

# **PRW Power Showcases Engineering-Driven Product Evolution on EPARTRADE Race Industry Now**

**From advanced valvetrain technology to modular SFI-certified driveline components, PRW Power details how engineering, manufacturing discipline, and strategic product development are reshaping one of the aftermarket's most recognized performance brands.**

The performance aftermarket has never been more competitive. Engine builders, racers, and distributors expect components that deliver OEM-level consistency, race-proven durability, and competitive pricing without compromise. During a recent EPARTRADE Race Industry Now webinar, Cary Redman, Vice President & Chief Revenue Officer of PRW Power, provided an in-depth technical look at how the company is reinventing itself through engineering innovation, expanded product development, and renewed attention to manufacturing quality.

Hosted by Brad Gillie from SiriusXM Channel 90's *Late Shift*, the webinar, "**The New and Improved PRW Power: Engineering, Quality & Performance for Today's Racing Industry,**" highlighted how new leadership has accelerated investment in product engineering while maintaining PRW's reputation as a comprehensive source for high-performance engine components.

## **A Brand Focused on Engineering, Not Just Expansion**

Redman explained that PRW's recent transformation extends far beyond organizational changes. The company's strategy centers on developing products that solve real-world problems encountered by professional engine builders, racers, and performance enthusiasts.

Rather than simply expanding its catalog, PRW has focused on redesigning critical components using modern engineering tools, finite element analysis (FEA), improved manufacturing processes, and extensive durability testing.

"Our goal isn't simply to sell another aftermarket component," Redman explained during the webinar. "It's to engineer products that outperform expectations while remaining accessible to builders across multiple segments."

This philosophy is reflected throughout PRW's expanding product portfolio, from valvetrain systems to rotating assemblies, harmonic dampers, flexplates, flywheels, and water pumps.

## **Direct-Oiling Rocker Arms Address a Longstanding Valvetrain Challenge**

One of the webinar's most technically significant discussions focused on PRW's latest rocker arm design.

Traditional roller rocker systems rely largely on splash lubrication to provide oil to the trunnion bearings. Under extreme RPM and spring pressures, inconsistent lubrication can become a concern.

PRW's new rocker arm addresses this issue through an engineered direct-oiling system.

Instead of depending on splash oil, lubricant travels through the pushrod into EDM-machined oil passages within the rocker body before being directed under pressure directly around the trunnion bearing. The oil then exits through the rocker, ensuring continuous lubrication throughout operation.

The design offers several engineering advantages:

- Pressurized lubrication directly to the trunnion
- Reduced dependence on splash oil
- Lower operating temperatures
- Improved durability under high spring pressures
- Reduced friction
- Increased long-term reliability

Redman also highlighted precision-ground roller tip technology designed to minimize friction while eliminating roughness or binding commonly associated with lower-quality rocker assemblies.

Despite incorporating additional internal oil passages, the redesigned rocker arm is actually lighter than the previous generation while offering greater structural rigidity.

Finite element stress analysis demonstrated minimal stress concentration even under approximately **1,000 pounds of open valve spring pressure**, illustrating the increased stiffness achieved through the redesigned geometry.

## **Modular Flexplate Engineering Reduces Inventory Complexity**

Another major focus of the presentation was PRW's innovative modular flexplate strategy.

Instead of manufacturing dozens of nearly identical part numbers, PRW developed a system capable of covering numerous applications through interchangeable balance weights and multiple transmission bolt patterns.

Its billet flexplates feature multiple transmission mounting patterns machined into a single component, allowing compatibility with popular GM transmissions including Turbo 350, Turbo 400, and 4L80E configurations.

Integrated removable counterweights allow builders to configure the same flexplate for multiple engine balance requirements, significantly reducing SKU count for distributors while simplifying inventory management.

The flagship billet series is:

- SFI certified
- Rated for approximately **3,500 horsepower**
- Rated to **12,500 RPM**
- Designed for severe racing applications

PRW also offers a Pro Series flexplate featuring material approximately **40% thicker than OEM**, SFI certification, and a horsepower rating around **1,500 HP**, providing a cost-effective solution for serious street and sportsman racing applications.

A third Sportsman line targets builders seeking an OEM-plus replacement with improved durability while maintaining affordability.

For warehouse distributors, the modular strategy dramatically reduces inventory requirements by allowing approximately two dozen core part numbers to service dozens of engine and transmission combinations.

## **Fluid Harmonic Dampers Expand Product Coverage**

Redman also discussed PRW's expanding harmonic balancer program.

The Elite Series fluid-filled dampers utilize viscous damping technology similar to premium fluid damper designs commonly used in high-performance applications.

The lineup now extends beyond traditional domestic V8 engines into diesel applications, reflecting increasing demand from both performance diesel builders and heavy-duty engine markets.

The expansion demonstrates PRW's strategy of serving multiple performance segments while maintaining common engineering principles across product families.

## **Benchmarking Against Industry Leaders**

One of the more notable discussions centered on PRW's internal quality validation process.

Rather than evaluating products in isolation, Redman explained that PRW regularly benchmarks its components against established premium manufacturers.

Fasteners, for example, are compared directly against leading products before entering production. If a production batch fails to meet PRW's performance targets, it does not move forward.

This validation philosophy extends throughout the company's product development process.

The result, according to Redman, is a product line designed to deliver premium-level performance while maintaining pricing that typically remains well below many flagship competitors.

For distributors, this creates an opportunity to offer customers a high-value alternative without sacrificing engineering credibility.

## **Engineering Supporting the Entire Engine Package**

Throughout the webinar, Redman emphasized that PRW's objective is to provide builders with complete engine solutions rather than isolated components.

The company's portfolio includes:

- Roller rocker arms
- Flexplates
- Flywheels
- Harmonic balancers
- Water pumps
- Fasteners
- Valvetrain components
- Additional rotating assembly products

Each product family is being evaluated for redesign opportunities using modern engineering analysis, manufacturing improvements, and expanded application coverage.

## **Supporting Today's Builders**

As engines continue producing higher cylinder pressures, increased RPM, and greater horsepower levels, component reliability becomes increasingly dependent on engineering rather than simply stronger materials.

PRW's latest product developments demonstrate how thoughtful design improvements—including direct oil delivery, modular driveline architecture, advanced stress analysis, and manufacturing validation—can provide measurable performance gains while simplifying installation and inventory management.

For engine builders, machine shops, warehouse distributors, and racers alike, the company's renewed engineering focus represents more than a product refresh—it reflects a long-term commitment to delivering performance components designed for the demands of modern racing.

The complete webinar, "**The New and Improved PRW Power: Engineering, Quality & Performance for Today's Racing Industry**," featuring Cary Redman, Vice President & Chief Revenue Officer of PRW Power, and hosted by Brad Gillie of SiriusXM Channel 90's *Late Shift*, is available through EPARTRADE's Race Industry Now webinar series.

For more information, [watch the full webinar here.](#)