Guided Bend Fixture for Intergranular Attack Testing

Built to ASTM A262 — Standard Practices for Detecting Susceptibility to Intergranular Attack in Austenitic Stainless Steels



OVERVIEW

Guided bend fixture for evaluating austenitic stainless steel specimens after the corrosive exposure of ASTM A262 Practice E. The specimen is bent around a hardened mandrel between supports, and the outer bend surface is then examined under magnification for fissures that indicate intergranular attack.

KEY FEATURES

- Interchangeable hardened mandrels for different specimen thicknesses
- Adjustable roller supports for controlled, centered bending
- Bends specimens to the angle required for Practice E evaluation
- Corrosion-resistant construction suited to post-exposure specimens
- Supplied with adapters to suit your load frame (clevis or threaded)

TECHNICAL SPECIFICATIONS

Test method	Guided bend after acid exposure, ASTM A262 Practice E
Test type / loading	Mandrel bend between supports (compression loading)
Specimens	Flat or round specimens per ASTM A262 Practice E
Load capacity	50 kN standard; higher capacities on request
Fixture material	Hardened tool steel, corrosion-resistant finish
Mandrels / supports	Interchangeable hardened mandrels; hardened rollers
Machine connection	Clevis pin or threaded adapter, to suit customer frame
Compatible frames	Electromechanical and servo-hydraulic universal test machines

APPLICATIONS

- Austenitic stainless steel sheet, plate and bar
- Welded stainless fabrications
- Sensitization and heat-treatment checks
- Mill certification and QC labs

ABOUT THE STANDARD

ASTM A262 describes practices for detecting susceptibility to intergranular attack in austenitic stainless steels, from an oxalic acid etch screening test to boiling acid exposures. In Practice E (copper-copper sulfate-sulfuric acid), exposed specimens are bent and the bend is examined; cracking or fissuring along grain boundaries indicates susceptibility.

Ordering & customization: Specify specimen thickness and width, mandrel diameters required, required capacity and test machine connection when ordering.

Specifications are typical and may vary by configuration; confirm at time of quote. Users should refer to the current edition of the standard for test procedures. Part ref. UGC-A262-BF