



*YOUR DEVELOPMENT PARTNER*

IWG - STCBC-04-05

October 2020

PUBLIC

INTERNAL

CONFIDENTIAL

SECRET

# Content

01\_ Test matrix

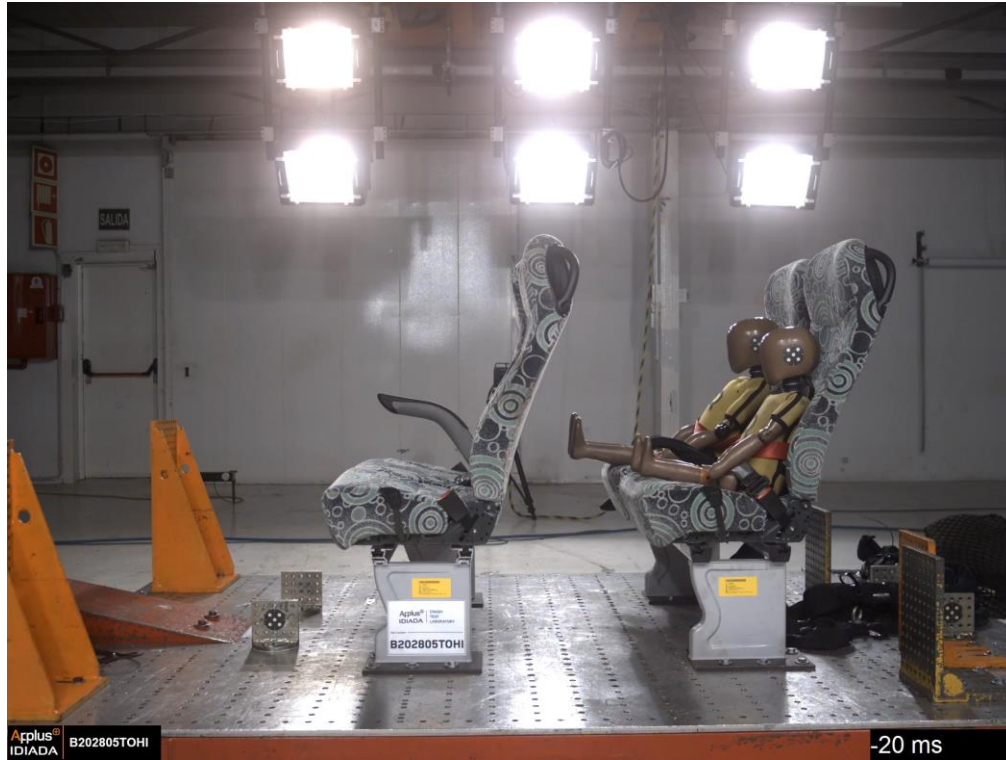
02\_ Test results

# Test matrix

Dummy		2 pts & CRS	2 pts
Q1,5	Infant carrier 129 belted	X	X
Q3	Toddler R44	X	X
Q6	Booster cushion R44	X	X
Q10	Booster cushion R44	X	X

- ⊕ CRSs: Infant carrier, toddler, booster cushion
- ⊕ Dummies: Q1.5, Q3, Q6 and Q10
- ⊕ Test configuration: 2pts vs. 2pts + CRS
- ⊕ Seat distance: R80
- ⊕ R80 test pulse

# Dummy Q 1,5; Without CRS; R80 test pulse

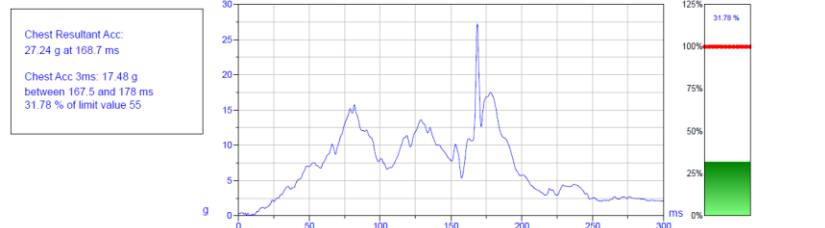


# Dummy Q 1,5; Without CRS; R80 test pulse

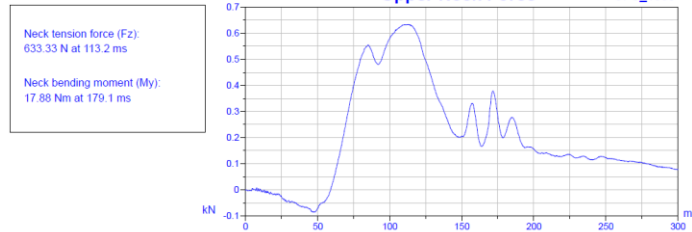
## HEAD



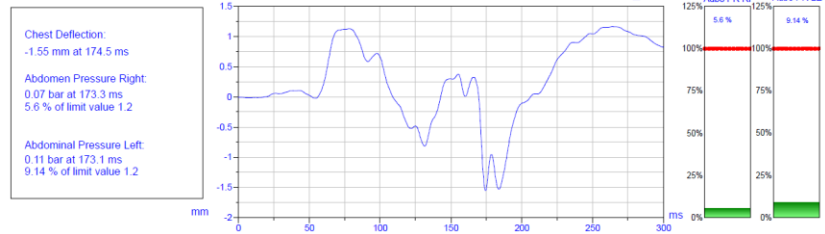
## CHEST



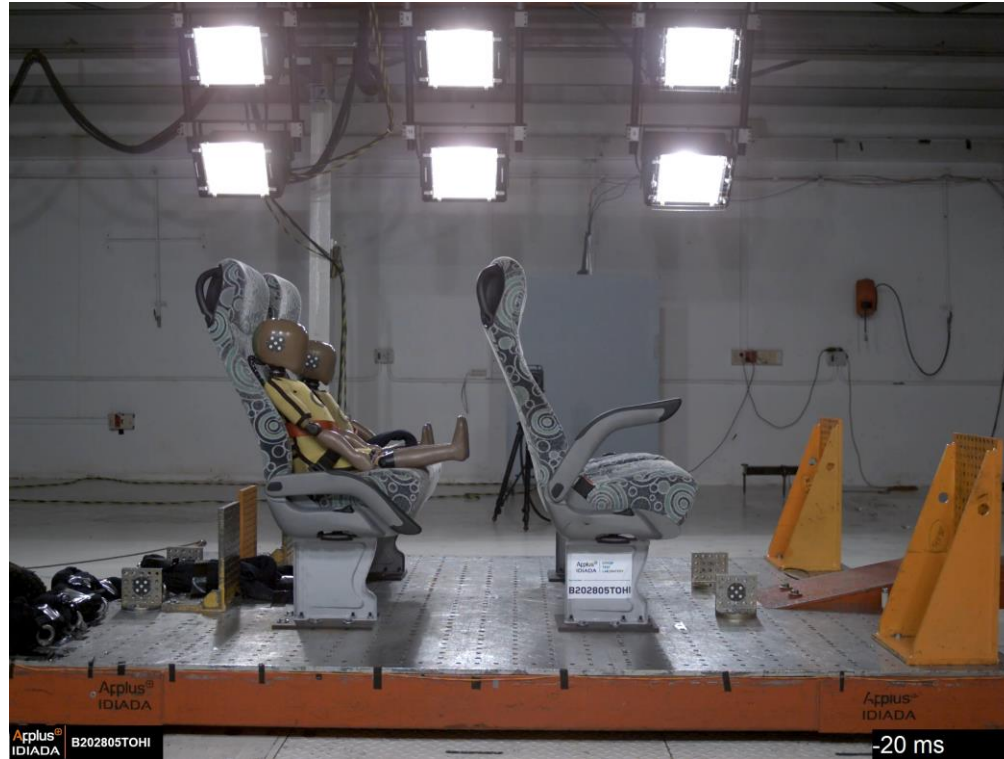
## UPPER NECK



## CHEST, ABDOMINAL



# Dummy Q3; Without CRS; R80 test pulse



# Dummy Q3; Without CRS; R80 test pulse

## HEAD

Head Resultant Acc:  
32.14 g at 159.4 ms

HPC: 57.14  
between 101.9 and 116.9 ms  
7.14 % of limit value 800

Head Acc 3ms: 27.97 g  
between 111.9 and 160.4 ms  
34.96 % of limit value 80



## CHEST

Chest Resultant Acc:  
16.13 g at 123.5 ms

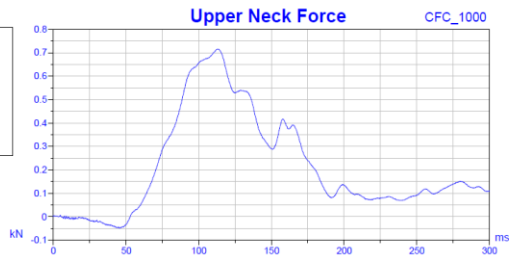
Chest Acc 3ms: 15.48 g  
between 121.9 and 124.9 ms  
28.15 % of limit value 55



## UPPER NECK

Neck tension force (Fz):  
714.85 N at 113.6 ms

Neck bending moment (My):  
5.26 Nm at 216.9 ms

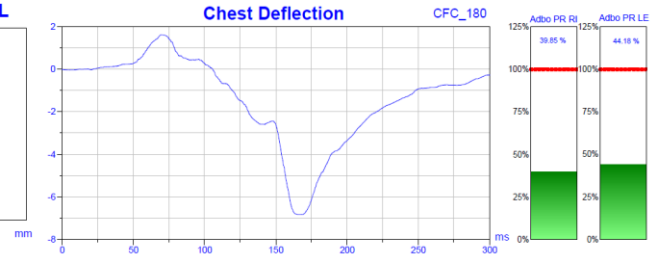


## CHEST, ABDOMINAL

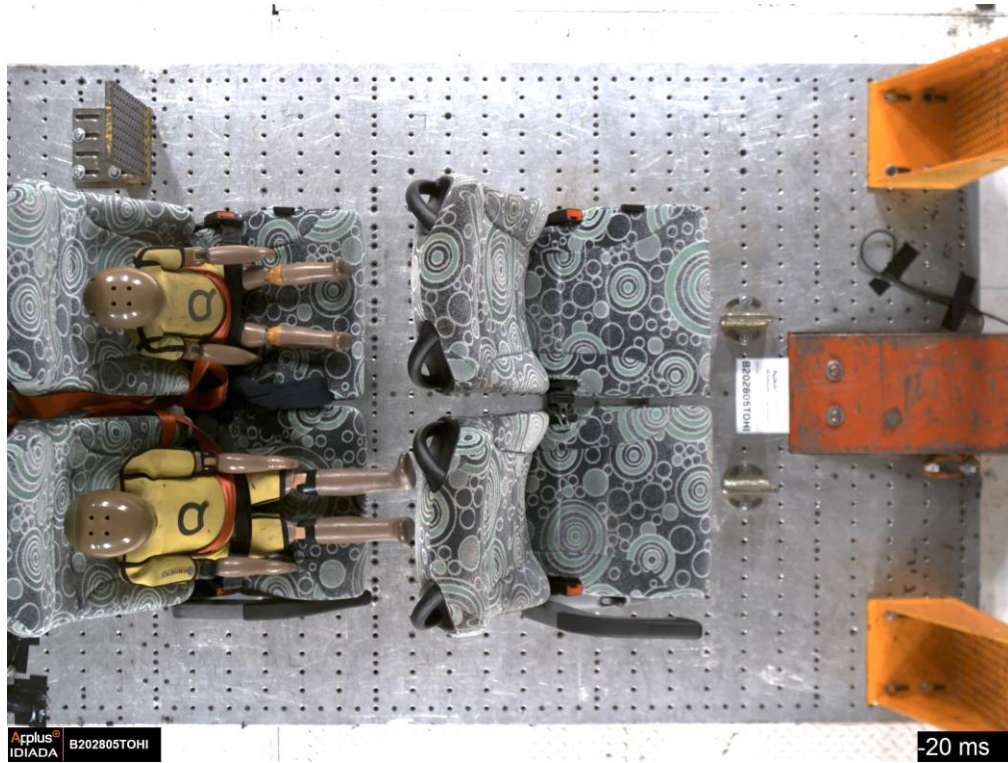
Chest Deflection:  
-6.82 mm at 169.1 ms

Abdomen Pressure Right:  
0.4 bar at 183.7 ms  
39.85 % of limit value 1

Abdominal Pressure Left:  
0.44 bar at 159.9 ms  
44.18 % of limit value 1



# Dummies Q 1,5 and Q3; Without CRS; R80 test pulse





# Dummy Q 1,5; With CRS; R80 test pulse



# Dummy Q 1,5; With CRS; R80 test pulse

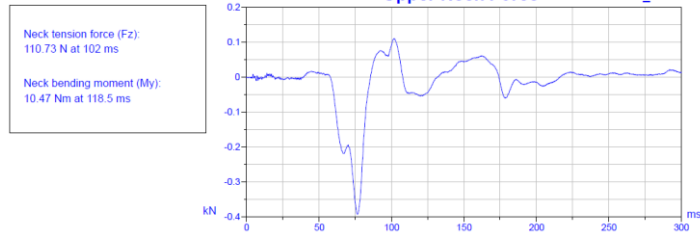
## HEAD



## CHEST



## UPPER NECK



## CHEST, ABDOMINAL



# Dummy Q3; With CRS; R80 test pulse

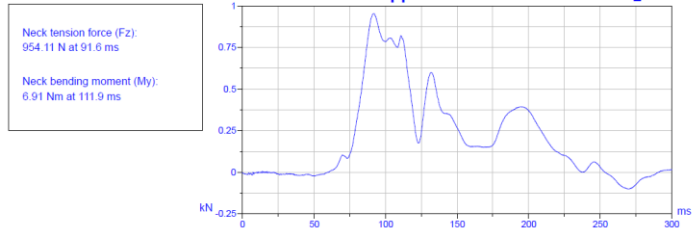


# Dummy Q3; With CRS; R80 test pulse

## HEAD



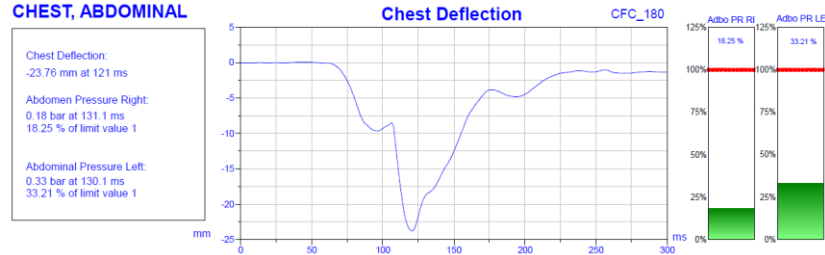
## UPPER NECK



## CHEST



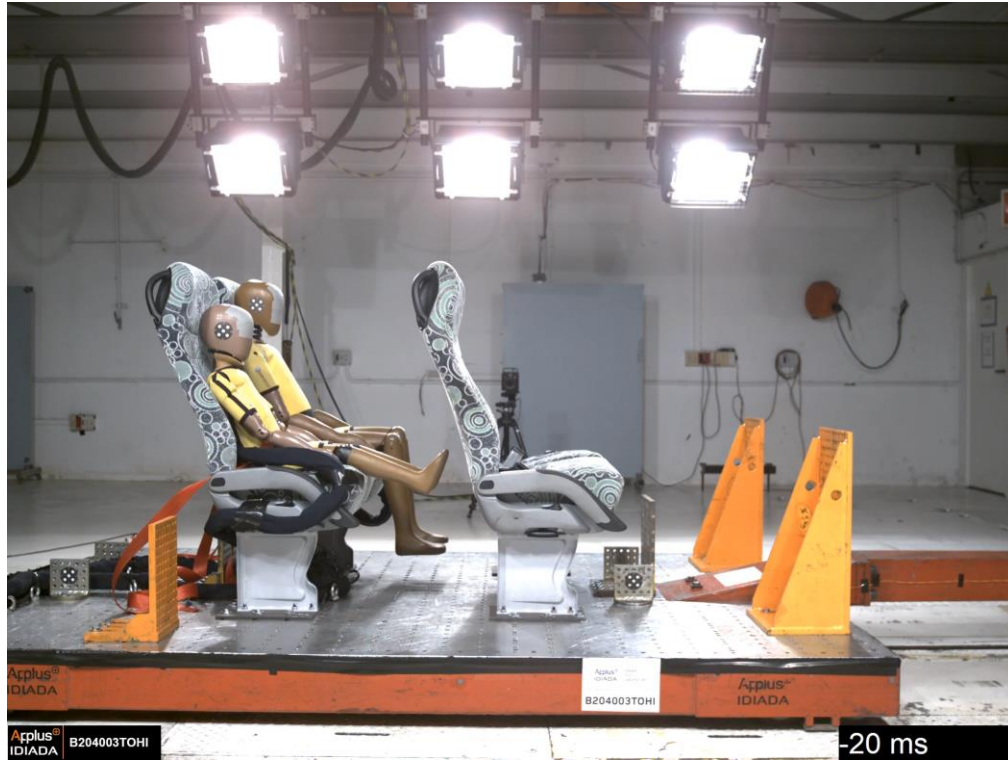
## CHEST, ABDOMINAL



# Dummies Q1.5 and Q 3; With CRS; R80 test pulse



# Dummy Q6; Without CRS; R80 test pulse



# Dummy Q6; Without CRS; R80 test pulse

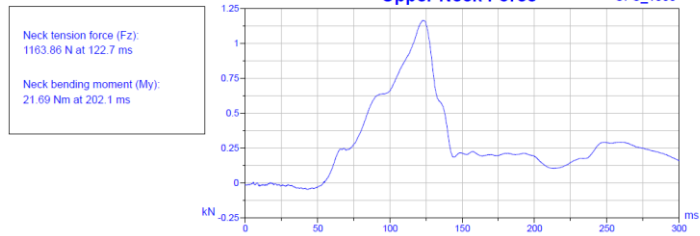
## HEAD



## CHEST



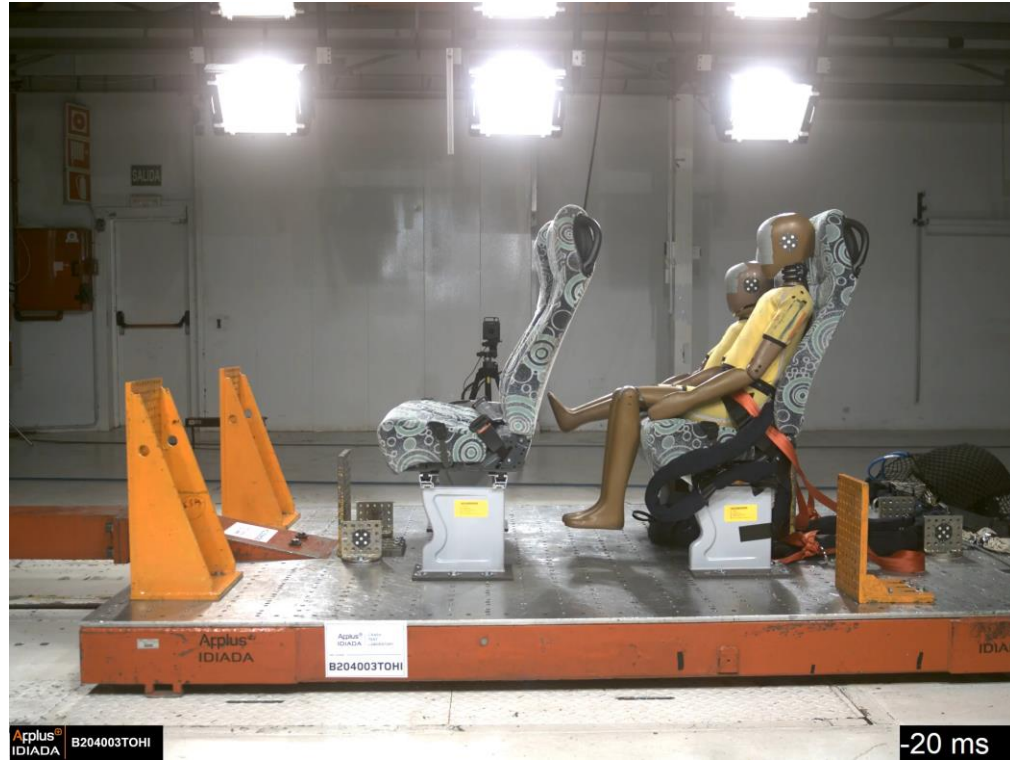
## UPPER NECK



## CHEST, ABDOMINAL



# Dummy Q10; Without CRS; R80 test pulse





# Dummy Q10; Without CRS; R80 test pulse

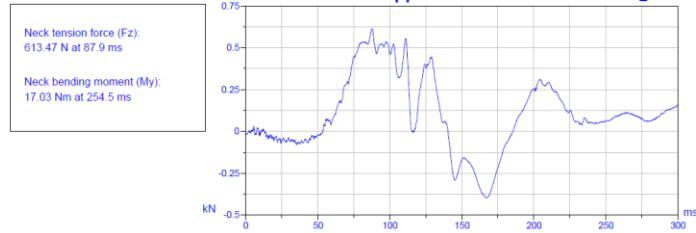
## HEAD



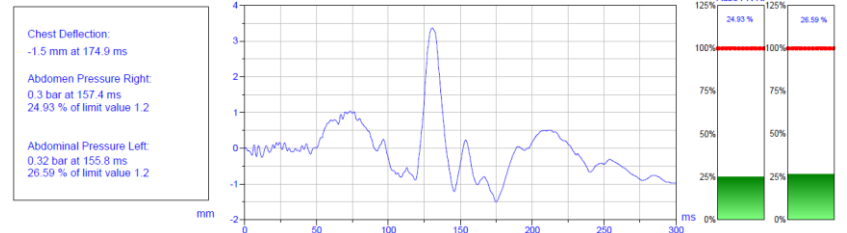
## CHEST



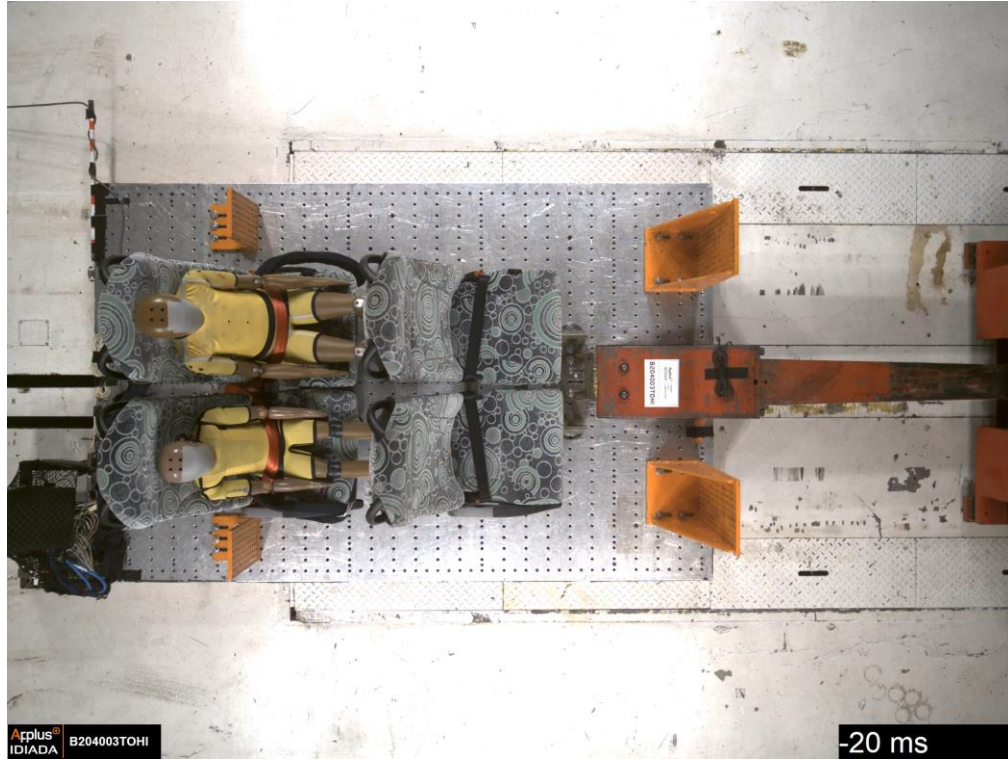
## UPPER NECK



## CHEST, ABDOMINAL



# Dummies Q6 and Q 10; Without CRS; R80 test pulse



# Dummy Q6; With CRS; R80 test pulse



# Dummy Q6; With CRS; R80 test pulse

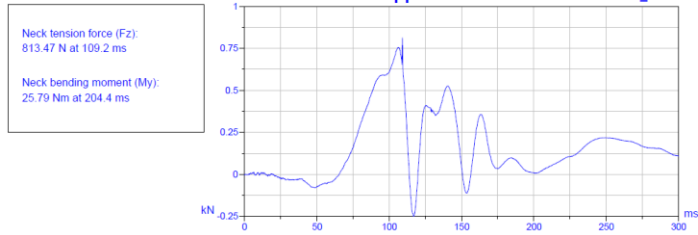
## HEAD



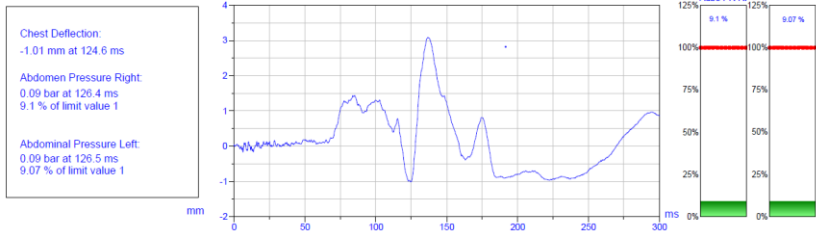
## CHEST



## UPPER NECK



## CHEST, ABDOMINAL



# Dummy Q10; With CRS; R80 test pulse



# Dummy Q10; With CRS; R80 test pulse

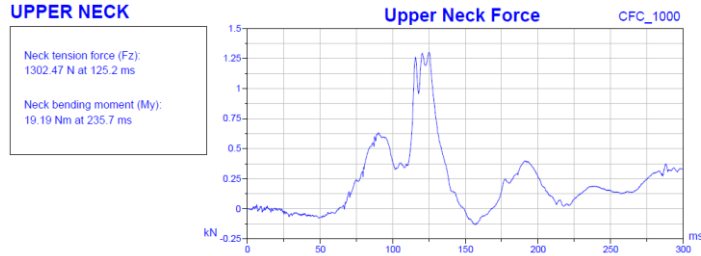
## HEAD



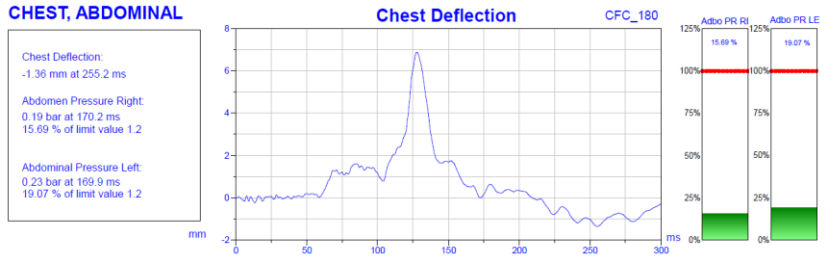
## CHEST



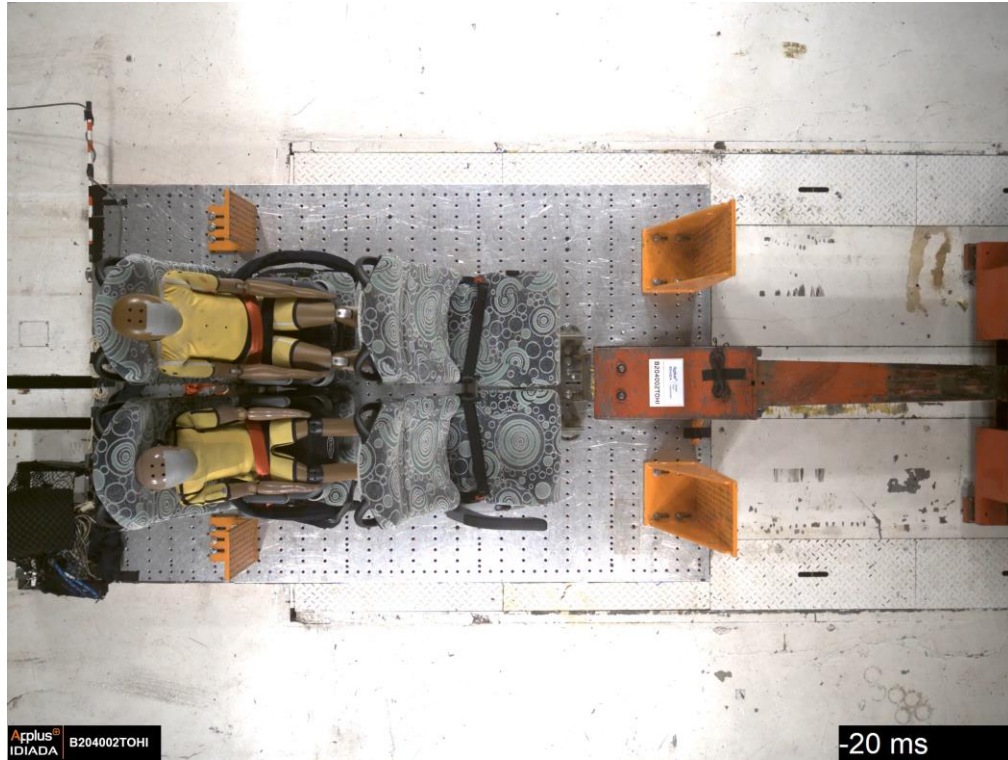
## UPPER NECK



## CHEST, ABDOMINAL



# Dummies Q6 and Q10; With CRS; R80 test pulse



Thank you for your kind attention





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