

## 2500kN servo-hydraulic fatigue test machine

Instron 8806 high-capacity testing machine

Servo-hydraulic mechanical testing machine capable of static loading to +/-3000kN and cyclic loading to +/-2500kN.

## Features and benefits

- Allows cyclic loading to be applied with constant or variable amplitude with precisely tailored loads
- Highest load rate of TWI's fatigue testing machines; TWI possesses other test machines ranging in capacity from 350kN to 1700kN
- The fatigue performance of welds is affected by specimen size: larger specimens give a lower fatigue strength. The ability to test at or close to the full scale of components subjected to cyclic service loading is therefore important in establishing the true fatigue performance

## Some applications

- Replication of larger components in test environment giving better fatigue understanding
- Full-scale testing for larger range of components
- Improved understanding of variable amplitude fatigue
- Testing parts exposed to vibration and movement, such as those used in offshore oil and gas, offshore wind, rotating machinery, transportation, bridges, ships and submarines

## Technical specification

- Peak cyclic load capacity of +/-2500kN
- Maximum static load capacity of +/-3000kN
- Hydraulic jaws able to accommodate plate samples up to 100mm thick and round specimens with 10–75mm diameters
- 8800MT controller
- Frame stiffness exceeds 4400kN/mm
- Operating pressure of 207 bar

