

# "DIT sets the standard for Strandburner quality and performance"

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Built to mil-std 286

All controls and monitoring instrumentation for pressure, test cell ignition, cell temperature monitoring, data acquisition and the computer are mounted on a remote console. This console includes digital meters for pressure and temperature readings, and panel mounted lights that indicate the position of the valves.

Windows based software is programmed to meet each customers needs. The default rate is 500 samples per second and is adjustable. The IO board allows 200,000 samples per second.

The operator can assimilate, monitor, and reduce the real time data from fired samples and then produce reports and graphs including: test cell pressure, internal test cell temperature, burn rate calculations, differential pressure (option), and manually entered notes.

A keyed safe and arm switch is mounted on the fire control system to prevent accidental ignition.

A 24 VDC transformer and shielded cables are used to eliminate transmission interference between the electrical components and the remote console

For temperature accuracy a 100-ohm RTD is located behind the shield plates that hold the propellant sample and is positioned near the center of the strands and vessel.

Electrical feed-throughs are constructed of Hastalloy

Pressure related components such as:  
Valves, surge tank, high-pressure tubing and Transducers are mounted on a remote controlled rack which can be located a safe distance away from the operator.

9/16 OD x 5/16 ID, cone and threaded 316 Stainless Steel tubing rated for 20,000 PSI is Standard.

Heads are designed for fast, easy removal and installation. Built for years of service, even at 50 - 60 burns per day.

DIT manufactures many other types of propellant Testing devices and can design a system to meet your needs.

# STRANDBURNER

### Remote Valve Rack

The equipment that regulates the pressure throughout the system is mounted on the valve rack. It is operated via the Remote Control Console.



### Temperature Bath

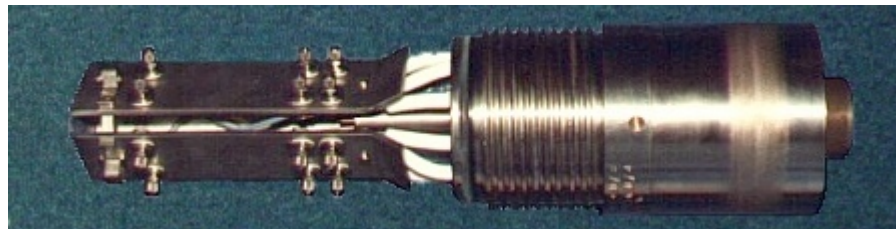
The bath houses the Test Cell Assembly. It regulates temperature which can be remotely controlled and recorded.



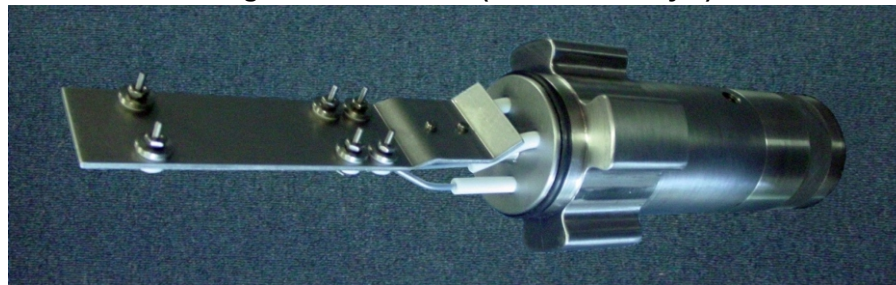
### Test Cell Head (available in single, double, or triple strand)

Single, double, and triple head configurations are offered. Multiple strand designs allow for simultaneous conditioning and firing of multi-samples which reduces the time to fire and minimizes nitrogen consumption.

#### Triple Test Cell Head



#### Single Test Cell Head (Clover Leaf Style)



### STANDARD CRAWFORD BOMB SYSTEM

MIL-STD-286 Style integrating advanced instrumentation and remote data acquisition & control resulting in increased accuracy and safety. Break wire timing method is standard. A typical system is designed for 5,000 psi at -65 to +180 F. All systems are tailored to customer requirements.

### HIGH PRESSURE SYSTEMS

These systems can be either gas or hydraulically pressurized and can test samples exceeding 30,000 psi.

### ACOUSTIC EMISSION (Optional)

This option integrates an acoustic transducer amplification system which records a sound trace of the burning sample over time, from which a burn rate is calculated.