

CCSi *Ultra-Life* Specimen Cutting Dies: ASTM D5963



Ultra-Life D5963 Rotating Die

CCSi manufactures this high quality Specimen Cutting Die for evaluating resistance to abrasion of rubber materials through the measure of volumetric loss of a specimen exposed to the action of a normalized abrasive medium secured to a rotating cylinder, as described in [ASTM D5963](#) 'Standard Test Method for Rubber Property-Abrasion Resistance (Rotary Drum Abrader)'.

The rotary drum type abrader is commonly referred to as the "DIN Abrader" as it complies with DIN 53516 "Testing of rubber and elastomers; determination of abrasion resistance." These two test methods are technically identical, and may be used interchangeably.

The test methods require a cylindrical specimen, having a diameter of 16 ± 0.2 mm (0.630 ± 0.008 in.) and a minimum thickness of 6 mm (0.24 in.) be prepared by a hollow drill (circular cutting tool) of the design shown above. The rotational frequency of the drill should be approximately 2.65 rad/s (1000 rpm) for specimens having a durometer hardness of *D2240 Type A 50+*, higher for softer materials.

CCSi features the [Gibitre™ DIN Abrader](#) and the [Hung Ta™ DIN Abrader](#), both of which are suitable for this application and comply with the requirements of both the ASTM and DIN standards.

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 D5963;
- Compliance with ISO 9001:2000 and ISO/IEC 17025.

Available in:

- ASTM D5963 *Hollow Drill* configuration.

CCSi *Ultra-Life* ASTM D5963 Specimen Cutting Dies: Specifications & Pricing

Part Number	Description	Dimensions
CCSi-D5963-Hd	D5963 Hollow Drill Configuration	$\varnothing 16 \pm 0.2$ mm x 6 mm ($\varnothing 0.630 \pm 0.008$ x 0.24 in.)

Please Request a [Quotation](#) for current pricing and delivery.

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