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CTW Automation Inc.

CTW Automation Inc. (CTW) designs, manufactures and sells a complete line of shock dynos based on a crank and scotch-yoke design to develop a pure and simple sinewave input. These range from 2HP to 20HP machines and will meet a wide range of damper testing needs across a variety of strokes and speeds.

CTW also manufactures a full line of electric linear actuators (LA) utilizing the finest ironless motors in the industry. These LA systems can run industry standard Sine and Triangle wave inputs as well as Custom, user defined, wave forms including track data playback.

These machines are primarily used to test shock absorbers in a wide variety of ways. This includes simple single speed testing, to multiple speeds, PVP, temperature based, production, R&D, real time and much more. We sell to the Friday-night racer, multi-car racing teams, damper manufactures, service centers and basically anyone and anything with a damper including:

- Racing – any and all from F1 to the Friday night racer working in his own garage
- Industry, R&D and Testing facilities
- Ride Development trailers and at the track units
- Manufactures and service centers
- OEM and after market brands
- Motorcycles, Motocross, and bicycles
- Off road trucks, 4x4 and side-by-side
- Helicopters, lawn mowers and solar panels
- Artificial joint testing

While we started in 2016, we have a heritage that goes all the way back to 1991. CTW Automation Inc. (CTW) grew out of the ashes of what was Roehrig Engineering Inc.

The current owners and management team of CTW, Scott Treichler (President) and Michael Kadlecik (Vice-President), and Scott Perman (Head of Design) all started working for Kurt Roehrig at Roehrig Engineering in the 90's.

- Scott Treichler originally started in 1995 by helping Kurt run Roehrig Motorsports, Kurt's NASCAR Super-truck racing program. Later Scott became the Vice-President of Roehrig Engineering and ran the day-to-day operations. Scott worked all the way through the sale of the company to MTS and then for MTS-Lexington for a period of time before leaving to take some time off and pursue other interests.
- Michael first met Kurt when the team he was working for, Cunningham Racing Nissan GTO team, purchased the 2nd shock dyno Kurt ever sold. In 1993, Michael would take a full-time position at Roehrig Engineering as the person that would put the "MK" into the MK dyno series that helped build the foundation of Roehrig and solidify their racing presence NASCAR and their Industry presence around the world. Michael also worked up and through the MTS buyout, ultimately leaving to pursue other interests.
- Scott Perman is the Head of Mechanical Engineering and Design as well as all things 3D Printed. Scott (yes two Scotts) worked at Roehrig Engineering back in the late 90's and is



instrumental in beginning the actual use of the electric linear actuators that would become known as the EMA. He took a brief pause from Roehrig in 2000 and would spend 16 years at Hendrick Motorsports as a lead engineer for the organization that helped Jeff Gordon and Jimmie Johnson to many-many championships.

Most of our employees used to work at Roehrig Engineering. Sometime after the company was sold by Kurt, the facility was closed, and everyone was let go. CTW was lucky to find a ready-to-work staff that was already proven and experienced in building the best equipment for testing dampers and springs. Bryan Pittman and Chris Bristol were the first two employees CTW hired.

- Bryan Pittman was able to resume the role he held at Roehrig Engineering and MTS-Lexington as the Head of Electrical Engineering and get CTW's own linear actuator program going in full motion. Bryan had done the same for Roehrig and was instrumental in the 4-Post shaker rigs that were produced and sold around the world. His experience with electric linear motors is ideal for the rapid growth and development of CTW.
- Chris Bristol was the head of EMA production in all phases for Roehrig. Chris currently heads up all calibration and the shock dyno production. He also is part of the Service and Support staff that helps to keep all CTW machines running as well as all the old Roehrig dynos and EMA's he helped produce.
- Zach Sink is another employee straight from Roehrig Engineering / MTS-Lexington. Zach was the person that built each and every Roehrig shock dyno up until the very end. He is currently working on his original area on his original build table!

CTW currently occupies the "old" Roehrig Engineering building in Lexington, NC. Luckily for us, it became available sometime after Kurt sold Roehrig Engineering in 2014. Scott and Michael are even in their original offices, maybe their original desks. The building is also occupied by [N2 Manufacturing](#) which is the core of the machining center that was owned by Kurt Roehrig and of course, the original people are running and operating it with Ron Nelson as the owner.

We, the CTW employees, built the industry standard shock dyno testing equipment for the racing community and then provided the best customer support on the planet. Now, with all ex-Roehrig employees we are building a new generation of testing equipment including shock dynos and electric linear actuators to fit your needs and exacting requirements. We make a wide variety of crank type shock dynos as well as a broad range of electric linear actuators capable of high force, high velocities and very high frequency response.

We are fully capable of servicing all types of damper and spring testing equipment, including Roehrig shock dynos and EMAs, and will be quickly ready to upgrade your software as well to the next generation of CTW Shock Testing and Control Software.

CTW Automation
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Old to New

