

CLIENT CONFIDENTIAL

Client Alu Rehab AS

Test Item Netti 4U/CE (27kg)

Test ISO 7176-19 Wheelchair Test

Millbrook Report No. 10/1444

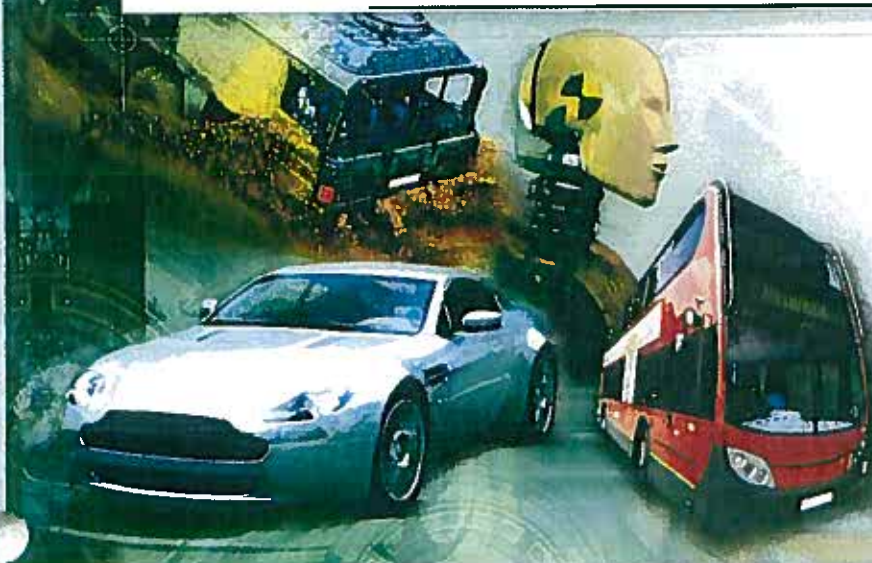
Millbrook Project No. CR0096-011-01

Millbrook Test No. S11301

Author: *Matt Bell* M. Bell
Engineer

Approved: *K. Forinton* K. Forinton
Principal Engineer

Date: 11th October 2010



Millbrook Proving Ground Ltd
Millbrook, Bedford, MK45 2JQ, UK
Tel: +44 (0)1525 404242
Fax: +44 (0)1525 403420
Email: info@millbrook.co.uk
www.millbrook.co.uk

Test Report



Test Results

ISO/NP 7176/19

7th July 2008

Section 5.2 - Dynamic Performance Requirements

Wheelchair:	Netti 4U/CE (27kg)	RESULTS
Occupant:	HII 50 %ile (75 kg)	
5.2.1	During the Test	
a).	Horizontal ATD and wheelchair excursion limits as per limits shown in Table 3:-	
	Was the horizontal movement of the test wheelchair P- Point (X_{wc}) less than 200 mm (± 5 mm)	PASS 48 mm
	Was the horizontal movement of the dummy knee (X_{knee}) less than 375 mm (± 5 mm)	PASS 297 mm
	Was the horizontal movement of the dummy head (X_{head}) less than 650 mm (± 5 mm)	PASS 458 mm
b).	Was the ratio $X_{knee}/X_{wc} > 1.1:1$	PASS 6 : 1
c).	Not Measured	
	Did the batteries of powered wheelchairs, or their surrogate parts:-	
i).	move outside of the wheelchair footprint	N/A
ii).	move into the wheelchair user's space	N/A
5.2.2	Post Test	
a).	Did the wheelchair remain upright on the test platform Did the ATD remain in a seated posture in the test wheelchair with a torso angle less than 45°	PASS
b).	Did the wheelchair securement points show visible signs of material failure	PASS
c).	Did any components of a mass greater than 100g become detached from the wheelchair	PASS
d).	Did any occupant contactable components fragment or separate with an edge of less than 2mm	PASS
e).	Did any primary load carrying components of the wheelchair show any visible signs of failure	PASS
f).	Did any 'tilt in space' locking mechanisms show signs of failure	PASS
g).	Was the ATD released from the wheelchair without the use of tools	PASS
h).	Was the wheelchair released from the restraint system without the use of tools	PASS
i).	Was the average decrease of H-Point height relative to the wheelchair platform less than 20% of the pre-test height.	PASS
Has the wheelchair satisfied the Dynamic Test requirements of ISO/FDIS 7176/19 of 7th July 2008		PASS