

## Waters introduces new range of TA instruments

04 October 2019 | News

**The MSF16 extends the capability of accelerated cyclic testing by loading 16 specimens simultaneously**



Waters Corporation has introduced the new TA Instruments™ MSF16 Multi-Specimen Fatigue Instrument. The MSF16 extends the capability of accelerated cyclic testing by loading 16 specimens simultaneously, rapidly delivering insights into the failure limits of materials, components and products under repeated loading.

The durability of materials and their construction is critical for the longevity of products that experience repetitive forces. From aircraft and automobiles to medical devices, understanding durability can be lifesaving. Fatigue testing of component materials or final assemblies involves repetitive mechanical loading (stress and strains) that measure when and how they fail. Failure quantification requires ten to one hundred specimens be tested for millions, even hundreds of millions of cycles. TA's MSF16 instrument, equipped with industry leading motor technology and 16-sample capacity, significantly accelerates fatigue analysis and provides users a competitive edge by reducing their time-to-market.

At the heart of the MSF16 is the patented, frictionless ElectroForce™ motor. It offers 3,000 N force capacity and market-leading accelerations enabling significantly faster test frequencies and therefore less testing time. Instrument and motor endurance are paramount in fatigue instruments, and the friction-free motor and sensor technologies have proven durability for billions of cycles. The MSF16 frictionless motor is a perfect match for high cycle testing, and it is backed the industry's only 10-year warranty. With sixteen samples of simultaneous loading, precision specimen-to-specimen adjustments and many convenience features, such as an auto-fill bath, the MSF16 gives test engineers the high-capacity and easy-to-use tool to advance their test programs and shorten their development time.