CORPORATE BROCHURE

PLASTIC SOLUTIONS WITHOUT LIMITS

MADE IN THE USA

DIVERSIFIED™ PLASTICS

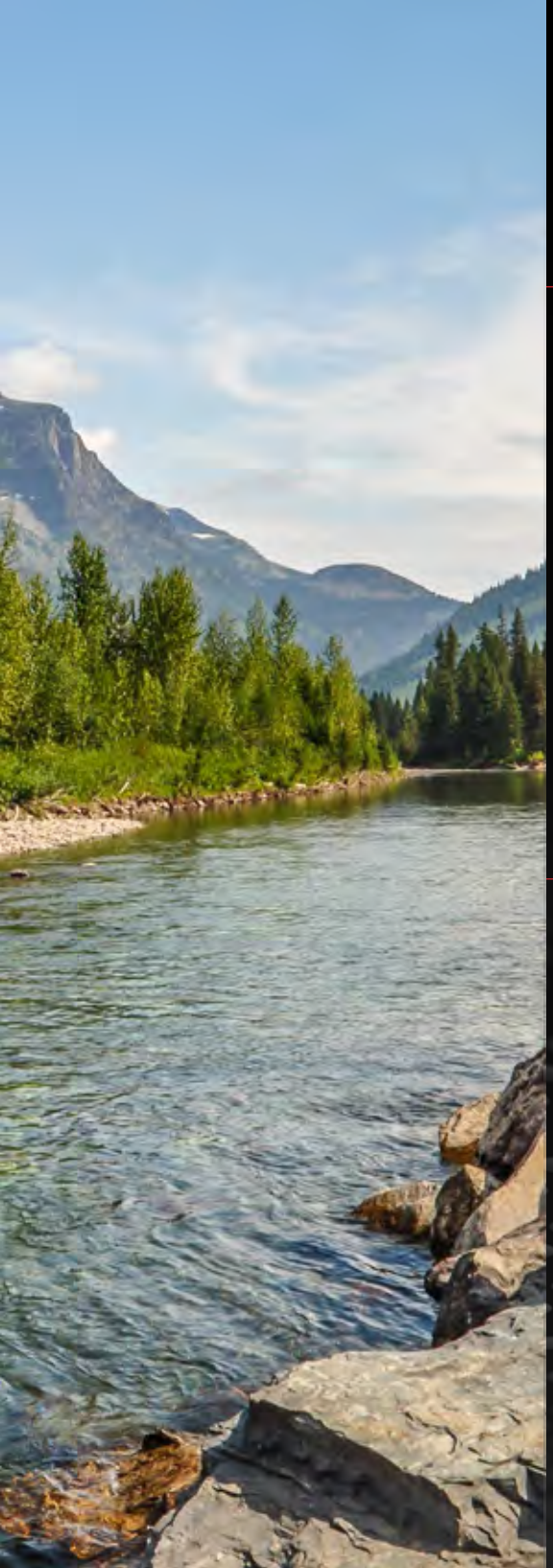
PLASTICS **INNOVATORS**

With the rivers, mountains, and forests surrounding Missoula to inspire us, our company initially began producing plastic wear strips for lumber and pulp mills in the area. Today, we are innovators of high-performance plastic parts and components for diverse industrial applications, both domestically and abroad.

INSPIRED BY OUR ENVIRONMENT

Launched in a garage by Rod Reid in 1976, we have grown to be a North American leader in plastics design, engineering, and manufacturing – doing whatever it takes to achieve more with plastic.

Diversified Plastics, Inc. is led by Brad Reid, a mechanical engineer, and a team of more than 80 experienced, knowledgeable, and creative plastics professionals.



Contact us to discuss how we can help solve your unique challenges with in-house design engineering and prototyping.

A VISIT TO **YOUR SITE**

Let's arrange a meeting at your facility for a full evaluation, at no cost to you.

With an assessment of your processes, materials, designs, and parts, we can offer plastics solutions to help.

800.321.0084

email: sales@dpiplastics.com

ANYTHING IS POSSIBLE

WITH DPI AS **YOUR PARTNER**

No matter your part, material, application, or industry, we'll find the best solution for your situation.

Whether we're custom engineering components and building prototypes in-house, injection molding parts with unique features, efficiently producing short or high-volume runs, or helping reduce costs and streamlining your supply chain — you can count on our team to make it happen.

Plastics are a top material solution for innovation in a wide range of industries.

Ready for a material that works better for you? Some of the benefits that you'll realize when you bring plastics from DPI into your approach include:

- Reduced material and production costs
- Resistance to abrasion and wear
- Reduced friction compared to metals
- Resistance to chemicals, moisture, and corrosion
- Improved long-term durability and useful life
- Range of plastic types to suit the application
- Opportunities to recycle or reuse plastic materials

Plastics are lightweight yet have the strength to outperform metals in many situations. Additionally, the process of manufacturing plastic is significantly quicker and more efficient than manufacturing metal.

From concept to creation, we are your most comprehensive plastics parts manufacturer.

With the ability to utilize a variety of plastics manufacturing and production processes under one roof, we have the best capabilities in-house to maximize efficiency and adapt to your needs.

- Bending and Thermoforming
- CNC Machining
- Custom Fabrication
- Custom QC Testing
- Drilling
- Gluing and Joining
- Injection Molding
- Injection Molding UHMW-PE
- Installation of Metallic Inserts
- MultiFab Hybrid Components™ Solutions
- Overmolding of Steel Parts
- Product Assembly
- Prototype Production
- Routing
- Spin Welding
- Stamping, Labeling Parts ID
- Steel Welding & Machining
- Thermoforming
- Urethane Casting
- Vacuum Forming
- Vapor & Standard Part Polishing

SOLUTIONS FOR **A WORLD OF APPLICATIONS**

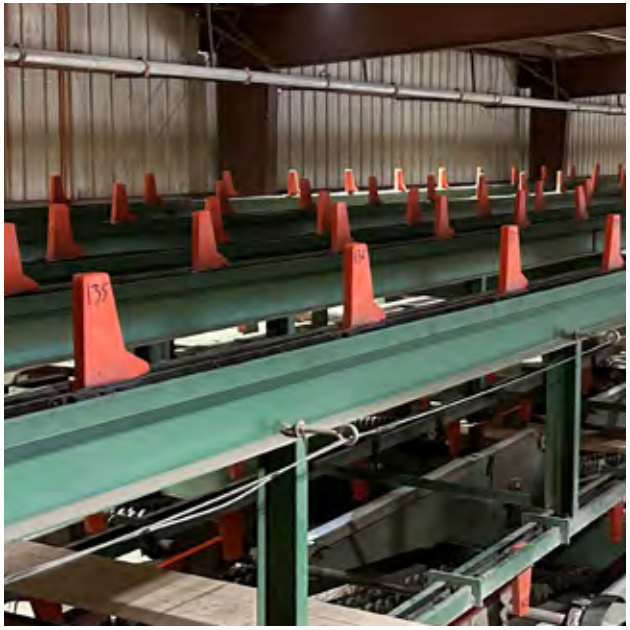
Make the switch to rugged, reliable, versatile plastic parts and components.

The benefits of selecting plastic parts and components for use in your industry are endless.

DPI plastic parts and components enhance conveying, processing, packaging, and other applications through reduced weight, prevention of material degradation, and enhanced durability in any environment.

We have the plastic solution for all your essential equipment.

Agriculture	Solar Power
Automotive	Water Treatment Solutions
Bridge & Road Construction	Marine
Car Wash	Aggregate
Conveying	Material Handling
Packaging	Pulp & Paper
Egg Processing	Cement
Food Processing	Defense
Forest & Lumber	Recreational
Mining	Transportation
Poultry	Semi-Conductor

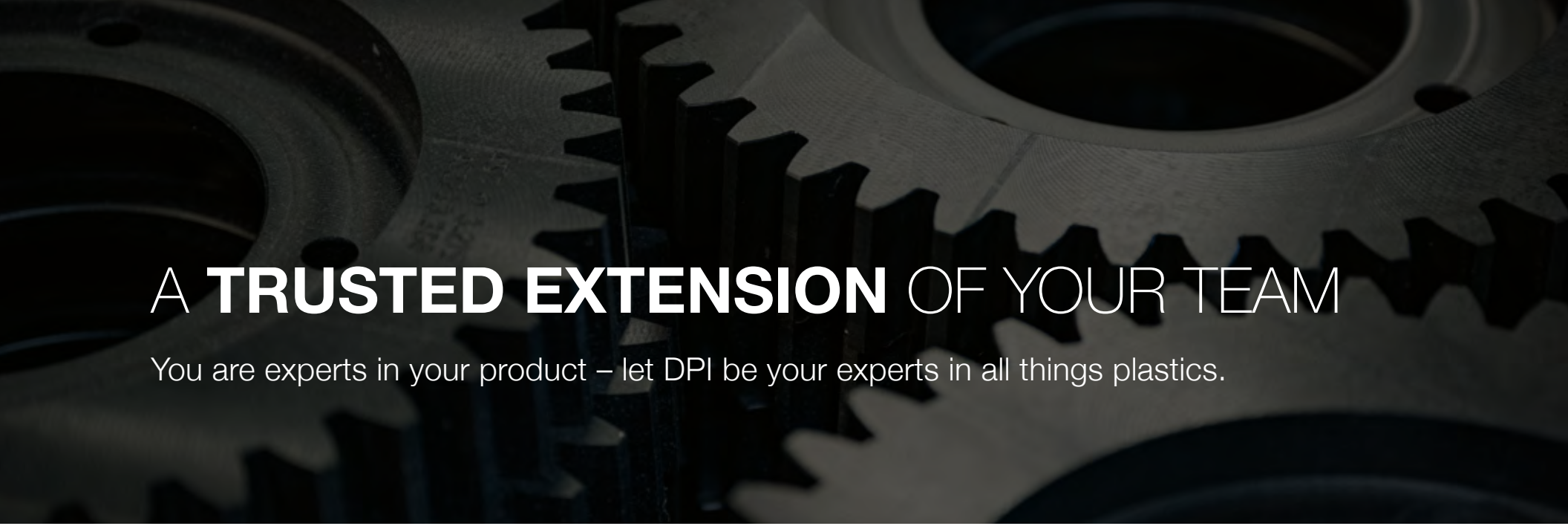


LET'S **SOLVE IT**

The impact that a new plastic part can have on the big picture might surprise you.

So don't hesitate to share your challenges with DPI. We'll listen, collaborate, and find the solution.

Whether you want to cut costs, increase lifespans, reduce breakdowns, test the performance polymers, or explore a custom part idea, we've got your back.



A **TRUSTED EXTENSION** OF YOUR TEAM

You are experts in your product – let DPI be your experts in all things plastics.

DPI INNOVATORS HAVE THE POTENTIAL TO HELP YOU:

- Increase Durability and Lifespans
- Cut Costs and Manufacturing Steps
- Change From Metals to Polymers
- Re-Engineer Parts to Maximize Performance
- Reduce Weight Without Compromising Strength
- Elevate Quality Control and Traceability
- Achieve Regulatory and Industry Standards Compliance
- Conduct Part Failure Analysis and Prevention
- Update Colors, Aesthetics, and Branding
- Gain Competitive Advantages
- Explore Custom Part Ideas

WHY CUSTOMERS TURN TO DPI

Engineering, Evaluation, and Collaboration – Our technical sales and engineering team works in collaboration with you to assess and solve your applications needs and specific performance goals. We can also evaluate your current part for areas of improvement in design, engineering, manufacturing, and performance.

Plastics Materials and Application Expertise – Beyond our expertise in the hundreds of polymer types available today, we also understand their unique characteristics and how select polymers and composites might deliver your best solution.

Manufacturing Process Knowledge – With an extensive experience and in-depth understanding of plastics manufacturing processes, we'll devise the right approach to getting your parts and components produced to ensure they achieve all your objectives.

Cross-Industry Insights – Through nearly five decades of experience serving customers across the U.S., we can offer insights and solutions for challenges in industries ranging from aerospace and automotive to consumer goods, agriculture, food processing, lumber processing, and water treatment.

CONCEPT TO **CREATION**

From first ideas to finished products, we are your most comprehensive plastic parts manufacturer.

- Single source for plastic parts engineering, tooling, and production
- Multiple manufacturing processes to meet any need
- Capabilities for custom orders, short runs, or high quantities

ON-SITE **DESIGN ENGINEERING**

Using creativity, collaboration, and a progressive mindset, we solve challenges no one else can.

With an in-house team representing a range of engineering disciplines and having extensive experience with plastics, you can rely on us to develop innovative solutions for any situation.

We can also incorporate custom resins, additive packages, and color matches to ensure you have the right plastic for the job.

Our engineers will show you what's possible with plastic.

Whether your goal is to update designs, simplify components, improve wear life, reduce costs, or boost productivity, we can help.

IN-HOUSE **TOOLING AND DESIGN**

For efficient prototyping and production, quality control, and cost savings.

Our in-house engineering capabilities streamline the development of quality, custom parts, and components. To support your unique plastic parts design and production needs, our process includes:

- Complete in-house tooling, molds, and fixtures
- Custom software and programming solutions
- Reverse engineering and analysis
- Rapid prototyping services
- Collaborative on-site meetings

Tool Room

HAAS VF-2 30”X 20”Y 20”Z	EDM Sinker
HAAS VM-3 40”X 26”Y 24”Z	Small Surface Grinder
HAAS VF-6 64”X 32”Y 30”Z	Ejecter Pin Grinder
Knee Mill	Horizontal Band Saw
Manual Lathe 16” X 60”	

CUSTOM MOLDS
FOR TOTAL CONTROL

An investment in long-term savings and profitability.

As a leading domestic injection manufacturer that makes our own molds, we save production time and costs by controlling every step of your plastics parts creation, from tooling to delivery.

To accommodate a wide range of parts sizes and designs, our molding machines include:

- 19 oz / 200 ton (2000kN)
- 29 oz / 320 ton (3200kN)
- 59 oz / 380 ton (3800kN)
- 89 oz / 530 ton (5300kN)
- 143 oz / 700 ton (7000kN)
- 155 oz / 674 ton (6000kN)
- 200 oz / 800 ton (8000kN)
- 300 oz / 1200 ton (10000kN)

Multi-component molds can be utilized to process multiple part designs simultaneously in a single injection mold.

THE RANGE OF PARTS WE CAN

INJECTION MOLD WILL INSPIRE NEW IDEAS

Why machine it when you can mold it?

The types, designs, and sizes of plastic components that we can injection mold is nearly limitless.

Just some of the plastics materials we can use for injection molding

- **UHMW-PE**
- **Urethane**
- **PEEK**
- **Polypropylene**
- **Nylon**
- **Ultem**
- **HDPE**
- **Glass, Carbon, and Oil Filled**
- **Acetal**

Get the benefits of injection molded parts and components:

- Savings of Costs, Labor, and Time
- Precise Production and Quality Control
- Custom Additives and Colors
- Multi-Component Mold Capabilities
- Faster Cycle Times Than Machining
- Guaranteed Molds Protect Your Investment
- Private Labeling
- Mold Flow Analysis Optimizes Design Before Tooling

THE ADVANTAGES OF

INJECTION MOLDED UHMW-PE

Our proprietary process makes us the only manufacturer with the ability to injection mold highly versatile, durable, and lightweight high-performance UHMW-PE.

The ability to injection mold UHMW-PE is our specialty – and a cost savings advantage you'll find only at DPI.

Our injection molding capabilities allow for custom and precision parts work and provide benefits such as faster cycle times, high production runs, reduced material waste, and significant savings of costs and time compared to machining.

Your low-volume, high-volume, and high-cost machined UHMW-PE replacement parts are great candidates for converting to injection molding with DPI.

UHMW-PE, or Ultra-High Molecular Weight Polyethylene, is an extremely durable, yet lightweight, plastic material. Because of its unique molecular structure, UHMW-PE provides benefits that make it superior to other types of plastic as well as metals.

Tested and Proved, See Data page 26

CNC MACHINING AND FABRICATION

FOR PRECISION PLASTIC COMPONENTS

From simple parts to complex assemblies, we're your source.

We provide a full range of plastics machining and fabrication, and assembly services to meet your unique part design needs – no matter the size or complexity.

- **Highly Trained and Experienced Machining Professionals**
- **Advanced, Computer-Aided Equipment for Ultimate Precision**
- **Custom Plastic Manufacturing From Prototype to Full Production**
- **Ability to Machine Larger Parts Than Most Facilities**
- **Full-Service Assembly and Fabrication Capabilities**
- **Expertise in Handling Both High-Tolerance and Low-Tolerance Components**

CNC Department

- HAAS ST35Y (turning center with live tooling)
- HAAS SL30 (turning center)
- HAAS VF-4 (vertical CNC mill)
- HAAS VFX-3 (vertical CNC mill)
- HAAS VF-3SSYT (vertical CNC mill)
- HAAS VF-3SSYT with 5th axis trunnion (vertical CNC mill)
- HAAS TRM (vertical CNC mill)

Turning Centers

- HAAS SL-30T
- HAAS ST-35Y

Machine Department

- HAAS TL-2 (turning center)

Routers Department

- HAAS GR-510 (vertical CNC router)
- HAAS GR-512 (vertical CNC router)
- HAAS GR-712 (vertical CNC router)

Production CNCs

- HAAS TM1
- HAAS VF-3SSYT
- HAAS VF-3SSYT with 5th axis trunnion
- HAAS VF-3YT
- HAAS VF-4

TOP EQUIPMENT **AT WORK FOR YOU**

State-of-the-art CNC mills, lathes, and routers.

To precisely and efficiently produce your plastic parts and components, our 70,000-square-foot production facility features an extensive line of advanced fabrication equipment that our team skillfully puts to work every day.

URETHANE CASTING WITHOUT COMPROMISE

Through proprietary processes and protocols we're able to maximize the versatility, hardness scale, and performance of urethane.

Urethane is a remarkable, versatile material. It can be cast into intricate shapes, poured into plates of varying size and thickness, and formulated to achieve a specific hardness. Additionally, urethane chemically bonds to virtually any metal or plastic.

We have the capability to manufacture parts that are engineered for a wide range of applications, optimal performance, and cost effective production.

Because engineering urethane components is entirely different from working with traditional polymers, trust our plastics experts to tailor urethane to meet your specifications for shape, size, color, and hardness levels ranging from 40A to 75D durometers.

THE ADVANTAGES OF DPI URETHANE

- **Precision Urethane Casting -** Molded into intricate, complex shapes with our in-house tooling.
- **Tailored Hardness Levels -** Durometer options from 40A to 75D for specific applications: soft for dampening or grip properties, hard for mechanical and structural properties, or right in the middle for optimal wear properties.
- **Superior Bonding Capabilities -** Adheres to nearly any metal or plastic for a durable bond under mechanical stress or wear.
- **Engineered Versatility -** Ideal for large and heavy components. Additives can be utilized to boost aesthetics and performance.
- **Economical Production -** Cost-effective solutions without compromising quality and durability.
- **Improved Safety -** Shock-absorbing EA-55 urethane improves worker safety and better protects products in a wide range of industries.

DPI INNOVATION AT WORK:

MULTIFAB HYBRID COMPONENTS

Blending the best in materials and manufacturing processes to deliver optimum part performance.

To produce truly innovative solutions, our MultiFab Hybrid Components approach allows us to bring together the right polymers with the capabilities of our fabrication, machining, injection molding, and polyurethane casting departments.

The result is optimum part performance and durability at a competitive price – for any given application.

- DESIGN ENGINEERING
- MULTIFAB HYBRID COMPONENTS
- INJECTION MOLDING
- CUSTOM FABRICATION
- CNC MACHINING
- URETHANE CASTING
- THERMOFORMING

MULTIFAB

HYBRID COMPONENTS

MULTIFAB BRINGS
IT ALL TOGETHER
FOR A
SINGLE
SUPERIOR
PART

We developed MultiFab to address a simple truth: different components of a part often require different qualities for maximum performance.

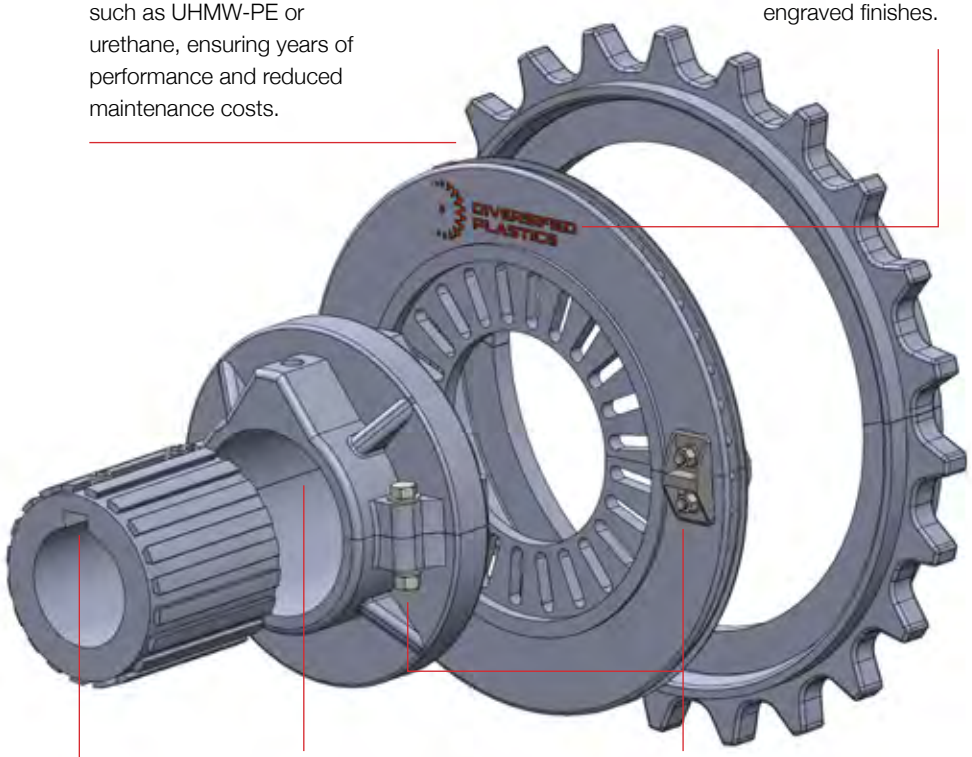
MultiFab brings all your manufacturing needs under one roof.

THE ADVANTAGES

- **Superior Performance –** The best materials and production processes optimize the performance of each component.
- **Durability and Strength –** Integrated design to deliver the best wear life and longevity.
- **Lower Weight –** Lighter than cast iron and other materials while still meeting or exceeding specifications.
- **Better Pricing –** MultiFab approach reduces costs of materials, machining, and waste.
- **Customization –** Materials and processes optimized for your application.

Teeth sections can be machined or injection molded from a highly abrasion-resistant resin, such as UHMW-PE or urethane, ensuring years of performance and reduced maintenance costs.

Custom branding allows integration of your logo, colors, and brand into plastics parts with custom molded and engraved finishes.



Intermediate plate and hub is injection molded from high-strength glass-filled copolymer, reducing material waste and maximizing torsion and load-bearing strength.

In-house assembly means faster turnaround times and ensures complete control over quality and fit, from fabrication to finished produict.

Center bore and keyway is machined or molded from high-strength nylon, urethane, or glass-filled copolymer to ensure a superior lock to the drive shaft and long keyway life.

A CLOSER LOOK AT OUR MULTIFAB **DESIGN-BUILD**

Explore the makeup of a component created with our MultiFab approach.

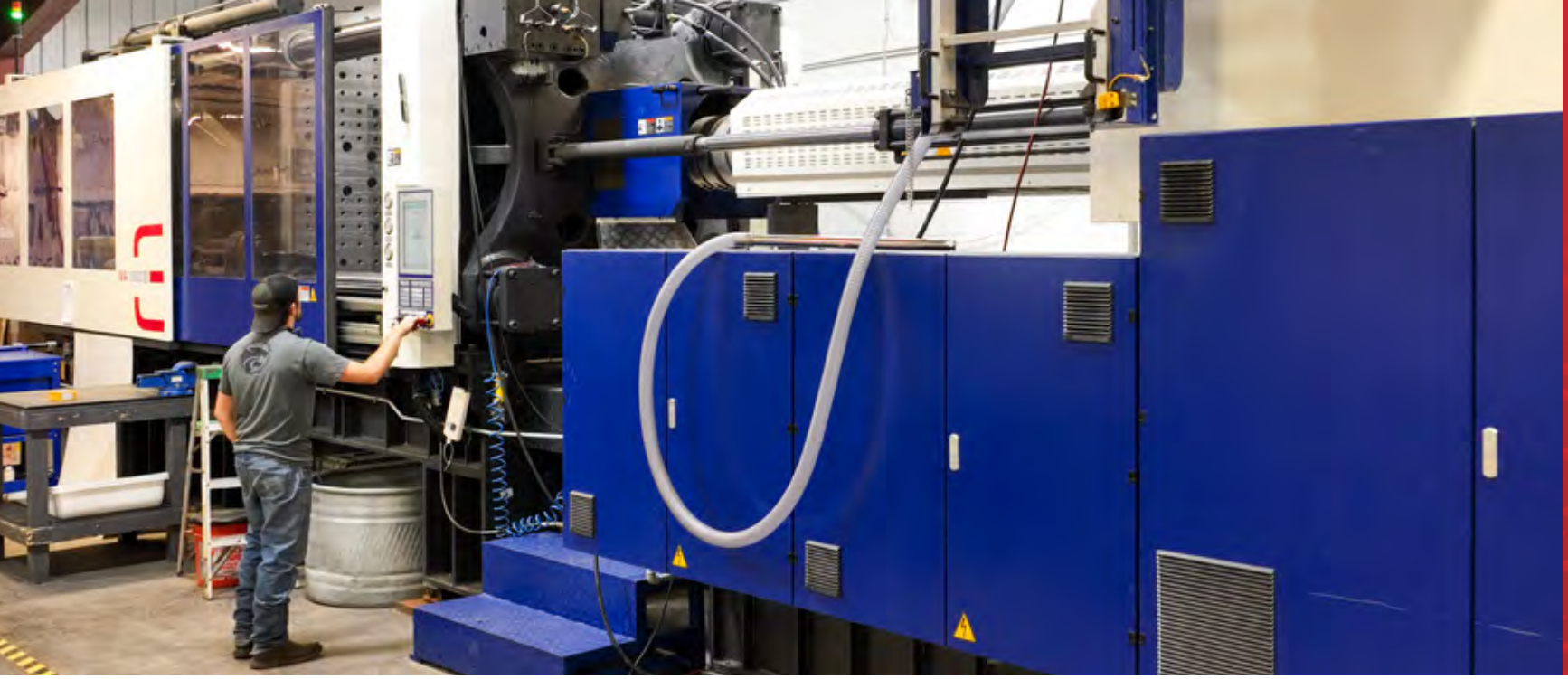
MultiFab Hybrid Components are the result of our custom process that combines the best of proven polymer materials, ensuring a superior component design that meets the challenges of your application.

Independent lab testing shows that our MultiFab Hybrid Components are stronger and wear better than parts made of just a single material.

Contact us to learn how we can develop your MultiFab solutions all under one roof.

800.321.0084

email: sales@dpiplastics.com



GO BIG

GO BIG WITH OUR **LARGE-SCALE** CAPABILITIES

When your project demands large plastic parts, DPI delivers.

Our advanced manufacturing capabilities handle everything from oversized components to complex large-scale assemblies.

With specialized processes like injection molding, thermoforming, and CNC machining configured for any-sized production, we can manufacture components that exceed typical size and weight limitations.

Thinking big at DPI includes working with polymers along with other materials like aluminum, steel, and titanium in larger, metal-plastic assemblies, too.

METAL COMPONENTS CAN EXHIBIT RUST WITHIN HOURS OF EXPOSURE TO THE ELEMENTS

DPI's plastic **parts never rust**

and remain functional for extended periods of time without breaking down or degrading in material quality.

NO LIMITS

QUALITY ASSURANCE AT EVERY STEP

A range of measures are implemented throughout our engineering and production process to ensure the products we produce are without defects and meet or exceed the highest of standards.

Quality assurance steps that make a difference:

- **Ongoing Testing**
- **Monitoring the Manufacturing Process**
- **First and Last Article Checks for Each Operation**
- **Continually Testing and Calibrating Equipment**
- **Maintaining ISO Compliance**

To meet your specific product quality assurance or compliance needs, we develop individualized Quality Assurance (QA) plans. To validate quality, we provide ISIRs and COCs.

Our team is committed to delivering the highest quality American-made plastic parts and solutions.

NEXT LEVEL **PERFORMANCE**

The right plastic material for every application imaginable.

With our expertise in all things plastic, we'll find the best solution for your part by considering factors including design, impact resistance, wear resistance, and viscosity – as well as your production and cost objectives.

There are hundreds of types of polymer materials with unlimited potential applications. We can also incorporate custom resins, additive packages, and color matches to ensure you have the right plastic for the job.

Discover the unique characteristics and benefits of the many plastic materials solutions available. We work with a wide range of industrial plastics, polymers, and thermoplastics materials including:

- ABS
- Acetal
- Acrylic
- Delrin®
- HDPE / LDPE
- HYDEX®
- Nylon
- PET
- Phenolics
- Polycarbonates
- Polypropylene
- Polysteel
- PEEK
- Polystyrene
- Polyurethanes
- PVC
- Rulon®
- Sintimid™
- Styrene
- Teflon®
- Thermoplastic
- UHMW-PE
- Ultem™ PEI
- Urethane
- Vinyl

THE DATA **PROVES IT**

Injection molded plastic parts pass the test.

Numerous independent tests validate the durability and abrasion resistance of Injection Molded UHMW-PE.

Converting to injection molded UHMW-PE components from high cost machined or compression molded plastics provides substantial cost savings for our customers, time and time again.

Case Study: Drag Paddles for Grain Handling

Based on third party test results, there are no significant differences in wear or performance when the original machined parts from an extruded plastic sheet are compared against the new DPI injection molded UHMW-PE parts.

Test	Extruded Sheet	Injection Molded UHMW-PE
In-Service Load Test	2411 lbs	2406 lbs
Flexural Strength	3074 psi	2939 psi
Tensile Strength	2934 psi	2902 psi
Abrasion Resistance	164 (mg)	72.8 (mg)

Field Test: Roller Assemblies for Car Wash Equipment

Lab testing data of roller assembly shows measurements for a UHMW machined roller sample (control) and injection molded roller sample (test subject).

Test Results

Analysis of injection molded and machined UHMW rollers confirms comparable quality performance, with dimensional measurements including internal bore diameter and outside diameter meeting acceptable tolerances and wear profile specifications. Based on comprehensive testing and evaluation, both injection molded and machined UHMW rollers are approved for roller assembly applications. Testing data indicates no evidence of premature failure risk, confirming reliable operational performance for car wash equipment.

Simulation Test: Certified Four Square Corrosion Wear Testing

For customers in the water treatment industry, we have conducted a range of simulation tests on plastic sprockets to measure tooth wear and have observed outstanding results.

10-Year Simulated WearTesting – Stork Materials Technology

Test Results

- 70/75d (4) test sprockets shown with gauge that represents the original tooth profile before testing
- Tooth profile wear exceeded testing parameters

Test Media

Perkool 9407 – 100ppm	CHAIN PULL - 1500 lbs
Salt – 2472mg/L	CHAIN SPEED - 29.7 fpm
Silica Sand - .25 lbs	Submittal No: 11355-056
CYCLES = 90,068	

MANUFACTURED FOR YOU IN **MISSOULA, MONTANA**

Proud to be an independent American business in beautiful Big Sky Country.

Where we work and live, outdoor activities are abundant: hiking, fishing, mountain biking, kayaking, snowboarding, skiing, hunting, and more. Missoula consistently ranks among the most livable cities in the US and was even proclaimed as a locale with the best summer weather by a prominent outdoor publication.

Missoula is also home to the University of Montana. Located at the edge of the Rocky Mountains, it attracts over 10,000 students, helping to prepare them for a successful career in many fields.

So, consider planning a visit to Missoula, taking a tour of DPI, and talking plastics with our experts. Come see firsthand how our plastics engineering team solves challenges with precision, creativity, and expertise.

MADE IN THE USA

We look forward to being your partner for USA-made industrial plastic parts, components, and design engineering.

MISSION

Pursue creative plastic solutions with determination and energy to achieve more

OUR VALUES

PEOPLE FIRST

Creating opportunities by encouraging collaboration, continuous learning, and investing in the personal growth of our team and customers

Valuing our team members and customers by treating them as vital partners

CUSTOMER CENTRIC

Doing whatever it takes to deliver the ultimate customer experience through creative problem solving, innovative engineering, responsive service, and unique, state-of-the-art plastic products

Every interaction with our customers is an opportunity to build a lasting relationship based on trust, reliability, and mutual success

Actively listen to customer feedback to deliver quality solutions that meet or exceed expectations

PROGRESSIVE MINDSET

Leveraging years of experience and expertise with the relentless energy and excitement of a new company to revolutionize the future of plastics and our company

Challenge the status quo by thinking differently and creatively in all aspects of our product development

Always pursuing innovative solutions with our multiple capabilities to solve problems no one else can

NO LIMITS

QUALITY AND **VALUE** FOR THE LONG RUN

Competitive pricing and responsive service is our promise.

As a progressive and determined company, we're able to ensure that our pricing is always competitive – so you can relax knowing you're getting the best quality plastic parts at the best prices.

And with our plastics expertise in every industry, you've got a knowledgeable, reliable team to call on for everything you need.

For information or pricing quotes, contact us today.

800.321.0084

email: sales@dpiplastics.com

DIVERSIFIED™ PLASTICS

DIVERSIFIED™ PLASTICS

Get a quote on your project today!

MADE IN THE USA

Your domestic partner for industrial plastic parts

Call 800.321.0084 or visit
www.dpiplastics.com

3721 Grant Creek Road
Missoula, MT 59808

sales@dpiplastics.com

Manufactured in the U.S.A.