THE IDEAL AEROSMITH TIMELINE

2015 Designed and manufactured full three-axis turnkey calibration system for major oil & gas company.
2014 Received U.S. Department of Commerce’s Export Achievement Award.
2013 Celebrated 75th anniversary.
2013 Began our “Lean” journey, which continues today.
2013 Selected as Rockwell Collin’s 2012 Business Supplier of the Year.
2011 Designed and manufactured two-axis turnkey station for major IMU manufacturer.
2011 Introduced and delivered first fully automated three-axis non-magnetic table system to major oil & gas company.
2010 Moved corporate headquarters to new facility in Grand Forks, ND.
2010 Received AERO 4000™ patent.
2009 REAC, Grand Forks, ND, facility inaugurated.
2009 Delivered first five-axis hydraulic table.
2007 Landed multiyear ATE contract with a major avionics OEM.
2006 Introduced the AERO 4000™ Motion Controller, the industry’s most advanced and capable controller.
2005 Delivered Satellite Communication Test Bench to major corporate jet manufacturer.
2005 Established offices in Pittsburgh, PA, and Menlo Park, CA, with former employees of Carco Electronics®.
2002 Acquired Automatic Test Equipment (ATE) line from Pentar Avionics.
2002 Developed in-flight entertainment test system for commercial aviation.
2002 Engineering and manufacturing facility established in Phoenix, AZ.
2002 Six Sigma methodology implemented into company processes.
2002 Introduced 1291BR Series, a single-axis table system designed specifically for MEMS.
2000 Purchased centrifuge and rate table line from Trio-Tech, formerly manufactured by Genisco Technology.
2000 Achieved ISO 9001 certification.
1999 Produced first Hardware-in-the-Loop (HWIL) missile simulator.
1996 Expanded into the Build-to-Print market; began providing on-site support to major avionics OEM.
1991 Aerosmith Table Language (ATL) introduced.
1986 Produced first automatic position and rate table for major avionics OEMs.
1986 Produced first fully automated three-axis non-magnetic table system to major oil & gas company.
1986 Produced first five-axis hydraulic table.
1971 Precision timing devices for numerous national sporting events produced.
1968 Truline Valves introduced.
1963 Y-way and DCNM manometers, tilt meters, and tilt & turn tables introduced.
1955 Ideal Laboratory S. Tool merged with Aerosmith Instrument, Co., creating Ideal Aerosmith.
1945 First Scorsby table introduced.
WWII Ideal awarded Army-Navy “E” for excellence in production during World War II.
1938 Ideal Laboratory & Tool formed in Cheyenne, WY, by a group of former airline maintenance personnel; CAA approved Repair Station, No. 2741 for aircraft instruments.

AERO 4000™ MOTION CONTROLLER

The Ideal Aerosmith AERO 4000™ Motion Controller is the most advanced and capable digital servo controller on the market today. It is designed for Ideal’s high-precision Hardware-in-the-Loop Flight Motion Systems, rate table systems and precision centrifuges, as well as upgrading aging table systems currently being used in the field. The AERO 4000™ Motion Controller design results in higher performance, ease of use and a longer support life. For more details, visit www.ideal-aerosmith.com.
Ideal Aerosmith is committed to manufacturing the highest quality rate tables, positioning tables, flight motion simulators, centrifuges and motion controllers in the world. From design and manufacture to post-sale service and support, we supply innovative motion tables that far exceed our customers’ expectations.

INERTIAL TEST SYSTEMS
Ideal Aerosmith position & rate table systems provide angular position, rate and acceleration motions for development and production testing of inertial components and systems. Our one-, two- and three-axis table systems provide precise stimuli to your test package and accommodate a wide variety of test requirements for rates, accuracies, dynamic performances, payload capacities and environmental conditions. These table systems are typically used for testing inertial sensors (such as MEMS, FOG, RLG, HRG, quartz, spinning mass and accelerometers) or inertial systems (such as IMU, INU, INS, AHRS and IRU). Applications include a wide variety of industries, including aviation, defense & aerospace, automotive, marine, space, petroleum, virtual reality, UAV, gaming and medical. Our line of centrifuge systems is used for a broad range of G-testing applications, testing payloads up to 200 lbs (91 Kg) and 1000 Gs.

FLIGHT MOTION SIMULATION SYSTEMS
Ideal Aerosmith manufactures high-precision and high-dynamic three- and five-axis electro-mechanical and hydraulic flight motion simulation (FMS) systems. This equipment primarily addresses development and production testing of Hardware-in-the-Loop (HWIL) missile guidance and seeker packages. Other specialized test equipment includes radome boresight error measurement and aeroload simulation systems.

MOTION TABLE CONTROLLERS
Our AERO 4000™ Motion Controller is designed to control single- and multi-axis test tables with unparalleled accuracy and precision. The AERO 4000™ provides an excellent, cost-effective refurbishment option for customers with older table systems that still have a good functioning mechanical structure. The AERO 4000™ is the most advanced and capable controller in the industry today.

AVIONICS INSTRUMENT TEST EQUIPMENT
Our history began with avionics test equipment, and it continues to be an important part of Ideal Aerosmith to this day. Our Scorsby motion tables, manual tilt & turn tables, and rate of turn tables have been a standard in the aviation maintenance industry for decades. Our tables can be found all over the world in facilities that deal with inspection, evaluation and calibration of aircraft gyroscopic instruments and components.
Ideal Aerosmith is dedicated to providing turnkey test solutions and build-to-print manufacturing services for a broad array of industries, including aerospace, automotive and defense. Ideal Aerosmith is committed to understanding our customers’ needs to ensure that our products and services exceed expectations in all aspects, including functionality, value, delivery and support.

TEST SYSTEMS & TEST EQUIPMENT
Obsolescence Management and Solutions
Ideal Aerosmith realizes that many test systems are aging and obsolescence is a serious problem. Discarding a test system and embarking on a new development program is often not an acceptable option for cost and compatibility issues. We offer both modernization and re-manufacturing services to upgrade your existing legacy test systems.

Turnkey Solutions
Ideal Aerosmith’s capabilities include full turnkey services in the design, manufacture and field support of automatic test equipment (ATE). Our expertise includes test system design and integration, test software development, test requirements definition and test program set (TPS) development. Our commitment to program management, coupled with our rapid procurement services and manufacturing capabilities, results in delivery of an on-time, on-budget test solution.

BUILD-TO-PRINT
Choosing the right build-to-print partner is a critical decision. When a decision is made to outsource the build of products or sub-assemblies to a contract manufacturer, you are placing your company’s reputation in someone else’s hands. Our experience in the design and build of test systems, fixtures, integrated test adapters [ITAs] and cable assemblies, combined with our commitment to customer satisfaction, will ensure an efficient transition to outsourcing your products. Our IPC-A-610- and IPC-A-620-trained inspection and assembly personnel and our ISO 9001:2008 certified facilities secure our reputation of delivering quality that you can depend on. From a single-wire cable to complex multi-bay test systems, our manufacturing team will respond with a product that exceeds your outsourcing requirement.

ENGINEERING SERVICES
Ideal Aerosmith’s engineering team can complement your program by providing design assistance and documentation creation. Our design assistance includes filling in the gaps of incomplete documentation during the build process, providing redlined prints for production changes, producing mechanical prints and cleaned up “as built” drawings. In the face of obsolescence and turnover of product knowledge, Ideal Aerosmith can provide reverse-engineering services to minimize impact and ensure future product builds.
We’re the ideal partner for motion testing. Here’s why:

IDEAL EXPERIENCE
We have the world’s most experienced motion simulation development team, combining those with backgrounds in engineering, manufacturing, quality control and customer service. This earned expertise means on-time delivery and uncompromising craftsmanship on every job.

IDEAL SOLUTIONS
We don’t just sell products; we find answers. These innovative solutions may come from existing technology or custom development, with either approach providing trustworthy metrics that help our customers’ designs to exceed even their own expectations. We work with aerospace, research, automotive electronics and petroleum companies around the globe.

IDEAL QUALITY
Ideal Aerosmith is committed to upholding the highest standards of product development and manufacturing quality. Ideal’s quality management system is ISO 9001:2008 certified and our assembly personnel are certified IPC-A-610 and IPC-A-620 specialists.

IDEAL SUPPORT
The name Ideal Aerosmith has become synonymous with outstanding customer service. We know that equipment failure is unacceptable. That’s why our passionate team will go to any length – around the world – to ensure that your system performs to the highest standard and level of satisfaction.

Find out for yourself about our earned expertise. Contact Ideal Aerosmith today.

Assembly Area

Final Acceptance Testing

Corporate Headquarters in Grand Forks, North Dakota, USA