

ACCURACY IS THE UNDERLYING STRATEGY

Introducing the GCTS UTM-500: Start exploring versatility in your new lab

The GCTS UTM-500 is a fully integrated, highly accurate servo-controlled system designed for modern laboratories. It empowers users to seamlessly transition between various test modes without the need for additional systems. With its blend of precision and adaptability, the UTM-500 offers unparalleled closed-loop control of real-time parameters.

KEY FEATURES

Test Immediately:

- Plug and Play
- Get started quickly with easy setup—no complex installation required

Versatility:

- Easily convert between tests
- Adapt to evolving testing needs without investing in new equipment



HOW THE UTM-500 BENEFITS YOU

Directional Capability:

- Control stress/deformation in the direction of least principle stress
- Automatic bumpless control transfer at different test stages

Closed-Loop Control Precision:

- Accurate measurement and control of crucial parameters during testing
- Direct servo control of sensor inputs or calculated parameters

Stiff Loading Frame Option:

- Ideal for post failure brittle materials
- Prevent premature failure and ensure reliable outcomes

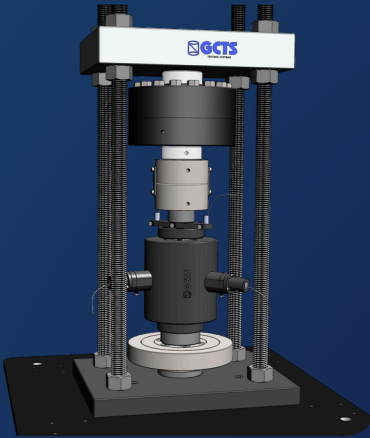
Customizable:

- Perform a large range of standard or user-defined tests
- Tailor the system to your specific needs
- Compatible with a multitude of sensors

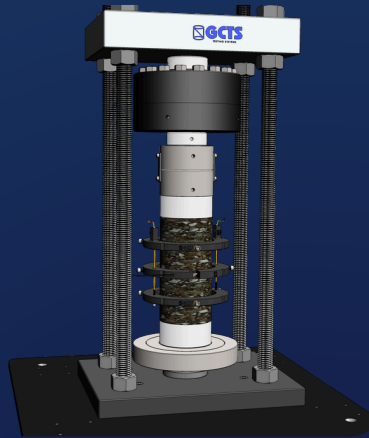
Knowledge:

- Meets ASTM, ISRM and other standards
- Reliable results for research and commercial applications

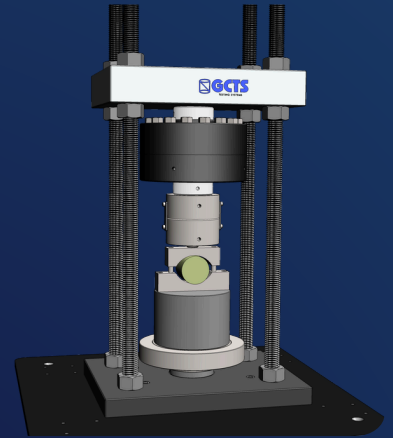
COMMONLY USED FIXTURES



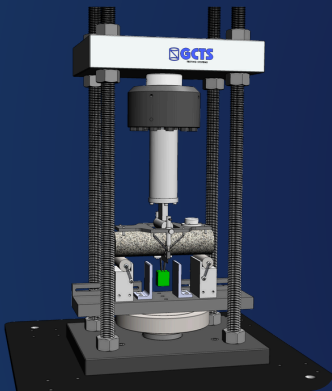
TRIAXIAL CELL



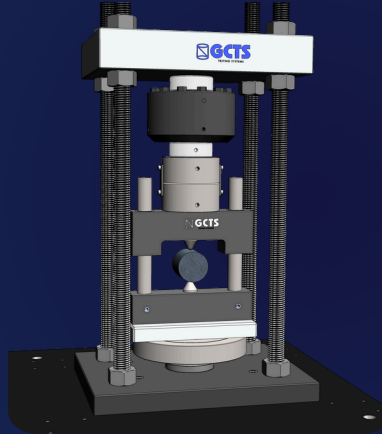
UCS & ELASTIC
MODULUS



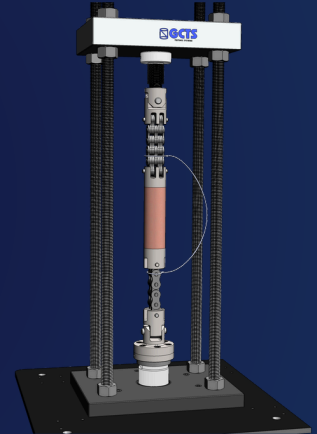
INDIRECT TENSION



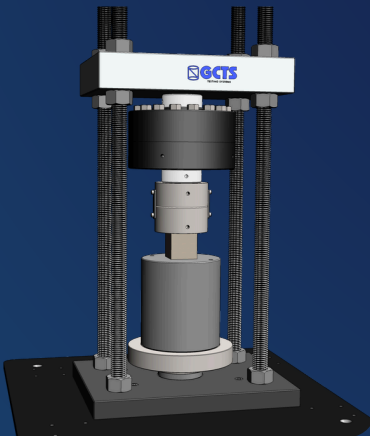
FRACTURE
TOUGHNESS



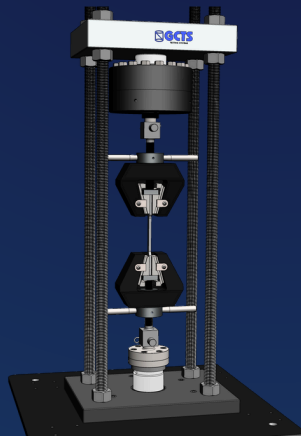
POINT LOAD



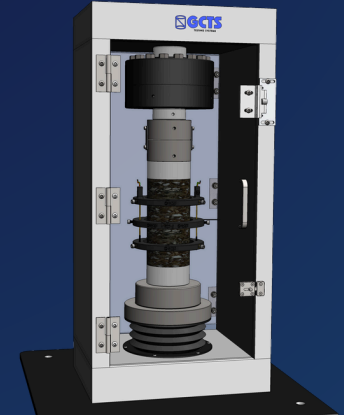
DIRECT TENSION



CEMENT TESTING



TENSION GRIPS



STIFF FRAME
OPTION

DON'T SEE WHAT YOU NEED? LET OUR ENGINEERS SOLVE THAT

AUTOMATED REPORTS

Easy to Use:



- Access an ever growing library of preprogrammed tests
- Streamline your testing process with user-friendly controls

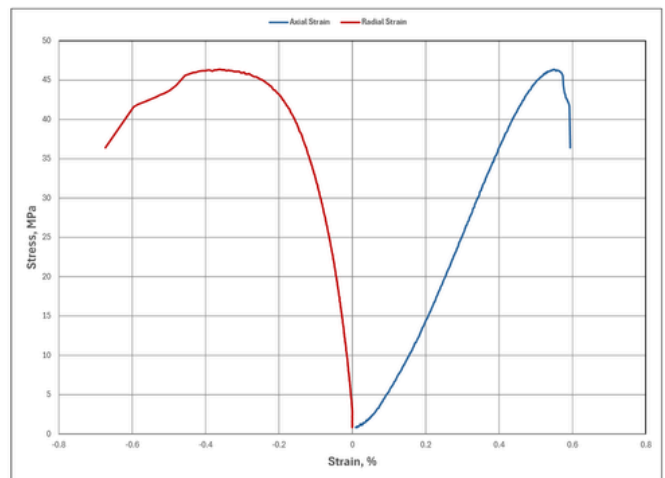
Budget Friendly:

- Expand easily while requirements grow
- Cost-effective solution for labs of all sizes

Specifications:

- Load Capacity: 500 kN
- Resolution: 24 Bit
- 8 Input Channels
- 200-240 VAC, 50/60 Hz, 1.5 kW

		ASTM D7012 Compressive Strength and Elastic Moduli of Intact Rock Core Specimens Method D (summary Report)	
Project		Results	
Date	1/22/2024 1:46 PM	Compressive Strength	46.36 MPa
File Name	Notch1	Strain at Peak Load	0.550 %
Job Number	Stiff Frame Demo	Time to Failure	5.86 min
Location	Berea, Ohio, BH#377b, 322' depth	Young's Modulus (40-60%)	11,258 MPa
Description	Berea Sandstone	Young's Modulus (25-50%)	10,482 MPa
Test System	GCTS UTM-500 S/N 7114	Poisson's Ratio (25-50%)	0.331
Tested by	Scott	Average Stress Rate (10-90%)	10.5 MPa/min
Specimen		Average Strain Rate (10-90%)	0.102 % /min
Diameter	38.1 mm	Notes Strain controlled test. Specimen failed along a single shear plane 	
Height	87.8 mm		
Gauge Length	39.4 mm		
Water Content			



Quote Now!

