

Washington Penn Plastic

Light Weight Technology



Product Description: Washington Penn Plastic **Light Weight Technology** is a series of highly engineered polyolefins developed to address the market need for reducing weight in plastics parts.

Over the last several years Washington Penn Plastic has partnered with Automotive OEMs to lead the way in integrating light weighting TPO solutions into vehicle designs. Incorporation of WPP **Light Weight TPO Technology** has assisted in driving improvements in fuel efficiency, reducing vehicle emissions and lowering operating costs without sacrificing the performance of individual components. Industries such as Packaging, Building & Construction, Appliance and Consumer are following trend and are incorporating WPP **Light Weight Technology** in next generation applications to capitalize on material savings, decrease in part cost and environmental benefits.

Two common approaches for decreasing weight are material density reduction and/or part thinning. Each approach requires a unique material solution in order to maintain the part performance and processing consistency while optimizing cost. If your industry is seeking to improve material efficiencies, please contact us to learn how WPP can customize a **Light Weight Technology** solution to meet your application needs.

Typical Applications:

Vehicle Exteriors

- Bumpers
- Cowl Screens
- Accent Panels

Vehicle Interiors

- Instrument Panels (IP)
- Knee Bolsters
- Pillar and Door Trim

Key Characteristics:

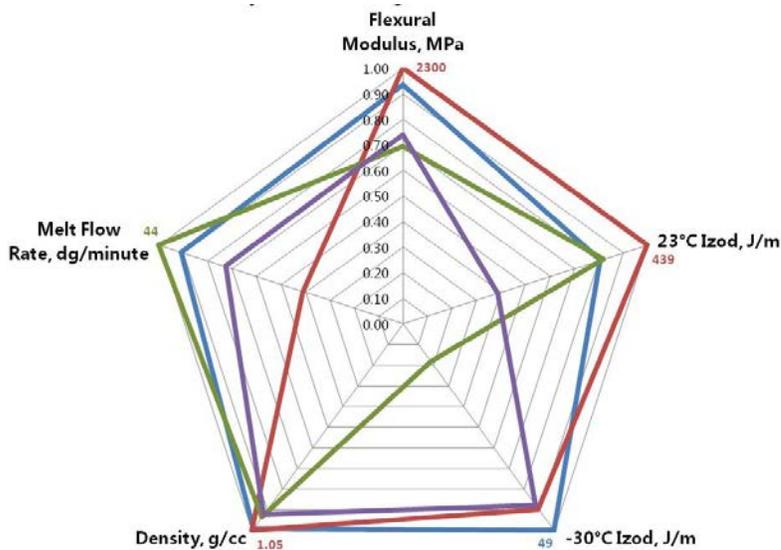
Reduced Material Density

- Maintain stiffness
- Maintain impact
- Maintain viscosity

Part Thinning

- Increase stiffness
- Increase impact
- Reduce viscosity

Survey of WPP Light Weighting TPO Solutions



Product	Flexural Modulus, MPa	23°C Izod Impact, J/m	Melt Flow Rate, dg/min	Density, g/cc
TPO-2600 SUV	2600	360	16	1.06
TPO-8793 UVP HF	2300	300	42	1.04
TPO-2170 LW UV	2000	90	26	0.92
TPO-3977 LW UVP	1700	170	32	0.97
TPO-1244 LW HF	1600	360	44	0.98

— TPO-8793 UVP HF (Exterior Thin-wall) — TPO-2600 SUV (Interior IP)
— TPO-1244 LW HF (Interior Thin-wall) — TPO-3977 LW UVP (Exterior Low Density)

Washington Penn Plastic Co., Inc. is a leading provider of polypropylene and polyethylene-based compounds. For more than 60 years, WPP has worked with customers to discover, innovate, and develop practical polyolefin solutions.

Key Technologies & Offerings:

- Mineral Reinforced
- Glass Fiber Reinforced
- TPO and Soft Touch TPE
- Masterbatches
- Light Weight and Sustainability Reinforcing Agents
- Flame Retardants
- UV Stabilization
- Scratch & Mar

Markets We Serve:



Automotive



Appliances



Construction



Consumer



Packaging

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