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<table>
<thead>
<tr>
<th>Material Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Amorphous</strong></td>
</tr>
<tr>
<td><strong>Semi-Crystalline</strong></td>
</tr>
<tr>
<td>Used in structural, bearing, and wear applications. Good stress cracking and chemical resistance. Difficult to bond and does not form well.</td>
</tr>
<tr>
<td><strong>Thermosets</strong></td>
</tr>
<tr>
<td>Good for structural and wear applications. Generates chemically and electrically resistant. Seta permanently after initial heating.</td>
</tr>
<tr>
<td><strong>Imidized</strong></td>
</tr>
<tr>
<td>Resistant to chemicals and extreme temperatures. Great mechanical values, but does not bond well and is very difficult to bond.</td>
</tr>
<tr>
<td><strong>Fluoropolymer</strong></td>
</tr>
<tr>
<td>High resistance to thermal shock, corrosive, and stress cracking. Excellent wear and friction reducing properties.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Friction Coefficient of Coefficient of Friction Rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friction coefficient is indicated using a 1 to 10 scale. Friction coefficient of low friction properties will receive a high score for having a low friction coefficient.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cost Effective, Standard, Commodity, Specialty</td>
</tr>
<tr>
<td>Relative cost is indicated using a 1 to 10 scale, with one being the most cost-effective, six being the most expensive, generally reserved for highly specialized grades.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Temperature Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum Service Temperature</td>
</tr>
<tr>
<td>The maximum service temperature is provided for the material. Temperatures are approximate and may vary greatly depending on the loading and application conditions.</td>
</tr>
</tbody>
</table>

### Composite Materials

#### General Purpose Engineering Plastics
- ABS, Acetal, Delrin®, Nylon, PVC, PET, Polycarbonate

#### Composite Materials, Thermosets
- Glass Epoxy, Phenolic

#### Olefin-Based Industrial Plastics
- HDPE, LDPE, Polypropylene, UHMW-PE

#### Fluoropolymer Plastics
- PTFE, PCTFE, PVDF, ETFE, FEP, Fluoroint*

#### High-Performance Engineering Plastics
- PEEK, Torlon®, Ultem®, Vespel®, Ertalyte®, Noryel®, PEI, PAI, PET, PPS

#### Transparent Plastics
- Acrylic, Polycarbonate, PETG, Twinwall & Multwall

#### Static Controlled Materials (ESD)
- Acetal ESD, UHMW-PE, Anti Static, Semistro™ ESD, Ultem® ESD

#### Medical Grade Plastics
- Polypropylene HS, Medical Acetal, Radel®, PPSU, Medical PEEK

#### Forming Grade Plastics
- Kydex®, Boltaron®, High Impact Polystyrene, PETG, ABS

#### Industry Applications & Markets Served

#### General Purpose Engineering Plastics

<table>
<thead>
<tr>
<th>Material</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acetal Copolymer and Delrin® Homopolymer</td>
<td>Acetal and Delrin® are tough, high strength, low friction engineering plastics that perform well in both wet and dry environments. They have excellent dimensional stability for ease of machining and close tolerance parts. Copolymer acetal is more chemically resistant than homopolymer Delrin®.</td>
</tr>
<tr>
<td>MD Filled Nylon</td>
<td>MD filled nylon contains molybdenum disulfide (MoS2) which offers higher rigidity and strength than unfilled grades. MD filled nylon is extruded or cast and exhibits a high heat distortion temperature than unfilled versions.</td>
</tr>
<tr>
<td>ABS – Engineering Grade</td>
<td>ABS is cost-effective with excellent chemical and stress resistance as well as an excellent combination of toughness, rigidity and creep resistance.</td>
</tr>
<tr>
<td>Delrin® AF Blend – 13%</td>
<td>Delrin® AF 13% is a blend of Delrin® AF-100 and Delrin® 150 resins with excellent sliding/friiction properties. Bearings made of Delrin® AF blend can operate at higher speeds while exhibiting reduced wear.</td>
</tr>
<tr>
<td>Polycarbonate – Machine Grade</td>
<td>Machine grade polycarbonate is a thermoplastic that features exceptionally high impact strength, dimensional stability, stiffness, tensile, and impact strength. Machine grade polycarbonate also has a low linear expansion coefficient.</td>
</tr>
<tr>
<td>PET</td>
<td>PET is a semicrystalline polymer, is a strong and stiff engineering plastic featuring excellent ease of machining, chemical-resistance and desirable bearing and wear properties.</td>
</tr>
</tbody>
</table>

#### Thermosets

<table>
<thead>
<tr>
<th>Material</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phenolic</td>
<td>Phenolics are thermoset composite materials that have the advantage of high strength and stiffness achieved through a reinforcement material. These composites have varying properties depending on the resin/reinforcement materials used.</td>
</tr>
<tr>
<td>PVC – Type 1</td>
<td>PVC has an excellent resistance to oils and a low permeability to gases. It is ideally suited for applications where maximum chemical resistance is necessary.</td>
</tr>
<tr>
<td>G10/FR4 Glass Epoxy</td>
<td>G10- FR-4 is a thermosetting industrial laminate made up of a continuous filament glass cloth material with an epoxy resin binder &amp; has high strength, desirable electrical properties and tough chemical resistance, even under wet or humid conditions.</td>
</tr>
</tbody>
</table>

### Industry Applications & Markets Served

#### Industry Applications & Markets Served

1. **General Purpose Engineering Plastics**
   - ABS, Acetal, Delrin®, Nylon, PVC, PET, Polycarbonate

2. **Composite Materials, Thermosets**
   - Glass Epoxy, Phenolic

3. **Olefin-Based Industrial Plastics**
   - HDPE, LDPE, Polypropylene, UHMW-PE

4. **Fluoropolymer Plastics**
   - PTFE, PCTFE, PVDF, ETFE, FEP, Fluoroint*

5. **High-Performance Engineering Plastics**
   - PEEK, Torlon®, Ultem®, Vespel®, Ertalyte®, Noryel®, PEI, PAI, PET, PPS

6. **Transparent Plastics**
   - Acrylic, Polycarbonate, PETG, Twinwall & Multwall

7. **Static Controlled Materials (Esd)**
   - Acetal ESD, UHMW-PE, Anti Static, Semistro™ ESD, Ultem® ESD

8. **Medical Grade Plastics**
   - Polypropylene HS, Medical Acetal, Radel®, PPSU, Medical PEEK

9. **Forming Grade Plastics**
   - Kydex®, Boltaron®, High Impact Polystyrene, PETG, ABS

10. **Industry Applications & Markets Served**
    - **General Purpose Engineering Plastics**
    - **Composite Materials, Thermosets**
    - **Olefin-Based Industrial Plastics**
    - **Fluoropolymer Plastics**
    - **High-Performance Engineering Plastics**
    - **Transparent Plastics**
    - **Static Controlled Materials (Esd)**
    - **Medical Grade Plastics**
    - **Forming Grade Plastics**
    - **Industry Applications & Markets Served**
HDPE

High-density polyethylene (HDPE) is a lightweight, machinable thermoplastic with a high strength-to-density ratio and long-term durability.

- Extreme corrosion, chemical, and wear resistance
- Easy to machine and fabricate
- FDA and USDA compliant for food processing applications

LDPE

Low-density polyethylene (LDPE) is characterized by its great chemical resistance and desirable electrical properties at a cost effective price point.

- Cost Effective
- Desirable chemical and corrosion resistance
- High impact strength at low temperatures

Polypropylene

Polypropylene is a versatile, lightweight thermoplastic with high strength, chemical, moisture, and corrosion resistance.

- Easily vacuum formed, thermoformed, fabricated, hot air welded, and machined
- Copolymer provides outstanding toughness and performs well in extremely cold conditions
- Resists most acids, alkalies, and solvents

UHMW-PE

UHMW-PE (Ultra High Molecular Weight Polyethylene) is an outstanding choice for high abrasion, impact, and chemical resistance at a relatively low cost.

- Easy to fabricate and machine
- Highly resistant to wear and abrasion
- Extremely low moisture absorption
- Low coefficient of friction

PTFE – Virgin Molded Grade

PTFE is a soft fluoropolymer mechanical plastic with exceptional resistance to high temperatures, chemicals, corrosion, and stress cracking. Available in a variety of formulations including bearing grades.

- Outstanding chemical resistance
- Extremely low coefficient of friction
- Excellent for seal/gasket applications as well as bearing and wear parts
- Performs in high heat environments up to 500°F

PTFE – Extruded Grade

Extruded PTFE retains nearly all mechanical properties of molded PTFE including exceptional resistance to high temperatures, chemicals, corrosion and stress cracking, at a more cost-effective price point.

- Outstanding chemical resistance
- Extremely low coefficient of friction
- More cost-effective versus molded PTFE

PCTFE

PCTFE features high compressive strength, low deformation under load, and stability within a wide thermal range. It is commonly used for cryogenic and chemical processing components, as well as laboratory instruments.

- Wide temperature operating range of approximately -400°F to 380°F
- Very low gas permeation and outgassing
- High compressive strength with low deformation

PTFE – 25% Glass Blend

PTFE with the addition of glass fibers has very little effect on chemical and electrical properties while greatly adding to the mechanical properties of unfilled PTFE and significantly increasing wear resistance.

- Higher mechanical properties versus unfilled PTFE
- High heat and chemical resistance
- Other blends available

PVDF

PVDF combines typical fluoropolymer properties, with the mechanical properties of more rigid thermoplastics.

- Non-toxic, high purity, and high heat deflection temperature
- High UV and gamma radiation resistance
- Ideal for semi-conductor processing, chemical processing, and heat exchangers

ECTFE

ECTFE (ethyl vinylidene fluoride) offers excellent resistance to abrasion, harsh chemicals, and permeation. For those applications exceeding the capabilities of PTFE, ECTFE can be evaluated before resorting to a fully fluorinated polymer.

- Desirable resistance to abrasion, harsh chemicals, and permeation
- Easier to fabricate than most fluoropolymers
- Ideal for wire and cable insulation

PFA

PFA is a high-performance fluoropolymer that exhibits similar characteristics to PTFE. It is melt-processible and performs extremely well in extreme heat and chemically corrosive environments.

- Chemically inert to nearly all industrial chemicals and solvents
- ASTM D 3307 Type II
- USDA and FDA compliant CFR-177.1550 (excluding PFA 350)

PVDF 500 PTFE

Fluorosint® 500 PTFE features the resistance to deformation under load versus unfilled PTFE. It is 10% harder than virgin PTFE, and features better wear characteristics while maintaining low frictional properties.

- Reliable performance in hostile chemical environments
- Ideal for high-pressure seals and wear parts
- Highly resistant to deformation under load
**High Performance Engineering Plastics**

**Torlon® 4301 PAI**
Torlon® 4301 exhibits excellent wear resistance in bearing grades and is able to endure harsh thermal, chemical, and stress conditions. It has superior resistance to elevated temperatures, capable of performing under severe stress conditions at continuous temperatures of up to 500°F.

- Exceptional toughness, stiffness, and strength
- Extreme heat temperature resistance
- Wear and creep resistant

**Noryl® – EN 265**
Noryl® is a strong thermoplastic with outstanding strength, stiffness, mechanical, thermal, and electrical properties. Low moisture absorption and low thermal expansion make Noryl® one of the most dimensionally stable thermoplastics available.

- Excellent dimensional stability in a wide range of service temperatures
- High impact resistance and dielectric strength
- Excellent flammability rating

**Ultreco® 1000 PEI Polyetherimide**
Ultreco® polyetherimide (PEI) offers outstanding elevated thermal resistance as well as high strength, stiffness, rigidity, and creep resistance. Ultem® is commonly used in the medical field due to its heat and radiation resistance, hydrolytic stability, and transparency.

- High tensile and dielectric strength
- Flame resistant even at extremely high temperatures
- Excellent dimensional and hydrolytic stability

**PEEK – Virgin Grade**
PEEK is a stiff thermoplastic material with exceptional chemical and fatigue resistance, and thermal stability. It is often used in applications where performance at extreme temperatures is necessary.

- Extreme chemical resistance with good mechanical properties
- Highly resistant to thermal degradation
- Excellent strength, stiffness, and dimensional stability

**Torlon® 4203 PAI**
Torlon® 4203 extruded PAI offers impressive compressive strength and extremely high elongation at break. With great electrical insulation and exceptional impact strength, Torlon® 4203 is commonly used for electrical connectors and insulators.

- High dielectric strength
- Superior resistance at high temperatures
- Performs under severe stress conditions

**Ertalyte® TX PET**
Ertalyte® TX is an internally lubricated mechanical thermoplastic that provides enhanced wear and creep resistant properties versus nylon and aramid products with lower wear and friction versus unmodified polyesters.

- FDA, USDA and 3A Dairy compliance
- Desirable wear, friction, chemical, and creep resistance
- Repeatable Delrin® AF substitute

**Ultreco® PEI U2300 30% Glass Reinforced**
Ultreco® PEI U2300 is a 30% Glass Reinforced grade, with even higher rigidity and dimensional stability versus PEI U1500 and Ultreco® 1000. The glass reinforcement offers an increased strength to weight ratio and improved tensile strength. PEI is common for medical devices, instrumentation, and electrical insulators.

- 10% and 20% glass reinforced grades available
- More rigid than non-reinforced grades
- Resistant to chemical solutions & daily sanitizing

**PEEK – Glass 30%**
Glass Filled PEEK offers the same exceptional properties of PEEK with enhanced mechanical and thermal properties over standard grades.

- Extremely high thermal and mechanical capabilities
- Very high continuous working temperature
- Very high heat deflection temperature

**Torlon® 5530 PAI – Glass 30%**
Torlon® 5530 is a compression molded PAI with 30% glass, making it ideal for higher load structural or electronic applications. It is used for larger shapes and parts or when the greatest degree of dimensional control is required.

- High dimensional control
- Great insulation properties
- Ideal for higher load structural or electronic applications

**PPS**
PPS offers high mechanical performance, and excellent heat and chemical resistance, with service temperatures that range up to 338°F. Excellent hardness, rigidity, dimensional stability, and creep resistance make PPS ideally suited for close tolerance machined components.

- Excellent strength and hardness with a high resistance to chemicals
- Machines to tight tolerances
- PEK alternative for lower temperature applications

**Vespel® Polyimide**
Vespel® polyimide is an extremely high temperature, creep resistant material that is often used in high heat environments where thermoplastic materials would lose their mechanical properties. Vespel® provides dependable temperature, wear and chemical resistance.

- Ultra low outgassing
- Extremely high wear and heat resistance
- Will not melt under nearly any operating conditions

**Laminate Glass Epoxy ESD**
Laminate Glass Epoxy ESD is a high strength laminate that has five times the stiffness of leading thermoplastics. It exhibits excellent dimensional stability, eliminates cracking and chipping, and features a printable surface. Laminate Glass Epoxy ESD is ideal for protecting static-sensitive electronic applications like automated test equipment, assembly fixtures, solder pallets, carrier plates, enclosures, and work surfaces.

- Uniform thickness
- Cost-effective ESD material

**Acetal ESD**
Ideal for use in applications that give off electrical discharge, static dissipative acetal offers good sliding behavior, low moisture absorption, low creep tendency, and a desirable combination of mechanical strength, stiffness, and impact strength.

- Accepted for clean-room use in semiconductor applications
- High surface resistivity
- No carbon black

**Semitron® ESD 410C**
Semitron® ESD 410C PEI is a static dissipative PEI that has the same general properties of unfilled PEI but with additional static dissipative properties, ideal for use in applications that give off electrical discharge.

- Static dissipative properties do not rely on humidity or surface treatments to activate
- Ideal for environments where wear-resistance, chemical-resistance and the management of static electricity are required
- Very high dimensional stability

**UHMW-PE ESD**
Anti-static UHMW can move products more safely in potentially volatile environments, such as munitions plants, grain handling facilities, and explosive assembly facilities (e.g. air-bag assembly) where a spark can cause a dust explosion. Anti-static UHMW protects products sensitive to build-up of electrical charges.

- Resists static buildup
- Extremely high abrasion resistance
- Outstanding impact strength, even at low temperatures

**Semitron® ESD 480**
Semitron® ESD is thermally stable at temperatures up to 475°F withstanding degradation and heat loss, and offers high structural strength and stiffness combined with excellent electrical stability.

- Excellent chemical resistance
- Static dissipative throughout a wide temperature range
- Maintains mechanical properties of PEEK
Heat Stabilized Polypropylene – PEEK – Medical Grade

- FDA compliant
- Low moisture absorption
- Lot controlled and traceable
- Laser markable
- Better dimensional stability compared to homopolymer resin, and USP Class VI approved
- Produced from a FDA and skin/tissue contact sterilization methods of sterilization and was specially developed to meet the requirements for materials used in medical technology.
- Very good resistance to chemicals, radiation, and stress cracking.
- Tested according to ISO 10993-5 for 24 hour skin/issue contact

PEEK – Medical Grade

Medical grade PEEK is a high-performance material with an exceptional mechanical property profile that handles sustained temperatures above 210°F. Medical grade PEEK exhibits excellent resistance to conventional methods of sterilization and was specially developed to meet the requirements for materials used in medical technology.

Radel® R5500 – PPSU

Medical grade Radel® R5500 resin offers exceptional hydrolytic stability, toughness and superior impact strength over a wide temperature range. Radel® offers high deflection temperatures and outstanding resistance to environmental stress cracking.

- Lot controlled and traceable
- Resin meets the requirements of USP Class VI and ISO 10993
- Superior dimensional stability

PPSU – Medical Grade

PPSU offers high deflection temperatures and outstanding resistance to environmental stress cracking.

Polypropylene – Heat Stabilized

Polypropylene HS (heat stabilized) is produced from a FDA and USP Class VI approved homopolymer resin, and exhibits better heat and dimensional stability over standard polypropylene.

- Laser markable
- Lot controlled and traceable
- Low moisture absorption
- FDA compliant

UHMW-PE Medical Grade

Medical grade UHMW-PE is produced from premium resin in accordance with ASTM specification F448 and International Standard ISO 584-1 and ISO 584-2 for surgical implants. Stringent quality control ensures a consistent and consistent fabricated form. Recommended sterilization techniques include EO gas cold sterilization and limited gamma irradiation.

- Compliant for surgical implants
- Cost effective

PETG

PETG thermoplastic sheets offers superior impact strength over acrylic and costs less than polycarbonate, while still being easy to machine and thermofrom for applications involving prototyping, model making, machine housings, molds, and POP displays. PETG can be cold formed without edge warping and it does not need to be pre-dried to heat form.

- Superior impact strength
- Easy to thermof orm
- Able to produce complex shapes

Acrylic plastic is extremely transparent and transmits 92 percent of white light. This is equal to the transparency of the finest optical glass. Impact resistant acrylic sheet has six to 17 times the impact resistance of ordinary glass, depending on the specific preparation.

- Lighter and stronger than glass
- Highly transparent
- Easily formed and machined

HIPS – High-Impact Polystyrene

High impact styrene is used for models, prototypes, signs, displays, enclosures, and more. It can be drilled, threaded, sawed, sheared, punched, and machined. It can also be painted and has superior impact strength over acrylic and costs less than polycarbonate.

- Meets 94 V-0 requirements
- Effective for pressure forming
- Meets 94 V-0 requirements

ABS – Forming Grade

ABS (acrylonitrile butadiene styrene) forming grade plastic is a tough, rigid thermoplastic material with high impact strength. It is easily formed and machined, ideal for structural applications.

- Tough and rigid
- Easily machinable and fabricated
- Wide operating temperature range
- High impact strength, even at low temperatures

Kydex® T

Kydex® plastic features superior formability when thermof orming. Kydex® is a versatile thermforming material perfect for countless projects. Using standard tooling, Kydex® sheet can be drilled, brake formed or punch pressed. Kydex® can be used for gun holsters, knife sheaths, prototyping, model making, as well as thermof ormed machine housings, molds, and POP displays.

- Extremely rigid of thermof orming material
- Effective for pressure forming
- Meets 94 V-0 requirements

Boltaron® 4335

Boltaron® thermof orming grade 4335 features consistent uniform surface quality, and maintains its wall thickness during thermof orming even in deep draws and sharp corners. It has exceptionally high impact resistance for durability and a long service life.

- FAR 25.853 (a) and UL V-0 compliant
- Uniform high quality appearance
- Very high load impact rating of 18 ft lbs

Acrylic

Acrylic is a high performance material with a high impact strength of 18 ft lbs and a high impact temperature of 180°F. Acrylic is also easier to machine and is available in a wide variety of colors.

- Easily formed and machined
- Lighter and stronger than glass
- Highly transparent
- Cost effective

Medical Grade Acetal

Medical grade Acetal is a thermoplastic with high strength and stiffness as well as good dimensional stability for precision machined parts. It features high chemical resistance, especially to alcohols, solvents and fuels.

- Lot controlled and traceable
- Resin compliant with FDA regulations 21 CFR 177.2400 and 21 CFR 178.3570 for colorants.
- Resin meets the requirements of USP Class VI specifications

Medical Grade Plastics

- Cost effective
- Compliant for surgical implants
- Sterilization and limited gamma irradiation.
- ISO 10993-1 and ISO 10993-2 for structural applications.
- High impact strength, even at low temperatures

Forming Grade Plastics

- Meets 94 V-0 requirements
- Effective for pressure forming
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- ISO 10993-1 and ISO 10993-2 for structural applications.
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- Superior impact strength
- Easy to thermof orm
- Able to produce complex shapes

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- FAR 25.853 (a) and UL V-0 compliant
- Uniform high quality appearance
- Very high load impact rating of 18 ft lbs
### Transparent & Translucent Plastics

#### Acrylic

Acrylic is resistant to long-term sunlight exposure and weathering. It has excellent optical properties and a much higher impact resistance than glass. Acrylic has low water absorption, good electrical resistivity, and fair tensile strength. It can be routed, drilled, flame polished, and bent into many shapes, perfect for applications including glass, windows, signage, POP, screens, transparent barriers, signage, and lighting.

#### General Purpose Polycarbonate

Polycarbonate is a machinable, cost-effective, generally transparent thermforming plastic. It’s an extremely durable material, lighter than glass and nearly unbreakable. Stronger than acrylic, it has better light transmission than many types of glass. Polycarbonate is safe, shatterproof, lightweight, and available in transparent or translucent colors. Many optional specifications are available including UV resistant and abrasion resistant grades.

#### Renovo-MPC™ Polycarbonate

Renovo-MPC™ is a clear reclaimed post-consumer, industrial grade polycarbonate. It retains the properties of general-purpose extruded polycarbonate, including its outstanding optical clarity, high light transmission, and low haze. Like general-purpose polycarbonate, this material may be thermoformed, sawed, routed, drilled, and is hot and cold bendable.

#### Polycarbonate Twinwall & Multwall

Twinwall and multwall polycarbonate is the ideal glazing solution for many outdoor applications including roofing, hobby and commercial greenhouses, storm panels, and window replacement. Twinwall’s double paneled sheets serve to trap air, increasing insulation strength. It withstands UV rays, hail, and extreme weather and provides the best thermal insulation of any hot/cold aisle containment, greenhouse glazing, storm panel, or agricultural covering solution on the market.

#### PETG

PETG is durable, lightweight, cost-effective, and allows for simple and flexible fabricating, forming, and finishing. PETG features higher impact resistance than acrylic while remaining cost-effective. Widely used in point of purchase applications, PETG handles deep draws, complex die-cuts, and precise molded-in details without sacrificing its structural integrity.

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### Applications & Markets Served

<table>
<thead>
<tr>
<th>Category</th>
<th>Applications &amp; Markets Served</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerospace</td>
<td>Aircraft interiors, control systems, windmills, solar cells, wind turbines.</td>
</tr>
<tr>
<td>Agriculture</td>
<td>Fabric recovery, geothermal systems, photovoltaic solar cells, wind turbines.</td>
</tr>
<tr>
<td>Automotive</td>
<td>Body panels, cable insulation in electric &amp; hybrid vehicles, fuel systems, interior parts, lighting system.</td>
</tr>
<tr>
<td>Building &amp; Construction</td>
<td>Cable management, ceiling panels, cladding, electrical equipment, flooring, glazing &amp; doors, insulation, membranes, stairs, roof coverings, windows, walls &amp; linings.</td>
</tr>
<tr>
<td>Chemical</td>
<td>Absorbent materials, biochemistry &amp; biotechnology, biomedical systems, food sciences, medical equipment, plant science.</td>
</tr>
<tr>
<td>Lumber</td>
<td>Engineered wood parts, paper, freezerboard, mills, rail transportation, sawmills, wood preservation.</td>
</tr>
<tr>
<td>Marine</td>
<td>Boat &amp; ship components, fishery &amp; aquaculture, marine equipment, marine ports, shipping.</td>
</tr>
<tr>
<td>Material Handling</td>
<td>Automatic guided vehicle systems (AGV), bulk handling equipment, conveyor systems, handling &amp; enclousures, robotics, delivery systems, storage &amp; disorder.</td>
</tr>
<tr>
<td>Environmental</td>
<td>Air pollution control, clean energy, energy storage, feedstock, waste management, park systems, geothermal energy, wastewater management equipment, water utilities.</td>
</tr>
<tr>
<td>Fluid Handling</td>
<td>Centrifugal pumps, fluid meters, positive displacement pumps, progressive injection, reciprocating pumps, water &amp; wastewater treatment.</td>
</tr>
<tr>
<td>Food &amp; Beverage</td>
<td>Brewing, bottling, drawers, food bars &amp; restaurants, food processing, food processing equipment, restaurants, seafood handling, wine processing.</td>
</tr>
<tr>
<td>Heavy Equipment</td>
<td>Capital equipment components, earth-moving, lifting, loaders, dozers, forklifts, cranes, materials handling &amp; distribution, transportation.</td>
</tr>
<tr>
<td>Life Sciences</td>
<td>Acrocept, industry, biochemistry &amp; biotechnology, biomedical systems, food sciences, medical equipment, plant science.</td>
</tr>
<tr>
<td>Mining</td>
<td>Earth-moving &amp; transportation equipment, excavation &amp; mining, loaders, dozers, forklifts, cranes, materials handling &amp; distribution, transportation.</td>
</tr>
<tr>
<td>Oil &amp; Gas</td>
<td>Exploration &amp; production equipment, marine engineering, marine service &amp; supply, tanker shipping.</td>
</tr>
<tr>
<td>Pharmaceutical</td>
<td>Biotechnology drug manufacturing, research &amp; development.</td>
</tr>
<tr>
<td>Recreation</td>
<td>Casino, resorts, &amp; spa facilities, fitness &amp; recreational centers, golf courses &amp; country clubs, parks, marinas, zoos, &amp; leisure sports arenas &amp; parks, tracks.</td>
</tr>
</tbody>
</table>

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