

Instron 8862 Low-Cycle-Fatigue (LCF)



Overview

- ± 100 kN servoelectric dynamic floor-standing test machine; backlash free, ball-screw drive for Low Cycle Fatigue (LCF) testing

Applications

Product/service	Loading modes	Main uses	Materials
<ul style="list-style-type: none">• Low Cycle Fatigue (LCF) mechanical testing	<ul style="list-style-type: none">• Compression• Tension	<ul style="list-style-type: none">• ISO 12106 & ASTM E606 for strain controlled fatigue testing, used for simulating mechanical loading into plastic region• Materials testing driven by demand from aerospace, automotive & power generation industries	<ul style="list-style-type: none">• Coatings• AM• Metals

Recent use cases

- Testing typically carried out at very high temperatures (1000°C) to replicate service conditions experienced by turbine blades in both gas turbines and jet engines