



Ultra-Life D4482 Specimen Die

CCSi manufactures these high quality Specimen Cutting Dies for the determination of fatigue life of rubber compounds undergoing a tensile-strain cycle, as described in [ASTM D4482](#) 'Standard Test Method for Rubber Property – Extension Cycling Fatigue'.

ASTM D4482 is also referred to as the “fatigue-to-failure” test, as a function of the popular instrument used to perform the test.

ASTM D4482 describes a procedure in which a test specimen is cyclically strained, at a fixed frequency, over a series of maximum extensions (flexing). The flexing causes cracks, usually initiated by a naturally occurring flaw, to grow and cause complete rupture of the test specimen (failure). The number of cycles required to cause failure is recorded as fatigue life.

CCSi *Ultra-Life* Specimen Dies: Quality Manufacturing

CCSi *Ultra-Life* specimen cutting dies are manufactured from homogenous, solid, high carbon content A2 tool steel. Each undergoes multi-axis precision grinding and conventional, plunge, or wire EDM (Electrical Discharge Machining) processes ... producing a world-class, close tolerance die.

Precision grinding and EDM processes ensure true parallelism and multi-plane dimensional accuracy. The quality of materials, design, and engineering serve to provide the highest specimen quality possible, over an extended service life.

Where highly technical manufacturing techniques and processes end ... old-world craftsmanship begins!

CCSi *Ultra-Life* specimen cutting dies are individually serialized, hand-honed, and mirror polished. A protective coating of industrial enamel is applied to the non-cutting surfaces before undergoing a rigorous final inspection.

Each *Ultra-Life* specimen cutting die includes a detailed final report and certification to the applicable standard, traceable to NIST, and compliant with ISO 9001:2000 and ISO/IEC 17025. The specimen dies are placed in a plastic, blow-molded, 'clam shell' style case with a foam lining to protect the die during transport and storage.

CCSi *Ultra-Life* Specimen Dies: Features

The CCSi Specimen Cutting Dies Feature:

- Exclusive *Ultra-Life* cutting edge technology;
- Designed with advanced 3D solid modeling;
- High carbon content A2 tool steel;
- Manufactured using computerized systems and techniques;
- EDM (Electrical Discharge Machining);
- CNC (Computer Numerical Control) 4 axis machining;
- Precision ground;
- Expertly honed;
- Finely polished;
- Protective industrial enamel coating;
- Plastic, foam lined, protective case;
- Traceability of dimensional measurement to NIST;
- Certification to ASTM D4482;
- Compliance with ISO 9001:2000 and ISO/IEC 17025.

Available in:

- ASTM D4482 Standard Die.

CCSi *Ultra-Life* ASTM D4482 Specimen Cutting Dies: Specifications & Pricing

Part Number	Description	Dimensions
CCSi-D4482-An	D4482 Die without mounting device	Cutting Length: 3.1 in. Tab End Width: 0.492 in. Tab End Radius: 0.492 in. R Center Length: 0.984 in. Center Width: 0.158 in.
CCSi-D4482-Aa	D4482 Die with arbor press mount	
CCSi-D4482-Ap	D4482 Die with press adapter	
CCSi-D4482-Am	D4482 Die with mallet handle	
Please Request a <a href="#">Quotation</a> for current pricing and delivery.		

The specimens are cut from test pieces prepared in laboratory compression mold, as described in [ASTM D4482](#), which CCSi also manufactures.