Wheels

Acorn Industrial Products Co





Engineering Assistance



Our experienced support team is ready to help you quickly select the best wheel for your application.



www.acorncasters.com

for engineering assistance call 800-523-5474 or email info@acorncasters.com

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Wheels by tread material family. For material and wheel recommendations please contact Acorn.



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Acorn TM and Nylacron TM are registered trademark of Acorn Industrial Products Co Vulkollan $^{\circledR}$ is a registered trademark of Bayer MaterialScience AG

Made in the USA



All of our Nylacron $^{\text{TM}}$ wheels are manufactured by Acorn Industrial Products Co in the United States of America.



Rubber







Elastic

Non-marking high grade elastic rubber. Good resistance to wearing and tearing. Floor protective and quiet.

Properties:

- Durometer: 70 Shore A
- Temperature Range: -4° F to 158° F

Wheel Core Types:

- Aluminum
- Nylon
- Cast Iron

Available bearing styles:

- Precision Ball - Roller

Thermoplastic

Non-marking high grade thermoplastic elastic rubber. Floor protective and quiet. Will not flat spot.

Properties:

- Durometer: 65 Shore A
- Temperature Range: -45° F to 180° F

Wheel Core Types:

- Polypropylene
- Polyolefin

Mold-on

High grade rubber tread vulcanized to core. Quiet and economical.

Properties:

- Durometer: 80 Shore A
- Temperature Range: -40° F to 80° F

Wheel Core Types:

- Cast Iron
- Aluminum
- Nylon



Available bearing styles:

- Precision Ball
- Roller
- Plain Bore



- Precision Ball
- Roller
- Plain Bore

Specialty Rubber



Aside from our standard offering of rubber wheels, Acorn has the ability to make custom or supply specialty wheels for unique applications.







Urethane







Vulkollan®

Non-marking high grade elastic rubber. Good resistance to wearing and tearing. Floor protective and quiet.

Properties:

- Durometer: 92 Shore A
- Temperature Range: -40°F to 185°F up to 250° F intermittent

Wheel Core Types:

- Cast Iron
- Coated Cast Iron (for caustic environments)

Polyurethane

Non-marking high grade thermoplastic elastic rubber. Floor protective and quiet. Will not flat spot.

Properties:

- Durometer: 95 Shore A
- Temperature Range: -40° F to 180° F

Wheel Core Types:

- Nylon
- Aluminum
- Cast Iron

Solid Elastomer

High grade rubber tread vulcanized to core. Quiet, impact resistant and economical.
Chemical Resistant.

Properties:

- Durometer 68 Shore D
- Temperature Range: -50° F to 180° F

Wheel Core Types:

- Solid
- Nylon



Available bearing styles:

- Precision Ball
- Plain Bore



Available bearing styles:

- Precision Ball
- Roller
- Plain Bore



- Precision Ball
- Roller
- Plain Bore

Specialty Urethane



Aside from our standard offering of urethane wheels, Acorn has the ability to make custom or supply specialty wheels for unique applications.

Eliminate static build up and discharge. Corresponds to all qualifications of the standards EN12527 to EN12533 and ISO 2878 Drive wheels are made with keyways machined into the cast iron center on an elastic, firmly bonded Vulkollan® tread. Available in standard sizes with steel cores, nylon seals, and steel seals.

Conductive



Drive Wheels



Pallet Rollers



Vulkollan® Press-on tires are excellent for high use applications and can be used on a steel or nylon core.

Urethane and Vulkollan® rollers with precision bearings as small as 20 mm. Custom and standard sizes are available.

Custom Vulkollan® wheels from 20 to 1200 mm in diameter.

Press-on Tires



Guiding Rollers



Custom Sizes



Nylon and Phenolic







Cast Nylacron™

Heavy duty cast nylon 6 wheels have the strength of steel and only about a third of the weight.

Properties:

- Durometer: 85 Shore D
- Temperature Range: -30° F to 220° F

Natural Nylacron™

Natural cast nylon wheels are an unfilled cast type 6 nylon. Wheels comply with section 177.1500 of food additive regulations.

Properties:

- Durometer: 85 Shore D
- Temperature Range: -30° F to 220° F

High Temp Nylacron™

High grade rubber tread vulct and conomical.
Chemical Resistant.

Properties:

- Durometer: 85 Shore D
- Temperature Range: -30° F to 400° F



Available bearing styles:

- Precision Ball
- Plain Bore



- Available bearing styles:
- Precision Ball
- Stainless Precision Ball
- Plain Bore



- Precision Ball
- Precision Ball with High Temperature Grease
- Plain Bore







Injection Molded Nylon

Injection molded nylon wheels are an unfilled molded type 6 nylon.

Properties:

- Durometer: 75 Shore D
- Temperature Range: -22°F to 175°F

Phenolic Resin

Phenolic resin mixed with chopped canvas to create a high capacity, high impact resistant wheel.

Properties:

- Durometer: 90 Shore D
- Temperature Range: -50° F to 250° F

High Temp Phenolic Resin

Phenolic resin mixed with chopped canvas made for high temperature applications.

Properties:

- Durometer: 90 Shore D
- Temperature Range: -40° F to 475° F 525° F Intermittent



Available bearing styles:

- Precision Ball
- Roller
- Plain Bore



Available bearing styles:

- Precision Ball
- Roller
- Plain Bore



- Precision Ball
- Roller
- Plain Bore

Specialty Nylon



Aside from our standard offering of nylon wheels, Acorn has the ability to make custom or supply specialty wheels for unique applications.

Eliminate static build up and discharge. Available in conductive and anti-static.

Drive wheels are made with keyways machined into a steel center on cast nylon tread. Flanged, Double Flanged, V-groove, and U-groove wheels are available upon request.

Conductive



Keyways



Custom Profile



In many applications nylon cores are more economical and can reduce shock loads when compared to steel.

Cast and injection molded nylon rollers with precision bearings as small as 20 mm. Custom and standard sizes are available. Custom cast nylon wheels in any size up to 20 inches. Available in standard, high temp, and natural nylon.

Press-on Cores



Rollers



Custom Sizes



Metal







Cast Iron

Strong, durable, and economical solution for heavy loads.

Properties:

- Tensile Strength: 30,000
- Temperature Range: -45° F to 600° F
- Hardness: Brinell 145

Ductile Steel

Ductile steel is a combination of special alloys that give it a higher load rating than cast iron, and is more economical than drop forged steel.

Properties:

- Tensile Strength: 45,000
- Temperature Range: -45° F to 800°F

Forged Steel

ASTM 1045 high carbon steel, hot drop forged to improve grain structure. Offers very high load capacity, extremely durable.

Properties:

- Tensile Strength: 60,000 PSI
- Temperature range: -45° F to 1300° F.
- Hardness: Rockwell 80 B



- Available bearing styles:
- Roller
- Plain Bore



- Available bearing styles:
 - Precision Ball
 - Tapered Roller
 - Roller
 - Plain Bore



- Available bearing styles:
- Precision Ball
- Tapered Roller
- Roller
- Plain Bore

Metal





Solid Cast Steel

ASTM 1045 high carbon steel, cast. Offers very high load capacity, extremely durable.

Properties:

- Temperature range: -45° F to 1300° F.
- Hardness: Brinell 170 210

Solid Cast Stainless Steel

Type 304 cast stainless steel precision machined to size. Non-Magnetic, Non Sparking.

Properties:

- Temperature range: -30° F to 500° F
- Hardness: Brinell 160-180



Available bearing styles:

- Precision Ball
- Plain Bore



- Precision Ball
- Stainless Precision Ball
- Plain Bore

Custom Metal



Aside from our standard offering of steel wheels, Acorn has the ability to make custom or supply specialty wheels for unique applications.



Custom Profiles

V-Groove, U-Groove, Flanged, Double Flanged, and more.





Custom Sizes

Low minimum quantities. Up to 20 inches in diameter.

Other Products



To see or request more information on other products offered by Acorn please go to www.acorncasters.com



Industrial Casters

for manufacturing environments, heavy loads,



Institutional Casters

Ideal for offices, hospitals, retail stores, etc.



Accessories

Axles and Nuts, Bearings, Brake Kits, Spanners, Washers and more.



Caster Jacks

Heavy duty jacks designed to raise and lower a load while maintaining mobility.



Medical Casters

Specialty casters designed for use on medical equipment or environments.



Glass Handling

Specialty casters and rollers designed for glass handling.

Engineering Assistance



1-800-523-5474 info@acorncasters.com

Customer Support

Our experienced team is available to help you quickly answer any questions that have about our products.

Design Assistance

Our engineers are available to help you select the right caster or wheel for any application or project.

In-Plant Consultations

If you have a problem that can't be solved over email or phone, Acorn TM will come to your facility and help you with any application in person.

Technical Drawings

CAD drawings are available on most of our wheels standard and custom. Please contact customer support for any drawing.

Quality Control

Everything is inspected prior to shipment to search for defects. All products are guaranteed to work properly when used within suggested guidelines.

Material Certifications

Acorn[™] can supply material certifications with any product to conform to compliance regulations such as RoHS.



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