handle cross pins be sheared away, the interlock will remain operational, preventing the coupler from opening.