



THE FUTURE
OF TRANSPORT

Q10 Hip Liner

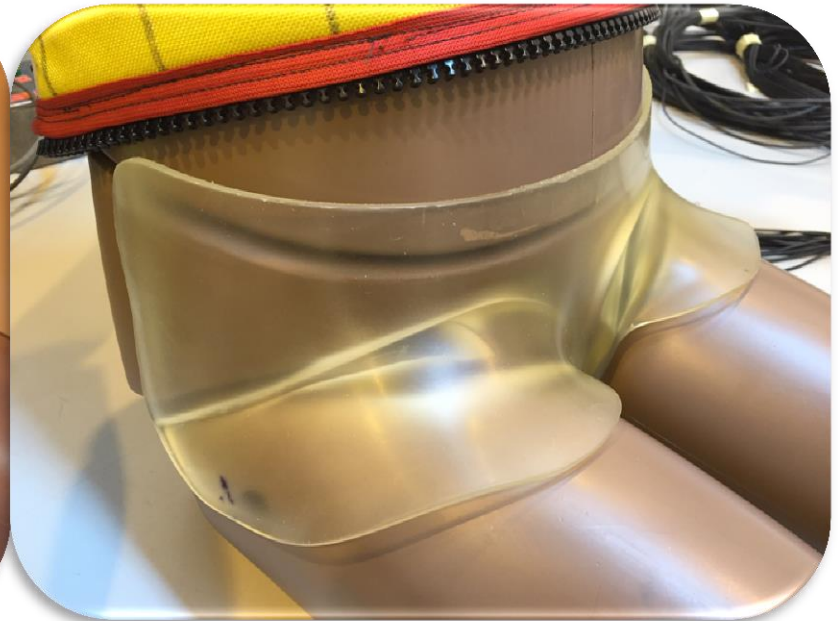
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Q10 hip liner - Aim

- Comparison of the performance of Humanetics hip liner to the original DOREL concept



DOREL hip liner



Humanetics hip liner

Q10 hip liner - Validation

- Tested using “Poor” CRS used in EC Research
- R129 test environment & pulse



Q10 hip liner - Results

- Submarining kinematic occurred



Measured Pressures:

- Left: 1.29 bar
 - Right: 0.59 bar
- (Limit 1.2 bar)

Q10 hip liner - Comparison



DOREL hip liner

- Lap belt penetration
- Measured Pressures:
 - Left: 1.32 bar
 - Right: 1.40 bar



Humanetics hip liner

- Less lap belt penetration
- Measured Pressures:
 - Left: 1.29 bar
 - Right: 0.59 bar
- Observations: Hip liner remains stable
Liner locates well in the ATD



Thank you



Q10 Hip Liner

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