

# **Technical Report No. 71356445**

Revision: 1

dated 2009-08-21

Choose certainty. Add value.

Client:

Invacare Deutschland GmbH

Kleiststrasse 49

D - 32457 Porta Westfalica

Manufacturing place:

Invacare Deutschland GmbH

Kleiststrasse 49

D - 32457 Porta Westfalica

Test object:

Type / model:

Storm<sup>4</sup>

Classification acc. to. DIN EN ISO 9999: 2007

12 21 27

Class of use:

В

Max. user weight:

150 kg

Test specifications:

DIN EN 12184: 1999

Purpose of

examination:

1. re-testing due to the points of non-compliances as listed in the Technical

Report no. 71353180 according to the test specifications.

Test result:

The test subject was found to be in compliance with the test specifications.

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Project Manager: Dipl.-Ing. Michael Kese Date: 2009-08-21

Phone: +49 511 9663-822 Fax: +49 511 9663-839

E-Mail: michael.kese@tuev-sued.de TUV®

TÜV SÜD Product Service GmbH

Hanover Branch Masurenweg 1-3 30163 Hanover Germany



#### 1 Description of the test subject

The electrically driven wheelchair presented for testing is designed to operate in indoor and outdoor environment. The wheelchair can be rear wheel driven. The version presented for testing is electrically adjustable in the seat inclination, in the back rest and in the seat height. The max. load is 150 kg.





#### 1.1 **Technical Data**

Test subject:

Storm4

Class of use:

Model:

Total height:

1030 mm - 1310 mm

Electrically driven wheelchair

Total length:

1100 mm

Width of the chassis:

630 mm

Seat width:

380 mm - 530 mm

Obstacle height:

100 mm

Max. speed: Max. load:

10 km/h 150 kg

Max. safe slope:

8° (15%, in the standard seat position as

specified by the manufacturer)

Driving motor:

Invacare Deutschland GmbH,

model no.: 1524521

Drive of the adjustment of

the seat angle:

Reac, model: RE20/23

Telescopic lifting column:

Danaher Motion, model: movoact TC16

Drive of the adjustment of

Nidec-Valeo, model: GMPG

the back rest:

Dynamic Controls Ltd, type: DX-2

Power electronics:

MK Battery, 2 × (12 V, 73 Ah (20hr)),

Batteries:

model: 8G24FT

TÜV SÜD Product Service GmbH



Battery charger:

CTE Corporation, model: BAT-GCO812,

24 VDC, 8 A

Shanghai Winsunny Electronics Tech. Co.,

Ltd., model: WS230-1, 24 VDC, 8 A

### 2 Order

#### 2.1 Date of Purchase Order

The testing of the electrically driven wheelchair has been carried out per purchase order of Invacare Deutschland GmbH dated at 2009-05-06.

# 2.2 Date of Receipt of Test Subject

The testing has been performed at TÜV SÜD Product Service, Masurenweg 1-3, D-30163 Hanover. The test subjects were delivered to the test laboratory as follows:

2009-05-07 (HAN-94707) Storm 4 version 1

2009-05-29 (HAN-95317) Storm 4 version 2

2009-07-13 (HAN-96352) seat carrier

2009-07-15 (HAN-96397) Storm 4 version 3

#### 3 Result

The points of non-compliance as listed in the Technical Report No. 71353180 were removed at the test subject and documents presented for re-testing.

## 4 Remarks

Motorised wheelchairs are motor vehicles according to the traffic law (§1, chapter 2). Wheelchairs which shall be operated on public roads have to fulfil the requirements of the German Traffic Law (StVZO), of the Road Traffic Regulations (StVO) as well as of the FZV (Fahrzeugzulassungsverordung). This also applies to motorized wheelchairs with a design-related maximum speed of 6 km/h (see also §18 StVZO, explanation 1).

### 5 Summary

The test subject was found to be in compliance with the test specifications.

TÜV SÜD Product Service GmbH

i.A. Dipl.-Ing. Torsten Zimmer Department Rehabilitation TÜV SÜD Product Service GmbH

Project Manager

i.A. Dipl.-Ing. Michael Kese

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Rehabilitation