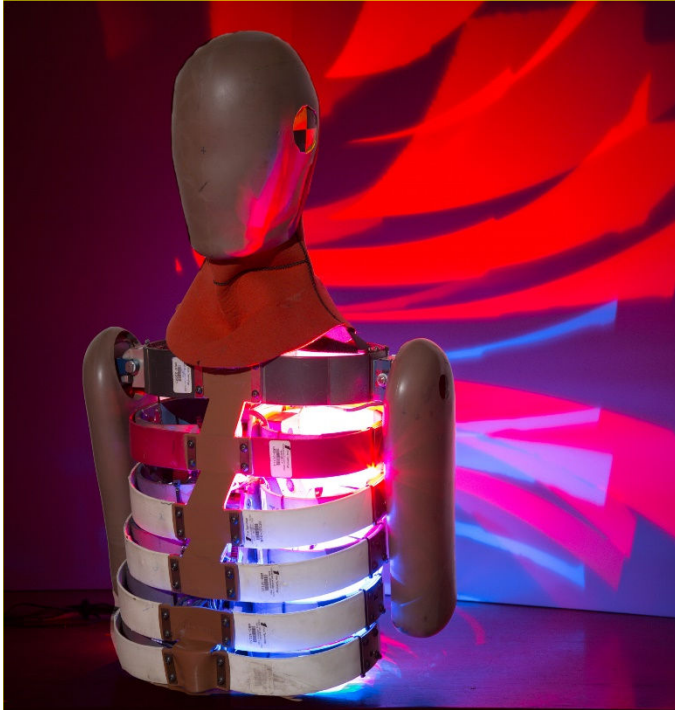


WorldSID 50th ATD – Second Generation RibEye™ A Better Way to Measure Thorax Displacement

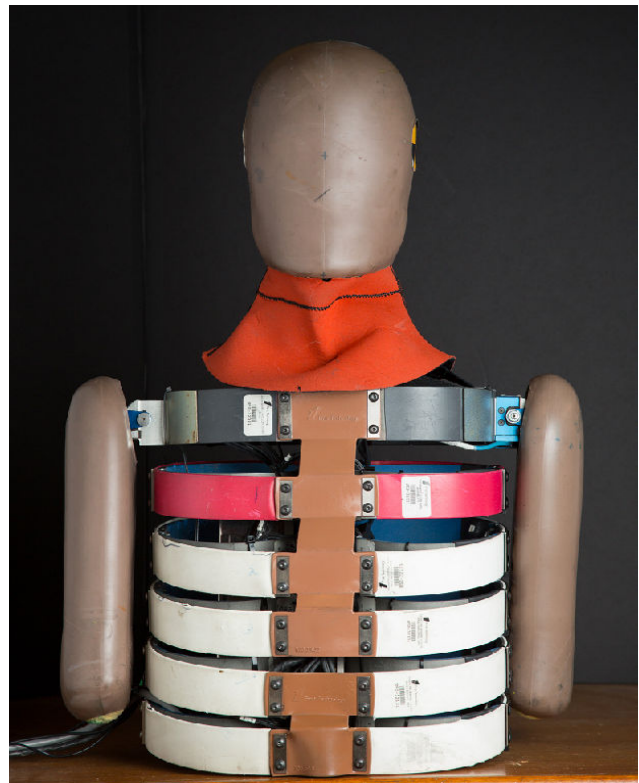


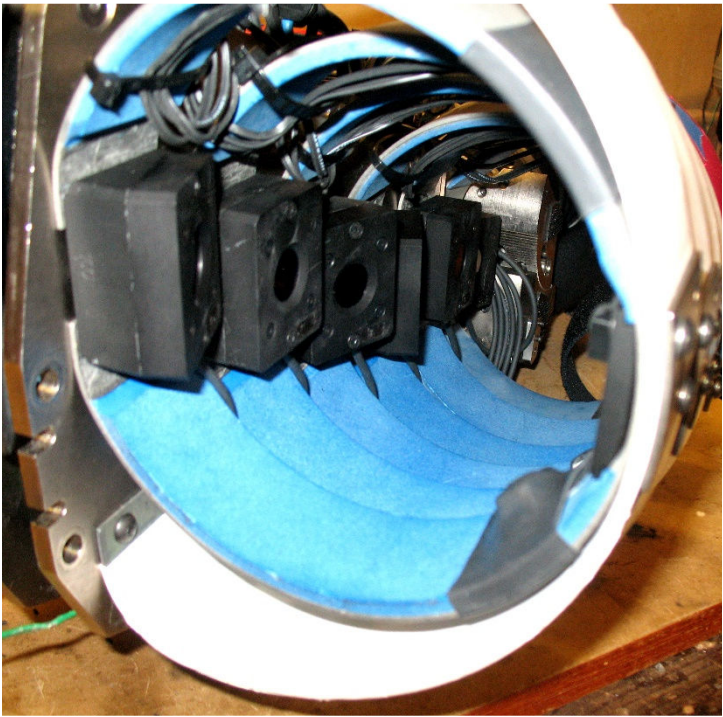
RibEye Advantages

- Multiple point measurement:
18 points @ 10 kHz sample rate,
captures linear and oblique loads
- 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
- Emergency battery with charge level
displayed in software
- Meets ISO 6487-2000 and
SAE J211 specifications

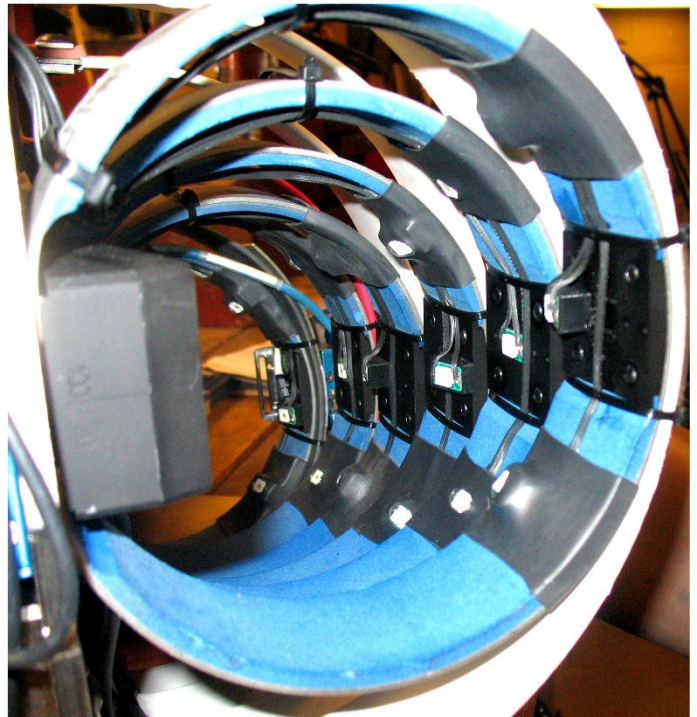
Measurement Capabilities

- Accuracy
For Y and Z data:
+/- 0.2 mm typical
+/- 1 mm max. error
For X data, max. error < 1.5 mm
- Range
X axis: +/- 130 mm fore/aft
Y axis: 85 mm chest compression
Z axis: 80 mm up, 50 mm down
- Acquisition time
3 minutes @ 10 kHz sample rate
- Temperature range
18°-24°C (65°-75°F)





RibEye Sensors



RibEye LEDs

More information

- PC-based control software exports data in Diadem, ISO, or CSV formats
- Power requirement:
12-60 Volts DC
15 W (idle)
25 W (data acquisition)
40 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 7.0

Connect/Setup Plot Live Display Export Trigger Test

RibEye Status
Connected - Idle

RibEye Type: WorldSID Male
Serial Number: 170
Calibration Date: 15 September 2021
Firmware Version: RE2_8_17-1

Connect to RibEye via: Ethernet IP Address: 192.168.0.240 DISCONNECT Find RibEyes

RibEye Pointed Toward Dummy: Left Side
ISO Test Object: 1 - Vehicle 1
ISO Position: 1 - Front Left

RibEye Installed in ATD:
ATD S/N 123
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 LE RE WS DS XYZ	-107.3	-99.4	-54.4
2	1	MIDDLE	1 1 SHRI LE MI WS DS XYZ	0.2	-100.8	-54.3
3	1	FRONT	1 1 SHRI LE FR WS DS XYZ	107.3	-99.0	-54.6
4	2	REAR	1 1 TRRI LU RE WS DS XYZ	-108.9	-101.0	-0.1
5	2	MIDDLE	1 1 TRRI LU MI WS DS XYZ	0.2	-100.8	-0.2
6	2	FRONT	1 1 TRRI LU FR WS DS XYZ	109.3	-100.9	-0.4

ARM

ERASE MEMORY

DOWNLOAD DATA

Data Buffer Operation: Circular Linear

Data to collect after Trigger (ms): 2000

Linear Buffer: Time (ms) to collect after ARM: 180000

Data in RibEye (ms): Start Time: -10102 Stop Time: 2000

Data To Download (ms): Start Time: -10 Stop Time: 400

Check Batt: Charge: 14.4 Volts

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