

Plastic Abrasives for Industry



The Magic is POLYMEDIA™

CUSTOM ENGINEERED BY

RODECO COMPANY

Metal Finishing Equipment and Supplies
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TECHNOLOGY CORPORATION

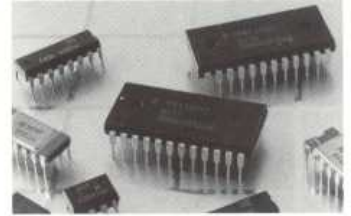
If your operation involves any kind of surface conditioning, treatment or coating removal, you should consider the advantages of US POLYMEDIA. It is fast, efficient and environmentally safe.

US POLYMEDIA is available in four different standard aggression/performance types: **POLYEXTRA**, **POLY V**, **POLYPLUS** and **POLYHARD**. In addition, specialty performance types are custom engineered and available. To insure that the appropriate type and size is used for a specific application, US TECHNOLOGY CORPORATION provides technical assistance free of charge.

US TECHNOLOGY CORPORATION pioneered the development of the plastic media blasting (PMB) technology, and is recognized as the leader in the manufacture of specialty plastic abrasives. The company products, known as **US POLYMEDIA**, have become the industry standard non-toxic plastic abrasive against which all others are judged. With international manufacturing capabilities, extensive R&D facilities, compliance with all elements of required government specifications, availability of Premium grade products in each Type media, which surpass Milspec requirements, and an approved recycling program, UST is committed to maintaining its leadership position.

POLYEXTRA® (TYPE I) is formulated for use in soft abrasive finishing and deflashing operations, where maintenance of surface tolerance is of the utmost concern, and the integrity of the substrate cannot be compromised. Surface contamination is removed with no distortion or harm occurring to the base material.

POLYEXTRA is uniform and reusable from application to application in contrast to agricultural media, which often varies in consistency from one lot to another.



POLY V® (TYPE V) is designed to solve today's coating removal and surface preparation problems. POLY V is custom engineered to provide rapid coating removal, minimal substrate abrasion, and high usability. The durability of this product translates into lower media consumption and less dust when blasting. This non-hazardous material may be obtained in Mil-Spec grade and in UST Premium grade which both meets and exceeds the requirements of MIL-P-85891(A). It is specifically designed to remove coatings from most sheet aluminum, fiberglass and composite surfaces as well as to deburr plastics, ceramics and soft metals.

PHYSICAL CHARACTERISTICS

	POLYEXTRA Type I	POLY V Type V	POLYPLUS Type II	POLYHARD Type III
Hardness				
Barcol	34-42	46-54	54-62	64-72
MOHS	3.0	3.5	3.5	4.0
Specific Gravity gms/cc	1.15-1.25	1.15-1.20	1.47-1.52	1.47-1.52
Bulk Density lbs./cu. ft.	45-48	45-48	58-60	58-60
Maximum Operating Temperature deg. F.	250	200	300	350
Chemical Nature	inert	inert	inert	inert



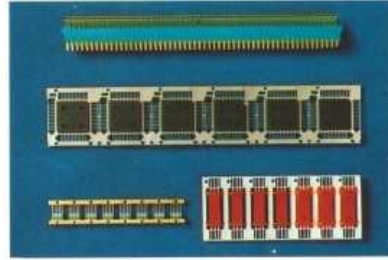
Damaging mechanical finishing operations, such as rotary disc sanding, can be eliminated.



Quickly and effectively removes paint around difficult surfaces.



Particles magnified.



Deflashes without damage.



Dangerous, costly chemical usage and disposal concerns can be totally eliminated.

On a Mohs scale of comparative aggression it is readily apparent where US MEDIA lies in relation to several other common abrasives. US MEDIA fills the void that previously existed in the critical 3.0 to 4.0 Mohs hardness range.

Agricultural	POLYEXTRA	POLY V
2.5-3.5	3.0	3.5

POLYPLUS® (TYPE II) is a more aggressive media than POLYEXTRA and applicable for a great variety of light industrial cleaning requirements.

POLYPLUS is designed to be used at low pressure settings 15 to 45 psi. It's fast and efficient, yet not damaging for most finishing applications.

POLYPLUS is a cost-effective replacement for chemical stripping operations, and makes a superb paint remover. It can reduce, if not totally eliminate, chemical consumption.



POLYHARD® (TYPE III) is the most aggressive formulation of US MEDIA. Fast acting, it approaches hard abrasives in its surface finishing capabilities.

POLYHARD is not harmful to blast cleaning equipment or cabinetry despite its high degree of aggression. It does not wear out tooling. Substantial savings are realized by eliminating the need to purchase expensive replacement parts.



BENEFITS

- No volatile, toxic chemicals or vapors
- Sharply reduced waste volume and disposal costs
- Lower consumables expense with recyclable media
- Significant reduction in manpower requirements
- Reduced downtime – increased revenues
- Reduces component cleaning time dramatically
- Retains clad, anodized, galvanized and phosphated coats
- Faster and safer than chemicals or sanding
- Minimizes equipment maintenance
- No silicosis hazard
- Eliminates metal embrittlement
- Provides superior surfaces for paint adhesion
- Preserves tolerances on parts and tooling
- Non-corrosive – eliminates chemical entrapment concerns
- Leaves body fillers, primers and gel coats intact
- Protects dissimilar metal buffers
- No flash rust after blasting
- No warpage or pitting of hard metals
- Eliminates special handling and storage measures
- Reduces energy consumption

APPLICATIONS

Aircraft paint removal. Removes most types of paint from typical aircraft substrates, while leaving anodized and alclad surfaces intact. Is employed on a wide variety of off-aircraft components – resulting in significant savings over chemicals.

Boats. Bottom paint stripping from aluminum, fiberglass and dense hardwood hulls. Rapid removal of dried barnacles. Cleans brass of oxides and other coatings. Detects and exposes blisters on fiberglass hulls.

Burr removal. Removes light burrs from components while maintaining integrity of finished part.

Clear epoxy optical sensors. Only media capable of removing resin bleed without opaquing surface. Eliminates individual time-consuming masking requirements.

Composite structures. Can strip paint and surface coatings from fiberglass, carbon-graphite, epoxy, and other resin rich components without bloom or fiber damage.

Die casting. Removes light flash from cast components without affecting critical surface dimensions.

Electronics deflashing. Used both in dry and wet blast to remove flash from electronic components and for surface preparation on PCB's.

Encapsulated electronic parts. Will not damage delicate parts or mar surfaces. Leaves product surface smear free, ready for identification printing or soldering.

Engine components. Carbon deposits and paint can be easily dry stripped with no wear to critical mechanical dimensions, including aluminum parts.

Ground vehicle paint removal. Paint is readily removed from auto, truck, railcar, and bus bodies.

Lead frames. Prepares lead for easier and more uniform tinning and coating procedures. Removes resin bleed without impinging surface.

Mold cleaning. Readily cleans molds used in rubber, plastic, glass, and die cast molding without affecting surface dimensions. Edges are not radiused, mold life is prolonged, cracks in molds are not smeared over, and flash on parts is reduced.

Paint rejects. Can be substituted for chemical stripping. In many applications, major time savings can be realized. Effective on most paint systems including powder coating.

Plastic molded parts. Effectively removes flash from parting lines on thermoset plastic parts. Removes surface anomalies without damage to the part.

Surface preparation. Etching circuit boards before printing. Pre-laminate roughening. Prepaint surface prep on plastics.

Surface sealants. Tenacious sealants and adhesives can be safely removed without damage to the substrate.

US POLYMEDIA

POLYPLUS	POLYHARD	Glass Beads	Silica Sand	Aluminum Oxide
3.5	4.0	5.5	6.0	9.0

Packaging

Bags and Boxes: 50 lb.

Drums: 250 lb

Bulk Bags: 1,000 to 2,500 lb.

Specifications

POLYEXTRA, POLY V, POLYPLUS and **POLYHARD** are available in four product categories. In addition, through its extensive research and development facilities, UST is capable of custom engineering media unique to application requirement(s) of individual customers.

PREMIUM GRADE. Plastic abrasive manufactured to US Technology specifications which exceed MIL-P-85891 (A) requirements. **The use of this product results in lower operating costs due to the superior durability and performance of the media.**

MIL SPEC Certified. Plastic abrasive meeting requirements as stated in MIL-P-85891 (A). **Use when critical dimensions of substrate material cannot be altered. UST performs all tests required by MIL-SPEC order and will furnish results to customers upon request. Containers will be marked "Material meets or exceeds MIL-P-85891 (A)".**

ELECTRONIC GRADE. POLYPRECISION media is custom engineered specifically to exacting requirements of the electronics industry.

STANDARD GRADE. This material meets our rigorous manufacturing standards and complies with our printed specifications designed to meet the requirements of general industrial use.

SIZE AVAILABILITY CHART*

(US Screen Opening Cross Reference)

TYPE	SCREEN	MILS	INCHES	MICRONS
ALL	8-12	2.13-1.68	.0937-.0661	2360-1700
ALL	12-16	1.68-1.19	.0661-.0469	1700-1180
ALL	12-20	1.68-.841	.0661-.0331	1700- 850
ALL	16-20	1.19-.841	.0469-.0331	1180- 850
ALL	20-30	.841-.595	.0331-.0234	850- 600
ALL	20-40	.841-.420	.0331-.0165	850- 425
ALL	30-40	.595-.420	.0234-.0165	600- 425
ALL	40-60	.420-.250	.0165-.0098	425- 250
ALL	60-80	.250-.177	.0098-.0070	250- 180

*Special sizes are available by request

Ordering Instructions

- Designate **POLYEXTRA, POLY V, POLYPLUS** or **POLYHARD**.
- Designate Grade Desired.
- Specify screen size for each product.
- Specify quantity ordered for each product and type of package required.



Carefully controlled operating parameters are the keys to success on this DC-9 fuselage.



Rapid paint removal, with gel coat and body filler preserved.



10:1 savings vs. chemicals are typical on most components, such as this aircraft wheel.

Material is manufactured to comply with published specifications concerning mesh size, specific gravity, shape, hardness, moisture content, storage stability, and operating temperature range.

Responsibility is disclaimed in the handling, use and storage of this material since it is beyond the scope of our control.



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