Test Bench Foam Definition

GRSP Informal Group CRS Testing
8th meeting at BASt in Cologne
January 21, 2009

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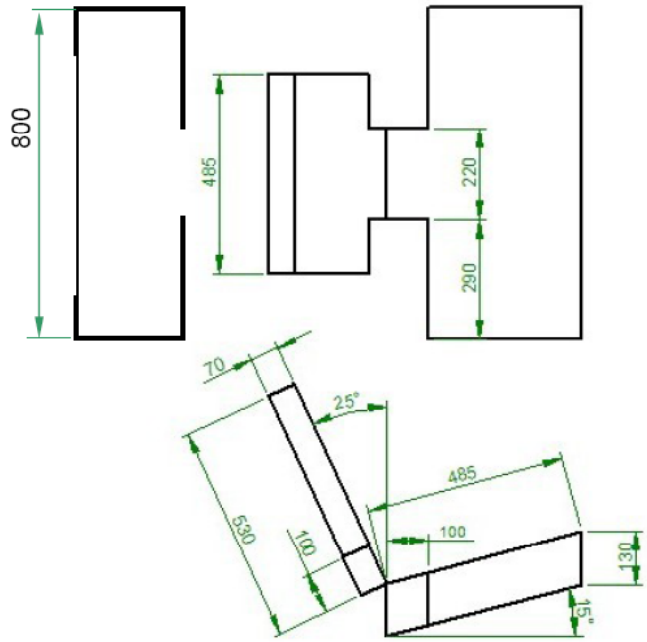
Drafting of Definition so far

- Document CRS 06-02:
  - NPACS Bench extended width for testing of carrycots
  - Dimensions as shown:



  - Stiffness based on NPACS research:
    NPACS foams: T75500 seat and T43250 backrest
  - Foam cover – Sun shade cloth made of poly-acrylate fiber

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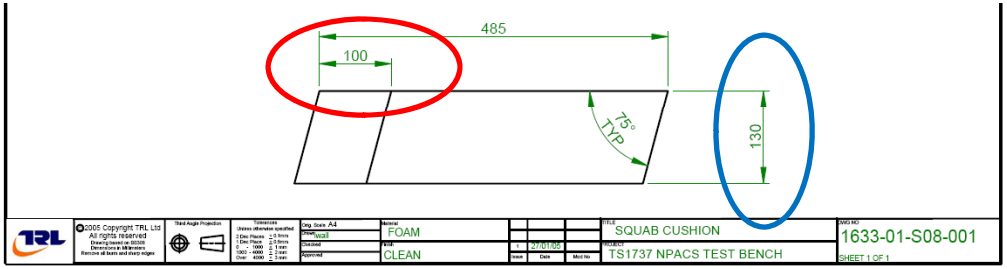
Progress and issues

- Dimensions

GRSP IG CRS 06-02:

NPACS document Annex 13:



Questions that arose are:

	GRSP CRS-06-02	NPACS Drawings
Squab thickness	125.6	130.0 (?)
Squab recess depth	100.0	96.6 (?)
Backrest height	530.0	590.0 (?)
Foam width at R-point	220.0	250.0 (?)

TRL promised to provide clarification.

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Progress and issues

- Stiffness based on NPACS research
  NPACS foam definition: T75500 seat T43250 backrest (Annex 12):
  - Proposed to use T75500 for both seat and backrest (to be confirmed)
  - No test data of NPACS dynamic foam tests available.

Figure 2. Drop Test Pre-release Position

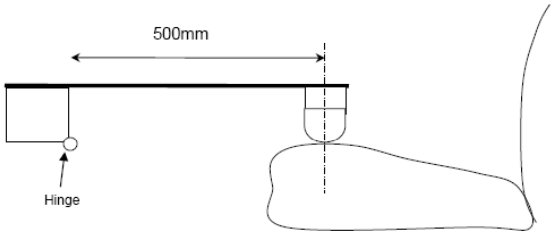

Figure 1 – Headform drop test diagram.

Questions that arose:

- Are the peak results presented in NPACS research average values of three tests per bench?
- What is the time history of the results?
  - Does bottoming out occur?
  - What are the penetrations recorded?
- The UNECE R44 test set-up is not described.
  - What kind of set-ups are used?
- What are acceptable tolerances on drop test results?

Support requested from: TRL, BASt, TUB, UTAC, IDIADA, Britax and Dorel

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Actions

• Confirmation to use T75500 foam for both seat and backrest	GRSP CRS 8th meeting
• Confirmation which dimensions are to be used	TRL
• Pictures of UNECE R44 bench foam drop test setups from several test labs. How is this done in other regulations USA/Australia?	Test labs FTSS
• Test data (acceleration and penetration) obtained in drop tests on bench foams (R44 and NPACS)	Test labs and TRL
• Contact with vendor on production tolerances and product consistency in the future	FTSS
• Compilation of a draft bench foam specification	FTSS

Any Questions?

FTSS needs input and support…

… to draft an appropriate bench foam definition.

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