

HDPE Sheets & Fabricated Parts



Key Features

Cost-Effective Engineering Solution

Excellent performance at a competitive cost for a wide range of industrial applications.

Excellent Chemical Resistance

Resists most acids, alkalis, and corrosive chemicals for long-term industrial use.

Easy to Machine & Fabricate

Ideal for CNC machining, cutting, routing, welding, and custom fabrication.

Lightweight Yet Durable

Lower weight than metal while providing excellent durability and impact strength.

Food Grade & Hygienic Options

FDA-compliant grades available for food processing and hygienic applications.

Custom Sizes & Fabricated Parts

Available in various colors, sheet sizes, thicknesses, and fully customized machined components.

Key Application

Chemical Processing

Chemical tanks, storage vessels, liners, and corrosion-resistant components.

Industrial Fabrication

Custom CNC machined parts, welded assemblies, machine guards, and protective covers.

Water & Wastewater Treatment

Tank covers, baffles, pipe components, and water treatment equipment.

Agricultural Equipment

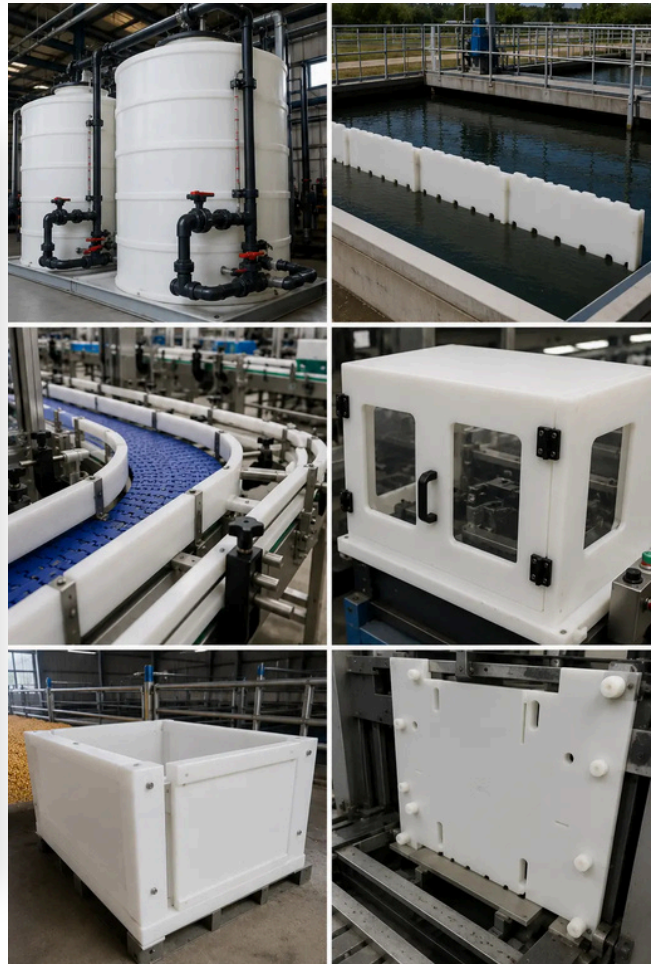
Feed systems, livestock equipment, protective panels, and agricultural components.

Food Processing

Cutting boards, conveyor guides, hygienic machine parts, and food-contact components.

General Industrial Equipment

General Industrial Equipment



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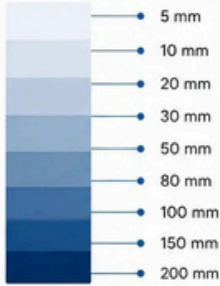
Engineered HDPE & UHMWPE Solutions for Industrial Applications

Standard Specifications

We offer a wide range of HDPE sheet and rod products in various sizes, thicknesses, colors, and material grades to meet diverse industrial requirements.



THICKNESS RANGE



- Custom thickness available upon request.



STANDARD SHEET SIZES

1220 × 2440 mm
48 × 96 in

1500 × 3000 mm
59 × 118 in

2000 × 4000 mm
79 × 158 in



Other sizes available upon request.



COLOR OPTIONS

- Natural
- Black
- Green
- Blue
- Red
- Yellow
- Custom Colors Available



MATERIAL GRADES



Virgin HDPE



Recycled HDPE



FDA Food Grade HDPE



STANDARD ROD SIZES

Ø 10–500 mm / Ø 0.4–19 in

- Custom length available.



ROD AVAILABLE RANGE

- Length: 1000–3000 mm / 39–118 in
- Custom length available.



PRODUCT FORMS

- Sheets
- Rods
- Fabricated Parts



CUSTOM DIMENSIONS

- Custom thickness / diameter
- Custom width / diameter
- Custom length



Custom cutting, machining, and fabrication services are available to meet your specific requirements.

Engineering & Supply Chain Capabilities

ENGINEERING CAPABILITY

From concept to manufacturable parts.



CUSTOMER CHALLENGES	HOW WE HELP
Unsure which material to choose? Choosing the right material can be challenging.	MATERIAL SELECTION Performance-based material recommendations.
Design difficult to machine? Complex designs increase costs and lead time.	DFM REVIEW Optimize designs for manufacturability.
Complex part geometry? Challenging geometries need expert support.	ENGINEERING SUPPORT Expert engineering from concept to production.
Tight tolerance required? Precision requirements demand reliable processes.	PRECISION MACHINING Tight tolerance machining with consistent quality.

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Engineered HDPE & UHMWPE Solutions for Industrial Applications

FLEXIBLE MANUFACTURING

From small batch to mass production.

PROTOTYPE → SMALL BATCH → MASS PRODUCTION



CUSTOMER CHALLENGES



Uncertain order quantity?

Demand fluctuates and is hard to predict.



Need fast turnaround?

Long lead time delays your project.



From prototypes to large orders?

Smooth transition is often challenging.



Multiple SKUs and custom needs?

Complexity increases management difficulty.

HOW WE HELP



FLEXIBLE CAPACITY

Adjust capacity to meet your order quantity.



SHORT LEAD TIME

Efficient planning and process control.



SCALABLE PRODUCTION

Seamless from prototype to mass production.



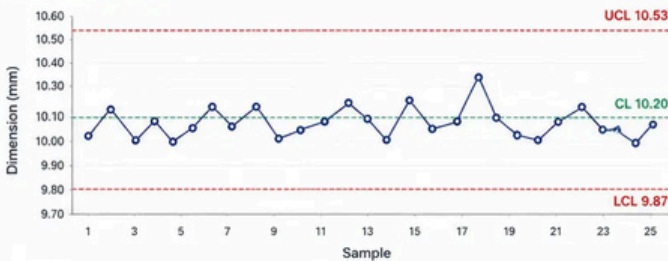
SMART PRODUCTION

Advanced systems ensure flexibility and efficiency.

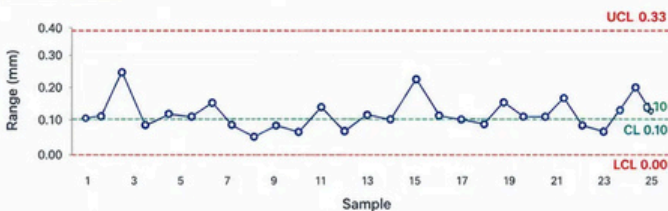
QUALITY CONSISTENCY

Consistent quality you can rely on.

X Chart (Dimension)



R Chart (Range)



✓ Data-driven process control ✓ Reduce variation ✓ Ensure reliability ✓ Consistent results

CUSTOMER CHALLENGES



Inconsistent product quality?

Variations affect performance and reliability.



Dimension out of tolerance?

Out-of-spec parts cause fit and assembly issues.



Material quality concerns?

Poor material leads to premature failure.



Defects or surface issues?

Surface defects impact appearance and function.

HOW WE HELP



STRICT QUALITY CONTROL

Rigorous inspections at every stage ensure consistency.



DIMENSIONAL VERIFICATION

Advanced equipment and process control guarantee accurate dimensions.



MATERIAL TRACEABILITY

Certified materials with full traceability and test reports.



THOROUGH INSPECTION

Visual and functional inspections to deliver defect-free products.

SUPPLY CHAIN MANAGEMENT

From raw material to your door, seamlessly.



CUSTOMER CHALLENGES	HOW WE HELP
Unstable raw material supply? Supply interruptions impact your production plan.	RELIABLE SOURCING Long-term partnerships ensure stable, quality raw materials.
Lack of inventory visibility? Unclear inventory leads to delays and shortages.	INVENTORY MANAGEMENT Real-time inventory monitoring ensures transparency.
Complex logistics and customs? Shipping and customs add risk and uncertainty.	GLOBAL LOGISTICS SUPPORT Experienced in global shipping and customs clearance.
Delivery delays or damage? Late or damaged goods affect your operations.	ON-TIME, SAFE DELIVERY Secure packaging and trusted carriers ensure on-time delivery.

HDPE vs. UHMWPE – Material Selection Guide

Compare performance characteristics and application suitability to choose the right material for your project.

UHMWPE PERFORMANCE CHARACTERISTICS How UHMWPE performs in key application requirements.		
CHARACTERISTIC	PERFORMANCE	DESCRIPTION
Wear Resistance	● Excellent	Outstanding resistance to abrasive wear and surface degradation.
Low Friction	● Excellent	Very low coefficient of friction for smooth, trouble-free movement.
Impact Strength	● Excellent	High impact absorption, even at low temperatures.
Chemical Resistance	● Excellent	Resistant to a wide range of chemicals and solvents.
Moisture Absorption	● Excellent	Extremely low water absorption; won't swell or degrade.
Noise Reduction	● Very Good	Helps reduce noise and vibration in operation.
Operating Temperature	● Excellent	Stable performance from -200°C to +80°C (-328°F to 176°F).
UV Resistance*	● Good	Good for typical use; enhanced UV grades available for outdoor applications.
Weldability	● Limited	Not recommended for welding; mechanical fastening preferred.

Performance ratings: ● Excellent ● Good / Very Good ● Limited
Ratings reflect typical performance of virgin UHMWPE (standard grade). Performance may vary based on grade, formulation, processing and operating conditions.



APPLICATION SELECTION GUIDE

Quick comparison to help you choose the right material.

APPLICATION REQUIREMENT / CONDITION		HDPE	UHMWPE	RECOMMENDATION
 Tanks, Bins & Chemical Containers	 Excellent	 Good	HDPE is more economical for chemical storage.	
 Weldable / Fabricated Structures	 Excellent	 Limited	HDPE can be easily welded and fabricated.	
 Wear & Abrasion Resistance	 Good	 Excellent	UHMWPE is ideal for high wear environments.	
 Low Friction / Sliding Performance	 Good	 Excellent	UHMWPE provides superior low friction and smooth sliding.	
 High Impact Resistance	 Good	 Excellent	UHMWPE offers better impact strength and durability.	
 Low Temperature Performance	 Good	 Excellent	UHMWPE maintains toughness even in very cold conditions.	
 Food Contact Applications	 Excellent (FDA)	 Excellent (FDA)	Both materials are available in FDA compliant grades.	
 Outdoor / UV Exposure	 Good	 Good*	HDPE better color stability. UV-stabilized UHMWPE available.	
 Cost Efficiency	 Excellent	 Good	HDPE is more cost-effective for general applications.	
 Long Service Life in Wear Apps	 Good	 Excellent	UHMWPE significantly extends service life and reduces downtime.	
 Excellent (Highly Recommended)  Good (Suitable)  Limited / Poor (Not Recommended)				

GENERAL RECOMMENDATION
Choose HDPE for general fabrication, tanks, and cost-sensitive applications.
Choose UHMWPE for demanding wear, low friction, impact-prone, and long service life applications.

Ratings indicate application suitability rather than intrinsic material properties.