Advanced Clutch Technology Webinar Highlights:

Maximizing Performance and Durability in Racing

In a recent webinar titled "Advanced Clutch Technology for Racers: Maximizing Performance & Durability," Advanced Clutch Technology (ACT) showcased their industry-leading clutch systems tailored for the high-demand world of motorsports. The presentation was led by Rich Barsamian, Vice President of Sales & Marketing at ACT, and Matt Field, a professional drift driver with Drift Cave Motorsports, providing firsthand insights into the benefits of ACT's innovative clutch solutions.

Clutch Basics and Evolution

As Rich Barsamian outlined, the clutch is often misunderstood by the general public. While most racers and car enthusiasts are familiar with the term, the intricate mechanics behind clutch systems remain a mystery to many. ACT, a family-owned business founded by Dirk Starkson over 30 years ago, has continually pushed the envelope in clutch design and performance. With over four decades of experience, Starkson has positioned ACT as a leader in the motorsports industry.

ACT's clutches, particularly the newly introduced **modular twin clutch system**, were a focal point of the discussion. Rich demonstrated a cutaway model, explaining how each component — from the flywheel to the pressure plate — contributes to improved engagement, holding capacity, and durability. "The flywheel adds inertia to the rotating assembly, providing a heat sink while ensuring stable mounting for the pressure plate," Rich explained.

Precision and Performance on the Track

Matt Field, a long-time user of ACT clutches, offered a racer's perspective, sharing his experiences with ACT's products. One notable upgrade in his performance came from switching to ACT's **forged aluminum pressure plates**. "As soon as I drove it for the first time, I could tell the difference," Field remarked. "The deflection was minimal, giving me a more precise and quicker shift. For a drift driver, where every millisecond counts, this improvement was game-changing."

Field emphasized that with ACT's aluminum pressure plates, he was able to reduce the travel needed for engagement, allowing for faster shifts — a critical advantage in drift competitions. "When your tires are spinning, every fraction of a second you can save on shifting means you're accelerating down the track that much faster," Field said.

Innovative Engineering: Diaphragm Spring Design

One of ACT's most impressive technical breakthroughs is its proprietary **diaphragm spring** design. Unlike many competitors, ACT engineers their diaphragm springs in-house, allowing for greater control over clamp load and durability. According to Barsamian, the diaphragm spring plays a pivotal role in increasing torque capacity without overburdening the driver with a stiff pedal feel. "Our design allows for tremendous clamping force without the typical drawbacks, such as excessive pedal stiffness," he explained.

Tailored Clutch Solutions

ACT's approach to clutch manufacturing is far from one-size-fits-all. The company offers over 1,200 different applications, ensuring that racers can find the perfect setup for their specific needs. Whether it's an **organic full-face clutch** for street cars or a high-performance **cerametallic button clutch** for competitive racing, ACT has developed solutions that cater to a wide range of driving styles and torque requirements.

Field highlighted the importance of selecting the right clutch for each application: "I have different clutches in all of my cars, each chosen for its specific purpose. The wrong clutch can lead to mis-shifts, lost time, and even damage to the drivetrain. ACT's modular approach allows me to fine-tune every aspect of my vehicle's performance."

Commitment to Innovation

ACT's commitment to innovation and quality has cemented its position as a leader in the clutch industry. From durable forged aluminum pressure plates to advanced diaphragm springs, ACT offers unparalleled solutions for racers looking to maximize their vehicle's performance. As Matt Field and Rich Barsamian demonstrated, ACT clutches are built to withstand the rigors of professional racing while delivering exceptional precision and control.

For more information, watch the full webinar here.