# MARKET LEADERS IN ENGINEERING PLASTIC SOLUTIONS





**SINCE 1967** 



# **DELIVERING RESULTS THROUGH ENGINEERING** PLASTIC OUTCOMES

With a legacy spanning over 50 years in the plastics industry, Dotmar stands as the largest distributor of semi-finished engineering thermoplastics and conveyor components across Australia and New Zealand.

Our unparalleled expertise coupled with our comprehensive range of products and services make us the ideal partner for companies seeking optimal plastics solution.



# **OUR CAPABILITIES**



#### **Application Development**

Unsurpassed technical expertise helps mitigate risk during specification. From design to prototyping, partner with Dotmar to help materialise your idea. Performance

Extreme Engineering **Plastics** 

Advanced **Engineering Plastics** 

## **Largest Selection of Engineering Plastics**

Representing the most reputable, semi-finished thermoplastic and conveyor part manufacturers, Dotmar stocks an unparalleled range of materials across Australia and New Zealand.

## **Industry Segments Serviced**





Fabricator Food Forestry

**Medical &** Research



Engineering **Plastics** 

### Custom Manufacturing and Engineering

With total machining capabilities in all locations, Dotmar can produce finished parts from even the most challenging engineering Heat Resistance plastics.

**Engineering Plastics** 

**Industrial Plastics** 



Construction



Defence



















Water Treatment



## APPLICATION DEVELOPMENT

Partner with Dotmar's team of engineers and experienced industry experts across the entirety of the specification journey. From the initial conceptualisation phase to design, through to development of prototypes for evaluation and testing, Dotmar can help your team mitigate potential risks.

Supplemented by sound engineering calculations and sophisticated tool RITA (Rochling Integrated Tank Building Assistant), you can be assured that the advice you receive is substantiated and vetted by technically trained, thermoplastics specialists. Backed by our exceptional service and technical expertise, Dotmar can be trusted with the most critical projects across a multitude of market segments.

## **Application Development Workflow**



Comprehensive needs analysis of application



Material selection and specification



Engineering drawings/reverse engineering of existing parts

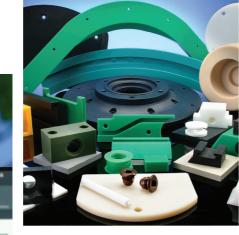


Prototype creation for client evaluation



Full scale production











# TOTAL MACHINING SOLUTIONS

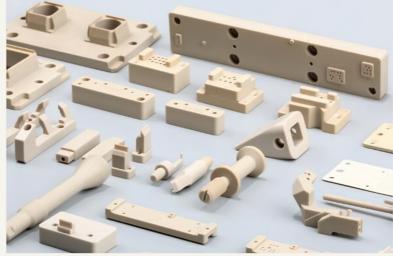
Dotmar operates seven cutting-edge plastic machining technology centers throughout Australia and New Zealand. Our machining centers are technology hubs featuring equipment dedicated exclusively to producing custom plastic parts for a wide range of applications.

Our staff are extensively trained in the full spectrum of engineering thermoplastics. With their expertise, materials like Acetal (Sustarin), Nylon (Sustamid), HDPE (Polystone G 300), UHMWPE (Polystone M 7000) and PEEK, are easily machined to the highest standards.

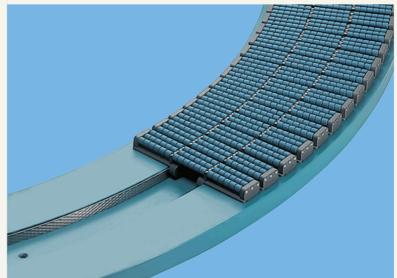
Additionally, we work with various grades of PTFE, PVC, and even challenging materials like PAI, PEI and PSU, all of which can be efficiently handled by Dotmar's expert machinists.

















# LARGEST SELECTION OF ENGINEERING PLASTICS

Dotmar operates across the Australian market with 5 locations positioned in major metropolitan areas, while 3 locations cover New Zealand.

Performance

Our large footprint is further strengthened by strategic reseller partners. These partners predominantly cater to regional Australia, delivering personalised services to local markets with extensive geographic coverage.

Partnering with Dotmar ensures that you have access to an unparalleled range of products and the most extensive stock inventory across Australia and New Zealand.

Our commitment to excellence extends to customer service, featuring rapid quotation response times and exceptional lead time management.

SustaPEEK Susta PEI Sustatron PPS PPSU PVDF, FEP, PFA **PES** Tetron/Ticomp (PTFE)

PBI PI PAI

Sustadur Sustamid (Nylon) Sustarin (Acetal) Polycarbonate (PC) Polystone M 7000 (UHMWPE) Polystone D 500 (HMWPE) Polystone G (HDPE/PE100) **Polystone CubX** 

Trovidur EC-N (PVC) Polystone P (PP) Acrycast (Acrylic/PMMA) Uniboard/Foamlite

Polystone 300 (HDPE) Polystone LDPE







	Tensile Strength (MPa)	sistance	Bearing Wear Resistance	Abrasion Wear Resistance	Thermal Exp x 10^-6	Co-Efficient of Friction	lity	Moisture Absorption	Chemical Resistance		- Temperature	Suitable for Food Contact
Material	ensile Str	lmpact Resistance	earing W	brasion V	hermal E	o-Efficien	Machinability	loisture <i>A</i>	hemical F	Min °C	Max °C (Long Term)	uitable fo
Comparison Table												
Polystone G PE100	24	Med	Low	Low	190	0.15	High	Low	High	-50	80	Yes
Polystone G 300	22	Med	Low	Low	190	0.15	High	Low	High	-50	80	Yes
Polystone D 500	27	Med	Low	Med	190	0.15	High	Low	High	-100	80	Yes
Polystone M 7000	20	High	Med	High	190	0.13	High	Low	High	-250	80	Yes
Polystone M 7000 AST	22	High	Med	High	190	0.13	High	Low	High	-150	80	Yes
Polystone M Flametech AST	22	High	Med	High	190	0.15	High	Low	High	-250	80	No
Polystone Matrox	20	High	Med	High	190	0.12	High	Low	High	-250	80	No
Polystone Marine-Tec	22	Med	-	-	190	-	Med	Low	High	-30	80	No
Polystone P(H)	32	Med	-	-	155	-	Low	Low	High	0	100	Yes
Uniboard/Foamlite	18	Low	-	-	155	-	Med	Low	High	-30	90	No
Sustarin C	67	Med	Low	Low	110	0.3	High	Low	Med	-50	100	Yes
Sustarin C GLD 350	45	Med	High	Low	120	0.15	High	Low	Med	-50	100	Yes
Sustadur PET	85	Low	High	Low	60	0.15	High	Low	Med	-20	115	Yes
Sustadur PET GLD 130	75	Low	High	Low	65	0.15	High	Low	Med	-20	115	Yes
Sustamid 6	80	High	Med	Med	90	0.4	Med	High	Med	-40	85	Yes
Sustamid 66	85	High	Med	Med	80	0.4	Med	High	Med	-30	95	Yes
Sustamid 6G	75	High	Med	Med	80	0.4	Med	Med	Med	-40	110	Yes*
Sustamid 6G OL	70	High	High	Med	80	0.2	High	Med	Med	-40	110	No
Sustamid 6G HS	75	High	Med	Med	80	0.4	Med	Med	Med	-40	120	No
Sustamid 66 GF 30	85	High	Med	Low	50	0.45	Med	Med	Med	-20	120	No
Sustamid 6G MO	82	High	Med	Med	80	0.35	Med	Med	Med	-40	110	No
Sustaglide Sustatron PPS MOD	75	High	High	Med	80	0.2	High	Med	Med	-40	110	Yes*
	50	Med	High	Med	50	0.25	High	Low	High	-20	220	Yes
SustaPEEK	110	Med	Med	Med	50 30	0.25	High	Low	High	-60	250 250	Yes
SustaPEEK MOD SustaPEEK GF 30	75	Med	High	Med		0.15	High	Low	High	-30		No
	80	Med	High	Low	30 25	0.3	High	Low	High	-20	250	No
SustaPEEK CF 30 Polystone PVDF	120 55	Med Med	Med	Low	25 120	0.2	High	Low	High	-20	250 140	No Yes
Sustason PSU	80	Low	-	-	55	-	High Med	Low	High Med	0 -50	140	Yes
SustaPEI	110	Low	-	-	55 45	-			Med	-50	170	Yes
	28			Low	45 129	0.06	High	Low		-200	250	
Tetron S Tetron G	28 17	Low	Low Med		84	0.06	High Med	Low	High	-200	250	Yes Yes
Tetron C	17.6	Low	Low	Low Low	84 70	0.15	High	Low	High	-200	260	No
Tetron B	23	Low	Med	Low	132	0.12	High	Low	High High	-200	260	No
Tetron GR	16.5	Low	Med	Low	68	0.13	High	Low	-	-200	260	No
Polycarbonate UV2	62.5	High	Meu	LOW	65	0.1	Med	Low	High Low	-200	120	No
Polycarbonate AR	62.5	~	-	-	65	-	Med		Low	-50	120	
Trovidur PVC	62.5 50	High Low	-	-	65 70	-	High	Low Low	High	-20	60	No No

\* Denotes that this may not apply to all grades or colours in the range.

# **KEY PRODUCTS**



#### **Polystone® PE Family of Products** (Polyethylene)

The Polystone® polyethylene family being one of the most well-known engineering plastics, covers the range from HDPE, HMWPE to UHMWPE with the highest molecular weight available, providing the best wear and abrasion resistance.

<b>Polystone® G PE100</b> Black	Polystone <sup>®</sup> PG100 is a HDPE made from PE100, that meets the highest standards for tank fabrication (DVS), and the latest HDPE pipe standard.
<b>Polystone® G 300</b> Natural (White) / Black / Yellow / Red / Green / Blue	Polystone <sup>®</sup> 300 is HDPE made from PE80, that still exceeds the performance of general-purpose HDPE.
<b>Polystone® D 500</b> Natural (White) / Black / Red / Green / Dark Blue	Polystone <sup>®</sup> 500 is a HMWPE with outstanding mechanical properties such as scratch and cut resistance, and is often used in the food, bottling and medical industry.
<b>Polystone<sup>®</sup> M 7000</b> Natural (White) / Black / Blue / Green	Polystone <sup>®</sup> 7000 is a 9.2m g/mol UHMWPE offering the highest abrasion resistance.
<b>Polystone® M 7000 AST</b> Black	Polystone® 7000 AST is an Anti-Static 9.2m g/mol UHMWPE offering the highest abrasion resistance.
<b>Polystone® M Flametech</b> Black	Polystone <sup>®</sup> Flametech AST is a 9.2m g/mol UHMWPE that is FRAS approved for underground coal mining that meets MDG3608.
Polystone® Matrox Grey	Polystone <sup>®</sup> Matrox is a specially formulated 9.2m g/mol UHMWPE with slip and release agents that is designed for flow promotion linings, together with being UV resistant.
<b>Polystone Marine-Tec</b> White	Polystone Marine-Tec is a colourfast white UV resistant sheet material, with an aesthetic textured surface that is scratch and mould/fungi resistant.

#### **Polystone® P Family of Products** (Polypropylene)

Polystone® P is a highly heat-stable polypropylene (PP) available as a homopolymer and copolymer. It lends itself to chemical environments and tank building.

Polystone<sup>®</sup> P Homopolymer Beige

Polystone<sup>®</sup> P Homopolymer stronger and stiffer than copolymer PP. It is also ideal for chemical, corrosive and hot environments, and is weldable for tank construction.

#### **Uniboard/Foamlite® Family of Products**

Uniboard/Foamlite® Foamed group of products are most commonly made from polypropylene, but is also available in HDPE, with a variety of surface textures and finishes.

Uniboard<sup>®</sup> ECO Black Foamlite (Colours) Uniboard® ECO and Foamlite is a closed cell foamed PP sheet with a solid skin on both sides. It has a scratch resistant embossed surface, and is an ideal wood replacement material as it doesn't absorb moisture, won't rot and can be fastened in the same fashion as wood.

#### Sustarin<sup>®</sup> Family of Products (Acetal/POM)

Sustarin<sup>®</sup> are homopolymer and copolymer acetal materials for applications requiring improved dimensional stability but less wear resistance than nylons. Special formulations include an enhanced bearing grade material, a metal and x-ray-detectable acetal, food-contact compliant acetals, and a range of colours.

Sustarin C is a general purpose, copolymer acetal grade that is often favoured for Sustarin C its porosity-free nature. Offers low moisture absorption and excellent machinability Natural (White) / Black capabilities. Used frequently for Food Contact and medical applications. Sustarin C GLD 350 is a self-lubricating, copolymer acetal grade that exhibits low-stick Sustarin C GLD 350 extending the wear life over standard acetal. Offers low moisture absorption and excellent machinability capabilities. Used frequently for Food Contact.

#### Sustadur<sup>®</sup> Family of Products

Best known for it's bearing wear properties, Sustadur® is a thermoplastic polyester based on PET-P. This family of products has exceptional dimensional stability coupled with excellent wear resistance, a low coefficient of friction, high strength, and resistance to moderately acidic solutions.

Sustadur<sup>®</sup> PET Natural (White) / Black

Blue

and oil and gas industries.

Sustadur<sup>®</sup> PET GLD 130 Natural (Grey)

Sustadur® PET GLD 130 is a self-lubricated version of Sustadur PET furthering the bearing wear resistance with an even lower coefficient of friction. Ideal for high load and high-speed bearings.



Sustadur® PET is characterised by its excellent wear resistance, low coefficient of friction, and high strength compared to nylons and acetals. It's ideal for bearing and structural applications throughout the pharmaceutical, food processing and packaging,





## Sustamid<sup>®</sup> Family of Products (Nylon/Polyamide)

The Sustamid<sup>®</sup> family is an all-rounder material. These nylons exhibit high toughness, a low coefficient of friction, and excellent wear resistance. These properties make them the industry standard for use in bearing and wear applications, and ideal replacements for materials ranging from bronze to rubber.

<b>Sustamid® 6</b> Natural (White) / Black	Sustamid <sup>®</sup> 6 PA6 exhibits a great combination of mechanical strength, stiffness, toughness, mechanical damping properties, as well as creep and wear resistance, and is a "general purpose" grade nylon.
<b>Sustamid® 66</b> Natural (lvory) / Black	Sustamid <sup>®</sup> 66 offers higher mechanical strength, stiffness, heat and wear resistance than Sustamid <sup>®</sup> 6, and is more easily machined.
<b>Sustamid® 6G</b> Natural (lvory)	This unmodified cast nylon 6 grade exhibits characteristics which come very close to those of Sustamid <sup>®</sup> 66. It is manufactured and stocked in larger rod diameter and sheet thicknesses.
<b>Sustamid® 6G OL</b> Yellow	Sustamid <sup>®</sup> 6G OL is internally lubricated with oil specifically formulated for applications involving unlubricated, highly loaded, and sliding or rotating bearings.
Sustamid® 6G HS Natural /Black / Blue	Sustamid® 6G HS is a heat stabilised cast nylon 6, designed to minimise heat-aging / heat degradation.
<b>Sustamid® 66 GF 30</b> Black	Sustamid <sup>®</sup> 66 GF 30 is 30% glass filled nylon 66, that increases the mechanical properties, and elevates the short-term temperature rating.
<b>Sustamid® 6G MO</b> Black	Sustamid <sup>®</sup> 6G MO is cast nylon PA6 filled with Molybdenum Disulfide (MoS2), offering improved wear resistance, higher strength and stiffness, compared to Sustamid 6G, and is the industry standard for Wire Rope Sheaves.
<b>Sustaglide®</b> Natural (White) / Green	Sustaglide <sup>®</sup> is internally lubricated, reducing the co-efficient of friction and suited to higher speeds bearings in lubricated applications.

## Advanced Engineering Plastics Family of Products (AEP)

The AEP's exhibit high mechanical strength and stiffness over an elevated temperature range. These thermoplastics have excellent dimensional stability and creep resistance, superior electrical characteristics (including insulating and dielectric properties), and some of the broadest chemical resistance of all engineering polymers.

	Sustatron <sup>®</sup> PPS MOD Blue	Sustatron PPS MOD is an inte outstanding chemical and hy great electrical insulating and inherently low flammability.
	SustaPEEK <sup>®</sup> Natural (Beige) / Black	SustaPEEK <sup>®</sup> is an unfilled gra toughness of all materials in where ductility and inertness
	<b>SustaPEEK® MOD</b> Black	SustaPEEK <sup>®</sup> MOD is modified friction and the best machine of low wear and friction, and bearings and bushings.
	<b>SustaPEEK® GF 30</b> Natural (Beige) / Black	SustaPEEK® GF 30 is a 30% g stability and outstanding che of glass fibres, SustaPEEK® G flexural modulus compared t
	<b>SustaPEEK® CF 30</b> Black	SustaPEEK <sup>®</sup> CF 30 is a 30% ca stiffness, mechanical strengt With a significantly reduced t SustaPEEK <sup>®</sup> CF 30 componer rapidly dissipate heat in bear
	Polystone <sup>®</sup> PVDF Natural (Ivory)	Polystone <sup>®</sup> PVDF is a fluoro p machinability and stress-cra- mechanically strong enough,
	Sustason™ PSU Natural	Sustason PSU is a translucer thermal, and electrical prope resistance, chemical resistan analytical instrumentation d to acidic and salt solutions, c
	<b>SustaPEI</b> Natural / Black / Blue	SustaPEI is a family of high-p rigidity at elevated temperat dimensional stability combin into parts for reusable medio

electronic insulators



ternally lubricated PPS offering superior wear resistance, hydrolysis resistance, excellent dimensional stability, nd dielectric properties, a low coefficient of friction, and

ade that offers the highest elongation and the PEEK family. Ideal for instrument and seal components, ss are critical.

d bearing grade of PEEK, giving it the lowest coefficient of nability of all PEEK materials. Due to SustaPEEK's combination d high PV, this grade is often chosen as a solution for

glass fibre reinforced grade with excellent dimensional nemical, corrosion, and creep resistance. With the addition GF 30 has a significantly lower expansion rate and high l to SustaPEEK.

carbon fibre-reinforced grade that exhibits even higher gth, and creep and wear resistance over SustaPEEK<sup>®</sup> GF 30. thermal expansion, and high thermal conductivity rates, ents are often favoured for their ability to extend part life and aring applications.

polymer that has excellent chemical resistance, acking resistance. It is often used when the PTFE is not h, and has excellent ultrasonic transparency.

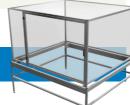
ent material that offers a combination of excellent mechanical, perties. This grade is often used due to it's high temperature nce, or autoclavability. Sustason PSU shapes are ideal for due to their outstanding radiation stability, and resistance detergents, hot water, and steam.

performance polymers that combine high strength and tures with long term heat resistance. PEI offers excellent ned with broad chemical resistance. Commonly machined into parts for reusable medical devices, analytical instrumentation, and electrical/

The Tetron family is made from polytetrafluoroethylene (PTFE), and is known for it's high temperature resistance (260°C), non-stick and low friction properties and being chemically inert.

Tetron Family of Products (PTFE/Teflon)

<b>Tetron S</b> White	Tetron S is virgin PTFE. Chemically inert, lowest co-efficient of friction of all materials, with ultimate non-stick properties. Excellent insulation characteristics and with continuous temperature resistance of 260°C.
<b>Tetron G</b> White	Tetron G is glass-filled PTFE, that improves the creep resistance, mechanical properties and wear resistance.
<b>Tetron C</b> Black	Tetron C is carbon filled PTFE. Improves creep and wear resistance, is anti-static with lubricity enhancement.
<b>Tetron B</b> Bronze	Tetron B is bronze filled PTFE, that provides the best creep resistance in the PTFE family, high thermal conductivity. The improved wear properties are often utilised in hydraulic systems. The chemical resistance is lower compared to other PTFE grades.
<b>Tetron GR</b> Grey	Tetron GR is a glass graphite filled PTFE that provides excellent wear properties against soft metals.



Polycarbonate® Family of Products (PC)

Polycarbonate<sup>®</sup> group of products are clear sheet grades that are extremely tough and impact resistant. With it's most common application being clear see through safety machine guards.

Polycarbonate® UV2 Clear	Polycarbonate <sup>®</sup> UV2 is polycarbonate sheet that is UV resistant on both sides, suitable for safety machine guards, signage, covered walkways, bus shelters, sky lights and exterior applications.
<b>Polycarbonate® AR</b> Clear	Polycarbonate <sup>®</sup> AR sheet is abrasion resistant on both sides for high traffic areas, security applications and mass transport.

#### Trovidur<sup>®</sup> Family of Products (PVC)



Trovidur<sup>®</sup> PVC group of products are especially outstanding for their stability, excellent chemical resistance, thermoformability and excellent flame retardant properties.

Trovidur® EC-N Grey Trovidur<sup>®</sup> EC-N is a plasticiser free PVC-U, which meets the requirements of RoHS, is weldable, self-extinguishing, with high chemical resistance.

#### **Thermoset Family of Products**

The thermoset family of products are materials of layered reinforced resins that exhibit very high mechanical properties particularly in compression in the Normal direction to the layers

	Orkot C320 (TLG)	C320 is manufactured from m and possessing dimensional s solutions. C320 grade incorpo
	Orkot C321 (TL)	C321 is manufactured from m and possessing dimensional s solutions. C321 grade has a h nuclear engineering application
	Orkot TLM Marine (TLMM)	Orkot® TLM Marine is a non- special fabrics with thermose Marine possesses exceptiona virtually no swell.
	PF CC 201	PF CC 201 is a medium weave gears, high load wear pads/gu stable, rigid and fire resistant
	PF CP 201	PF CP 201 is a cellulose paper plates for electrical cabinets,
	PF CC 22	PF CC 22 is a medium cotton or resistance and dimensionally



medium weave fabrics with excellent mechanical strength stability when immersed in water, acids and chemical porates graphite for improved dry running capability.

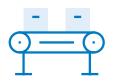
medium weave fabrics with excellent mechanical strength I stability when immersed in water, acids and chemical high resistance to gamma radiation and is recommended for tions.

-asbestos laminated material manufactured by impregnating etting resins and incorporates solid lubricants. Orkot® TLM al wear resistance and dimensional stability in water with

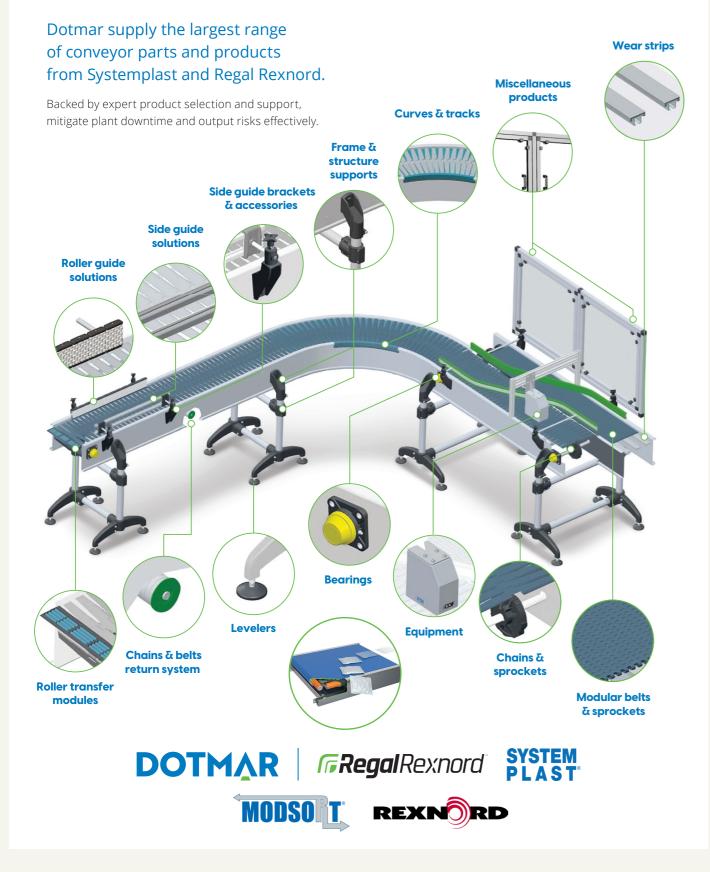
re cotton cloth reinforced phenolic resin sheet. Used for guides. A good electrical insulator, as well as being thermally nt

er reinforced phenolic resin sheet. A good insulator, used as, , holding fixtures and jigs, very rigid and thermally stable

a cloth reinforced phenolic resin tube. High bearing load y stable.



## CONVEYOR PARTS AND PRODUCTS



## MATROX FLOW PROMOTION LININGS







AARAA MAN

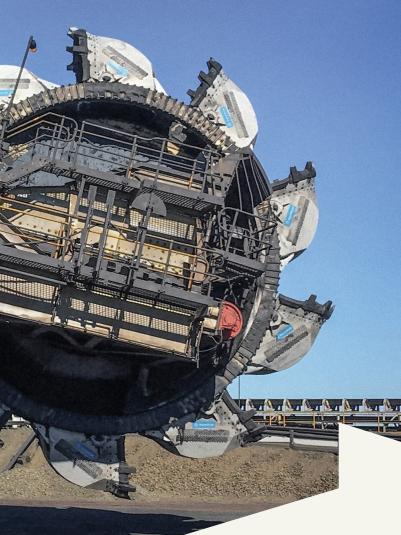
Aster



#### Advanced polymer alloys solving flow and wear issues across industries.

Featuring ultra-low friction, exceptional wear resistance, high impact strength, chemical resilience, and peak performance for challenging applications.

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