Deutsche Akkreditierungsstelle D-PL-11130-01-02

TEST REPORT
No. 20DE-00830

Test Specimen:	Plastic Case	
Client Reference No:	Max 620H250	
Client:	Plastica Panaro Srl Via Gramsci 438 I-41054, Marano sul Panora (MO)	
Responsible Persons:	Margit Pochendorfer Stefanie Bächer	(Plastica Panaro Srl) (PAConsult GmbH)

Purpose:

By means of a laboratory simulation one Plastic Case Max 620H250 is tested to transport strains. The test specifications are given by the client and are described in ATA 300 Revision 008, Cat. 1 standard [1]

Summary:

All tests were performed according to the test standard. During the tests visible changes could be observed. Single latches unclenched during the drops, but the case in total did not open. After testing drop edges and corners showed abrasion marks and slightly dented bars. However, the interior and exterior of the container did not reveal any failure of functionality.

The detailed visual inspection, the final functional tests, and the evaluation of the results will be performed by the client.

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List of revision:

Revision	Date	Reason
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1. Specimen

For the tests one Plastic Case Max 620H250 (see Figure 1) was provided by the client. Table 1 specifies the shipping unit. In the following designation, the specimen is abbreviated by EUT (**E**quipment **U**nder **T**est).

Table 1: Specimen[C]

EUT No	Specimen	Content	Dimensions in mm			Weight in kg	Shipping Unit Construction in kg
			Length	Width	Height		
1	Shipping unit *Plastic Case Max 620H250*	foam pad	687	528	276	8.14	Total Weight: 8.14
Note: The specified dimensions are identification values and not measurement results.							

Figure 1 EUT

The incoming goods control showed no visible damages at the packaging.

[C] Information provided by the customer; not verified by PAConsult GmbH

2. Test and Equipment

The test standards and parameters were given by the client. Table 2 describes the tests according to the specification.

Table 2: Test Parameters

Test	Test Level		Referenz
Drop Test	Drop Height: Face Drops 762 mm Edge Drops 915 mm Corner Drops 915 mm	Face Drops: Face 3, 1, 2 and 4: 27 Drops/Face Face 5 and 6: 26 Drops/Face Bottom Edge Drops: Edge 2-3, 3-4 and 3-5: 7 Drops/Edge Edge 3-6: 6 Drops/Edge Vertical Edge Drops: Edge 2-5 and 4-5: 7 Drops/Edge Edge 2-6 and 4-6: 6 Drops/Edge Top Edge Drops: Edge 1-2, 1-4 and 1-5: 7 Drops/Edge Edge 1-6: 6 Drops/Edge Bottom Corner Drops: 2-3-5, 2-3-6, 3-4-6, 3-4-5 5 Drops/Corner Top Corner Drops: 1-2-5, 1-4-5, 1-4-6,1-2-6: 5 Drops/Corner	ATA 300, 2008 B-2-1 Cat. 1 [1]
Impact Test	Drop Height Projectile 50 cm Projectile: Ø 32 mm Weight: 6 kg	1 Drop on Face 1	ATA 300, 2008 B-2-4 Cat. 1 [1]

2.1 Test Facility

The tests were performed in the laboratory of:

PAConsult GmbH
Site Berlin
Quitzowstr. 47
10559 Berlin

2.2 Laboratory Conditions

All tests were performed, if not stated otherwise in the test report, under the conditions listed in Table 3.

Table 3: Environmental Conditions

Temperature	15 °C - 35 °C
Relative Humidity	< 85 %
Air Pressure	860 hPa – 1060 hPa

2.3 Equipment used for Test

The test equipment used in the laboratory of PAConsult Site Berlin is listed in Table 4.

Table 4: Test Equipment

Device	Manufacturer	Type	Serial number / Version	Date of last calibration
Drop Table	PAConsult	n/a	n/a	2020/03
Impact Projectile	provided by the client	n/a	n/a	n/a
Scale	MEWA	IT1000	106503	2020/04
The calibration of the laboratory test equipment is performed annually (± 2 months).				

3. Test Procedures

Figure 2 specifies the faces, edges, and corners, according to the test standard.

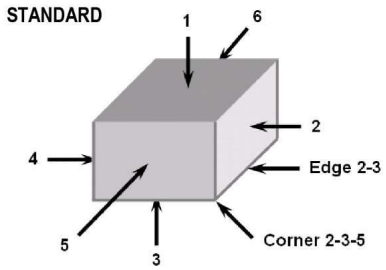

Figure 2: Definition of Faces, Edges, and Corners

3.1 Drop Test

The drops are performed onto a steel plate. Table 5 shows the allocation of the drop number, drop height, and test faces of the shipping unit. Figure 3 exemplarily shows the test setups.

Table 5: Test Parameter Drop Test

Drop Area	Orientation	Drop Height	Drops
Faces	Face 3	762 mm	27
	Face 1		27
	Face 2		27
	Face 4		27
	Face 5		26
	Face 6		26
Bottom Edges	Edge 2-3	915 mm	7
	Edge 3-4		7
	Edge 3-5		7
	Edge 3-6		6
Vertical Edges	Edge 2-5	915 mm	7
	Edge 2-6		6
	Edge 4-5		7
	Edge 4-6		6
Top Edges	Edge 1-2	915 mm	7
	Edge 1-4		7
	Edge 1-5		7
	Edge 1-6		6
Bottom Corners	Corner 2-3-5	915 mm	5
	Corner 2-3-6		5
	Corner 3-4-6		5
	Corner 3-4-5		5
Top Corners	Corner 1-2-5	915 mm	5
	Corner 1-4-5		5
	Corner 1-4-6		5
	Corner 1-2-6		5

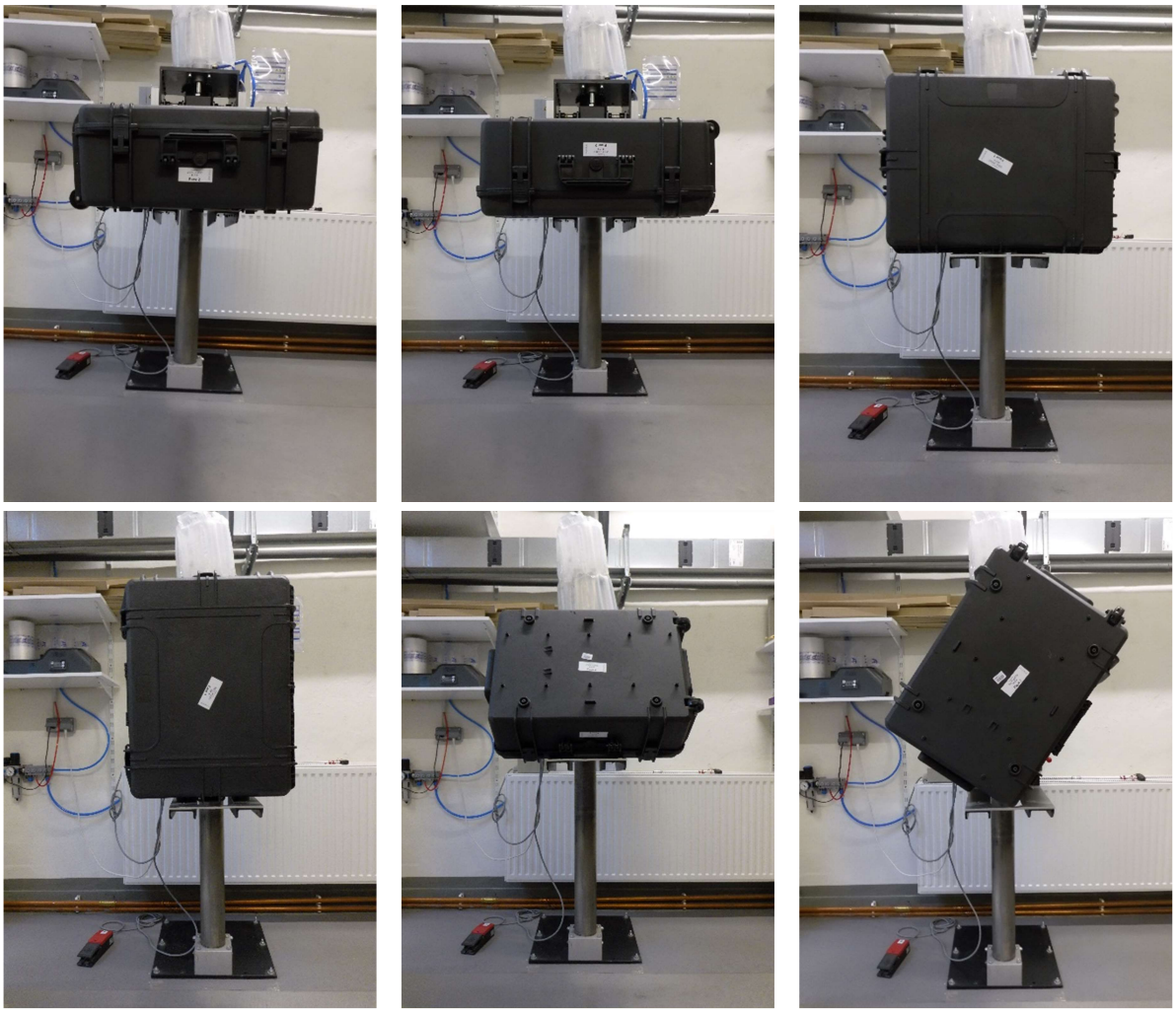

Figure 3: Setup Drop Test, exemplarily

3.2 Impact Test

The impact projectile is placed onto the drop table, 50 cm above the top surface of the specimen. A single drop is performed onto the top face. Figure 4 shows the test setup.

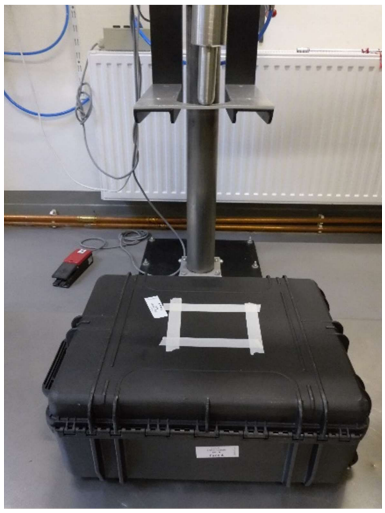

Figure 4: Setup Impact Test

3.3 Acceptance Criteria

As no decision rules for the statement of conformity for *ATA 300 Revision 2008, Cat. 1 standard* are given, all results for tests were documented as information only.

No additional acceptance criteria are given by the client.

4 Test and Results

4.1 Drop Test

The test was performed according to the parameters specified in Table 2. During the test visible changes were observed. The latches opened on several drops. Figure 5 exemplarily shows the open latches on edge 1-2. Minor abrasions on the edges/ corners were observed (see exemplarily Figure 6).

Figure 5: Open Latches, exemplarily

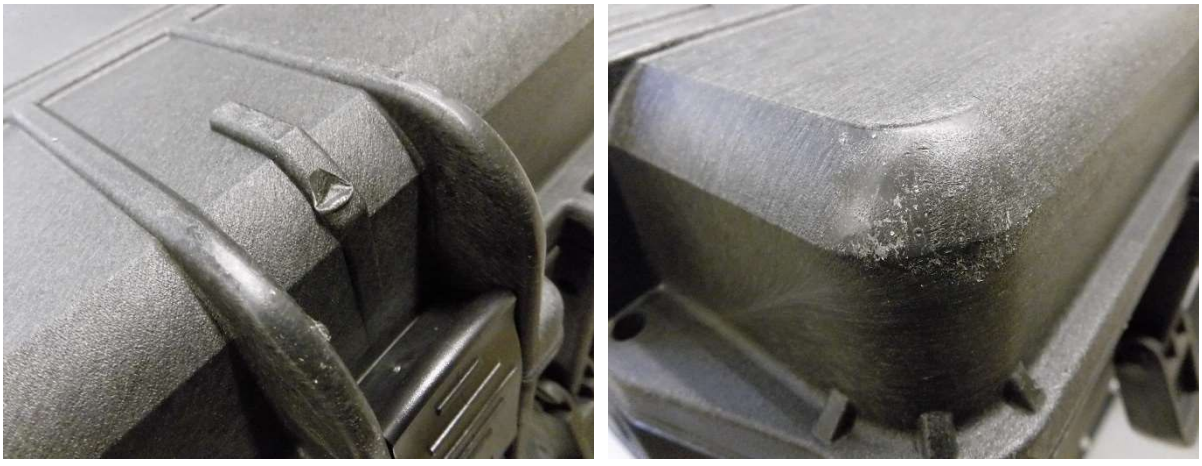

Figure 6: Minor Abrasion, exemplarily

4.2 Impact Test

The test was performed according to the parameters in Table 2. An abrasion could be observed (see Figure 7).

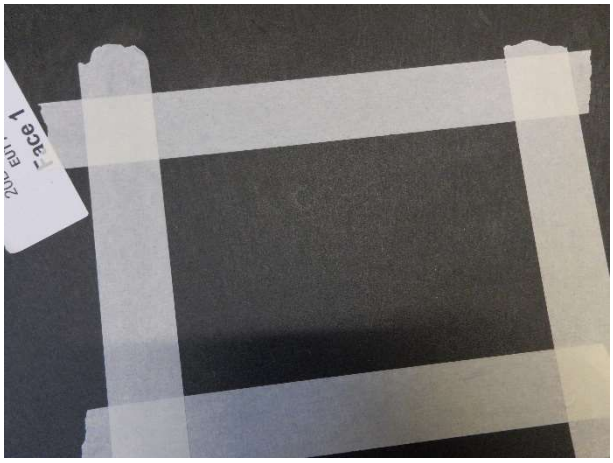

Figure 7: Minor Abrasion

4.3 Acceptance Criteria

No acceptance criteria were defined by the client.

5 Summary

The tests were performed successfully. During the tests visible changes were observed. Table 6 summarizes all visual inspections.

Table 6: Summary Results

Results Environmental Simulation - Plastic Case Max 620H250		
Seq	**Test**	**Result**
1	Drop Test	Visible changes were observed (see Figure 5 and Figure 6)
2	Impact Test	Minor abrasions were observed (see Figure 7)

The detailed visual inspection, the final functional tests, and the evaluation of the results will be performed by the client.

6 References

[1] ATA Specification 300 Revision 2008.1

Note