Our technically accomplished team will help you slash the weight and cost of your new or existing application.

**BENEFITS OF CHOOSING PLASTIC OVER METAL:**
- Cost reduction
- Weight reduction
- Design freedom
- Secondary operation elimination

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**Stanyl® nylon 4/6**

**KEY ATTRIBUTES:**
- Chemical resistance
- High HDT
- Lubricity

**STRENGTHS:**
- Flowability
- Hot-water moldable
- Outstanding wear and friction performance

Why we recommend **Stanyl® TW200F8**:
- High stiffness at high temperatures
- Low wear
- Weight and noise reduction

**Stanyl® TW200F8**
(40 percent glass-fiber-reinforced PA46)

**APPLICATION REQUIREMENTS:**
- Diesel engines
- High stiffness at high temperatures
- High toughness
- Good oil resistance at high temperatures
- Low wear, good fatigue
- Safety, durability
- Weight and noise reduction

**COMPETITION:**
- Metal
- PA66

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**ForTii™ Nylon 4T® nylon 4/6**

**KEY ATTRIBUTES:**
- Dielectric properties
- Dimensional stability — CLTE
- Very high HDT

**STRENGTHS:**
- Blister resistance
- Chemical and oil resistance
- Isotropic CLTE

Why we recommend **ForTii™ Nylon 4T®**:
- Components for reflow soldering
- Low moisture uptake
- Weight reduction

**APPLICATION REQUIREMENTS:**
- Better knitline strength than LCP
- Blister resistance
- Dimensional stability — low warpage and low coefficient of linear thermal expansion (CLTE) below and above T<sub>g</sub>
- Good resistance to salts that attack PA6 and PA66
- High heat capability (581°F DTUL)

**COMPETITION:**
- LCP
- PEI
- PPA
- PPS

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The chart below demonstrates the superior wear performance of Stanyl® polyamide 4/6, which is particularly attractive at high speeds at which other nylons fail.
**Leona®** partially aromatic nylon 6/6

**KEY ATTRIBUTES:**
- Surface appearance
- Weatherability

**STRENGTHS:**
- High stiffness
- Paintability

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Industry leaders call on Chase Plastics for engineered resins to replace metal without sacrificing performance or quality.

**Leona® 90G50** partially aromatic nylon 6/6
(50 percent glass-fiber-reinforced)

**APPLICATION REQUIREMENTS:**
- Class-A surface finish
- Colorability
- High toughness
- Stiffness throughout a wide range of temperatures
- Weatherability

**COMPETITION:**
- Metal die-cast
- PA6
- PA66

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Why we recommend **Leona® 90G50**:
- Cost savings
- Parts integration
- Strength
- Surface appearance
- Weight reduction

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Painted cover of ABS and inside bracket of Zamak
Unpainted one-piece stay of Leona® 90G60 B3374
Painted ABS and metal die cast
Unpainted one-piece stay and housing of Leona® 90G60 B3374
Reny® MXD6

KEY ATTRIBUTES:
• Good dimensional stability
• Low moisture uptake
• Surface finish

STRENGTHS:
• Paintability
• Super-low thermal expansion
• Weatherability

APPLICATION REQUIREMENTS:
• Good strength and stiffness retention at higher temperatures and wetter environments
• Highly resistant to oils and organic solvents and fuels
• Less moisture uptake than PA6 and PA66; less growth with moisture and better dimensional stability, especially in high-humidity environments
• Very good surface capability with high filler loadings — resin-rich surface

Why we recommend Reny® MXD6:
• Low mold shrinkage
• Low warpage

COMPETITION:
• Die-cast metals
• PA6
• PA66
**Ryton® PPS**

**KEY ATTRIBUTES:**
- Chemical resistance
- Dimensional stability
- High HDT

**STRENGTHS:**
- Precision molding
- Temperature resistance

**Ryton® R4-02XT**

(40 percent glass-fiber-reinforced improved ductility PPS)

**Why we recommend Ryton® R4-02XT:**
- Chemical resistance
- Thermal stability

**APPLICATION REQUIREMENTS:**
- High stiffness at elevated temperatures
- Low dimensional change under varied conditions
- Resistance to several chemicals
- Structural integrity

**COMPETITION:**
- Aluminum
- Die-cast metal

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**Solvay Specialty Polymers Omnix® 4050 HPPA**

**KEY ATTRIBUTES:**
- Crystallizes sooner than other aromatic nylons for faster cycle times
- Exceptional surface appearance
- High-performance semi-aromatic nylon base
- Low and slow moisture uptake provides excellent dimensional stability

**STRENGTHS:**
- High stiffness
- Hot-water and hot-oil moldable
- Low flash

**Why we recommend Omnix® 4050 HPPA:**
- Excellent creep resistance
- Good impact

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