

WorldSID ATD – 5th Female RibEye™ **A Better Way to Measure Thorax Displacement**

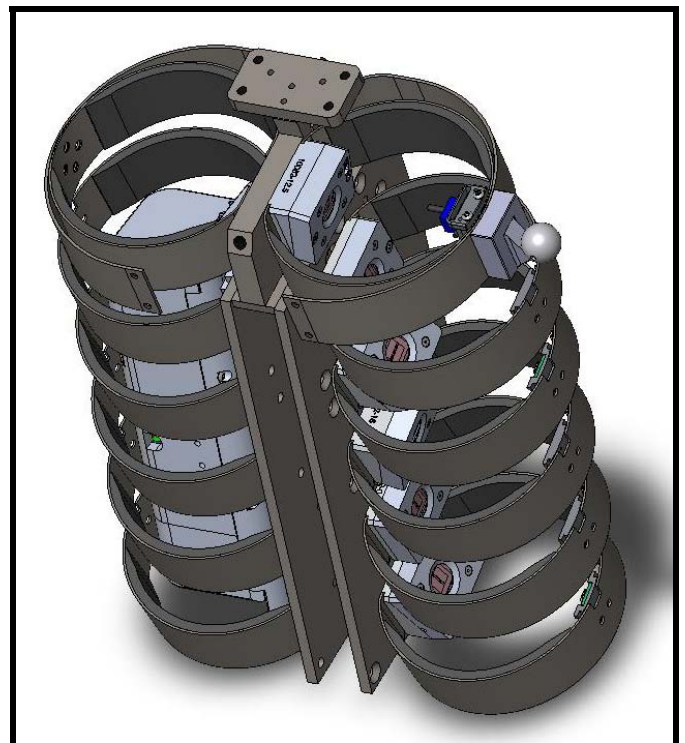


RibEye Advantages

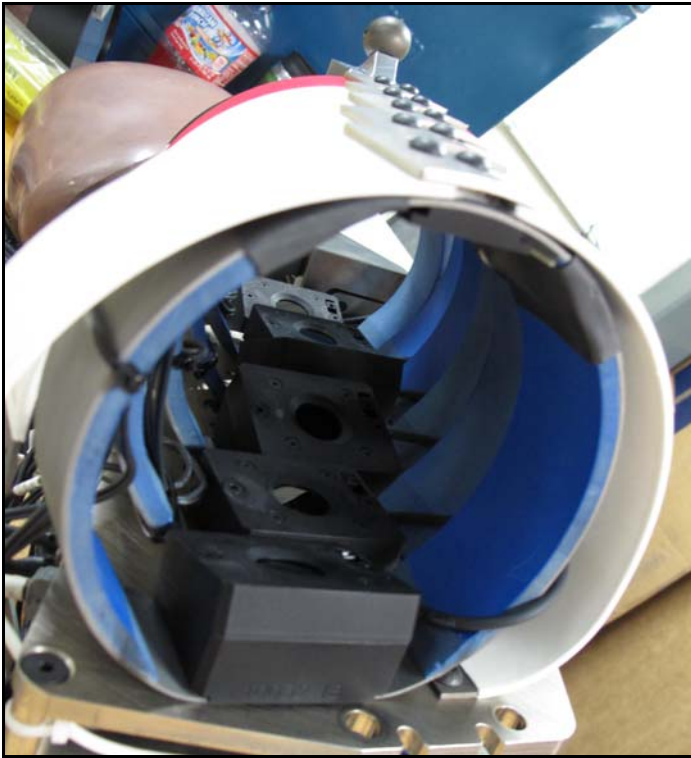
- Multiple point measurement:
18 points @ 10 kHz sample rate,
captures linear and oblique loads
- Six-LED version also available
- Multiple-axis: measures X, Y and Z
positions for each LED
- Non-contact: no mechanical linkages
between spine and ribs
- Mounts to existing holes in spine and
ribs – no modifications to dummy
- Interfaces with existing data acquisition
systems: open protocol for RibEye
operation by DAS software
- Meets ISO 6487-2000 and
SAE J211 specifications

Measurement Capabilities

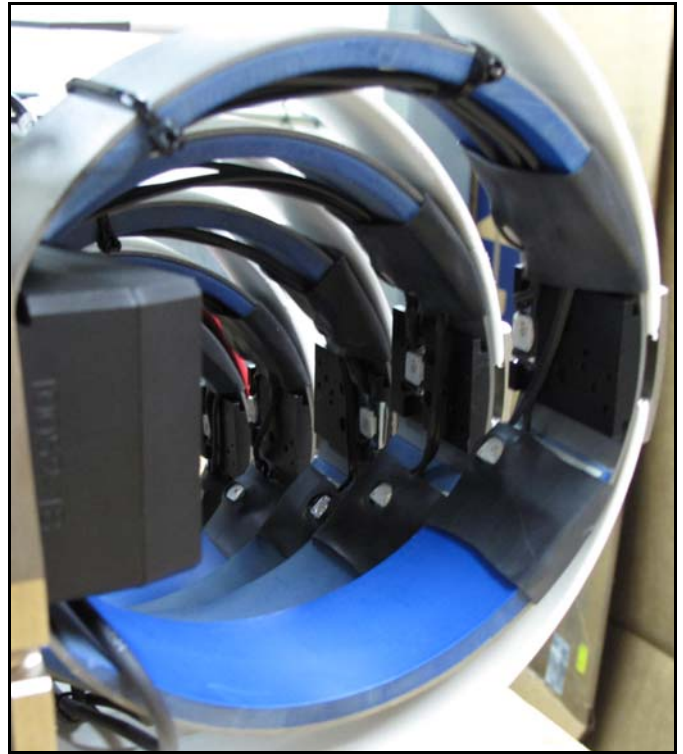
- Accuracy
 - For Y and Z data:
 - ± 0.2 mm typical
 - ± 1 mm max. error
 - For X data, max. error < 1.5 mm
- Maximum range
 - X axis: ± 120 mm fore/aft
 - Y axis: 67 mm chest compression
 - Z axis: 80 mm up, 65 mm down
- Acquisition time @ 10 kHz sample rate
 - 25,000 ms (25 seconds) in RAM
 - 1.7 seconds in flash memory
- Temperature range
 - Operating, -18° - 38° C (0° - 100° F)
 - Max. accuracy, 18° - 24° C (65° - 75° F)



WorldSID 5th Female RibEye Thorax



RibEye Sensors



RibEye LEDs

More information

- PC-based control software exports data in Diadem, ISO, or CSV formats
- Power requirement:
12-36 Volts DC
8 W (idle)
12 W (data acquisition)
20 W (max.)
- U.S. Patent
Number 7508530
- For more data, please see our website literature, including user's manuals and technical conference papers about third-party testing using the RibEye

www.boxborosystems.com

RibEye Ver 3.2 Beta

Connect/Setup Plot Live Display Export

RibEye Status
Connected - Idle

RibEye Type: WorldSID Male
Serial Number: 112
Calibration Date: 29 Nov 2012
Firmware Version: WS50BS001

Connect to RibEye via: IP Address
Ethernet 192.168.0.237 DISCONNECT
Find RibEyes

RibEye Pointed Toward Dummy: Left Side
ISO Test Object: 1 - Vehicle 1
ISO Position: 1 - Front Left
RibEye Installed in ATD: wsid 50th #2
Trigger Setting: Rising Edge
Show Current XYZ's

LED	RIB	POSITION	ISO CODES	X (mm)	Y (mm)	Z (mm)
1	1	REAR	1 1 SHRI 00 RE WS DS XYZ	-58.8	-77.1	-52.3
2	1	MIDDLE	1 1 SHRI 00 MI WS DS XYZ	-28.9	-92.3	-54.0
3	1	FRONT	1 1 SHRI 00 FR WS DS XYZ	23.4	-77.8	-60.0
4	2	REAR	1 1 THRI 01 RE WS DS XYZ	-45.2	-92.7	-2.0
5	2	MIDDLE	1 1 THRI 01 MI WS DS XYZ	-1.5	-107.9	-1.0
6	2	FRONT	1 1 THRI 01 FR WS DS XYZ	45.2	-94.2	-2.8

ARM

ERASE MEMORY

DOWNLOAD DATA

Data Buffer Operation
Circular Linear

Data to collect after Trigger (ms)
2000

Data in RibEye (ms)
Start Time: -200 Stop Time: 1500
Data To Download (ms)
Start Time: -10 Stop Time: 400

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