

Testing site: via Braide Matte, 4 33048 San Giovanni al Natisone (UD) tel. +39 0432 747211 lab@catas.com

Date received: 23/05/18

Date of issue: 22/06/18

Report consists of 16 test reports.

Defects before testing: None

Sample name: TRILL armchair NARDI S.P.A.

VIA DELLE STANGA' 14 36072 CHIAMPO (VI)

**ITALIA** 

### **SAMPLE N° 251743**

Overall dimensions: 590 x 560 x 830 (h) mm

#### List performed tests:

- 1. Safety requirements EN 16139:2013+AC:2013
- 2. Information for use EN 16139:2013+AC:2013
- 3. Seat and back static load test EN 1728:2012+AC:2013
- 4. Vertical load on back rest EN 1728:2012+AC:2013
- 5. Arm sideways static load test EN 1728:2012+AC:2013
- 6. Arm downwards static load test EN1728:2012+AC:2013
- 7. Vertical upwards static load on arm rests EN 1728:2012+AC:2013
- 8. Seat and back fatigue test EN 1728:2012+AC:2013
- Seat front edge durability test EN 1728:2012+AC:2013
   Arm fatigue test EN 1728:2012+AC:2013
- 11. Leg forward static load test EN 1728:2012+AC:2013
- 12. Leg sideways static load test EN 1728:2012+AC:2013
- 13. Seat impact test EN 1728:2012+AC:2013
- 14. Back impact test EN 1728:2012+AC:2013
- 15. Arm rest impact test EN 1728:2012+AC:2013
- 16. Stability EN 1022:2005



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> ging Director ea Giavon



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## **SAMPLE N° 251743**

Date of issue: 22/06/18

Sample weight: Not determined Sample name: TRILL armchair



Side view



Bottom view



Rear view



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**ITALIA** 

NARDI S.P.A.

VIA DELLE STANGA' 14

36072 CHIAMPO (VI)



LAB N° 0027 Membro degli MRA EA, IAF e ILAC

#### **TEST REPORT**

### 251743 / 1

 Date received:
 23/05/18

 Date of test:
 29/05/18

 Date of issue:
 22/06/18

Sample name: TRILL armchair



Safety requirements EN 16139:2013+AC:2013

Safety requirements clause 4	
Statement checked	Remarks
Corner and edges in contact with the users:	
<ul> <li>Absence of sharp edges and corners</li> </ul>	Yes
Edges on the handles:	
Absence of sharp edges and corners in the direction of the force	Handles not present
Other edges:	
Absence of sharp edges and corners	Yes
Accessible hollow components:	
The ends of hollow components are closed or capped	Yes
Movable and adjustable parts:	
<ul> <li>It shall not be possible for any movable and adjustable part of the chair to come operate unintentionally.</li> </ul>	Movable and adjustable parts not present
Connections between parts of the structure:	
<ul> <li>It shall not be possible for any load bearing part of the seating to come loose unintentionally</li> </ul>	No
Parts which are lubricated:	
• All the parts which are lubricated shall be designed to protect users	Lubricated parts not present
Shear and squeeze points between movable parts ≥ 8 mm ≤ 25 mm:	
• Shear and squeeze points under influence of powered mechanism	Mechanism not present
<ul> <li>Shear and squeeze points during normal use and during normal movements and actions</li> </ul>	No
Conformity to clauses 4.1 and 4.2 of standard EN 16139:2013:	YES
2	· <b></b>

Comorning to clauses 4.1 and 4.2 or standard EN 10139.2013.

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#### **TEST REPORT**

251743 / 2

 Date received:
 23/05/18

 Date of test:
 29/05/18

 Date of issue:
 22/06/18

Sample name:

TRILL armchair

NARDI S.P.A. VIA DELLE STANGA' 14 36072 CHIAMPO (VI) ITALIA

#### **Information for use EN 16139:2013+AC:2013**

#### Information for use clause 7

Statement checked	Remarks
Information for use in the language of the country in which the chair will be delivered to the end user	Italian language
Information regarding the intended use (Annex B of EN 16139:2013)	Present
Instruction for operating the adjusting mechanisms, where applicable	Not applicable
Assembly instructions, where applicable	Not applicable
Instruction for the care and the maintenance of the chair	Present
Information on the choice of castors in relation to the floor surface if the chair is fitted	Castors not present
Advice that only trained personnel may replace or repair seat height adjustment components with energy accumulators if the chair is fitted	Seat height adjustment not present

Conformity to clause 7 of standard EN 16139:2013:	YES
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#### **TEST REPORT**

251743 / 3

 Date received:
 23/05/18

 Date of test:
 30/05/18

 Date of issue:
 22/06/18

Sample name: TRILL armchair

NARDI S.P.A.
VIA DELLE STANGA' 14
36072 CHIAMPO (VI)
ITALIA

#### Seat and back static load test EN 1728:2012+AC:2013

Seat and back static load test, clause 6.4

#### Test results:

Seat load	Back force	Number	Remarks
N	N	of cycles	
1.600	560	10	No defects

#### Seat front edge static load, clause 6.5

Seat load N	Number of cycles	Remarks
1.300	10	No defects

#### Note:

The test has been carried out according to table 1 of EN 16139:2013, level L1 - general.

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#### **TEST REPORT**

251743 / 4

 Date received:
 23/05/18

 Date of test:
 01/06/18

 Date of issue:
 22/06/18

Sample name:



NARDI S.P.A. VIA DELLE STANGA' 14 36072 CHIAMPO (VI) ITALIA

#### Vertical load on back rest EN 1728:2012+AC:2013

Vertical static load on back rest clause 6.6

#### Test results:

Seat load N	Downwards force N	Number of applications	Remarks
1.300	600	10	No defects

#### Note:

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#### **TEST REPORT**

251743 / 5

 Date received:
 23/05/18

 Date of test:
 01/06/18

 Date of issue:
 22/06/18

Sample name: TRILL armchair

NARDI S.P.A. VIA DELLE STANGA' 14 36072 CHIAMPO (VI) ITALIA

### Arm sideways static load test EN 1728:2012+AC:2013

Arm sideways static load test clause 6.10

#### Test results:

Horizontal force N	Number of applications	Remarks
400	10	No defects

Note:

The test has been carried out according to table 1 of EN 16139:2013, level L1 - general.

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#### **TEST REPORT**

251743 / 6

 Date received:
 23/05/18

 Date of test:
 01/06/18

 Date of issue:
 22/06/18

Sample name: TRILL armchair

NARDI S.P.A. VIA DELLE STANGA' 14 36072 CHIAMPO (VI) ITALIA

#### Arm downwards static load test EN1728:2012+AC:2013

Arm downwards static load test clause 6.11

#### Test results:

Vertical force N	Number of applications	Remarks
750	5	No defects

#### Note:

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#### **TEST REPORT**

251743 / 7

 Date received:
 23/05/18

 Date of test:
 01/06/18

 Date of issue:
 22/06/18

Sample name: TRILL armchair

NARDI S.P.A. VIA DELLE STANGA' 14 36072 CHIAMPO (VI) ITALIA

## Vertical upwards static load on arm rests EN 1728:2012+AC:2013

Vertical upwards static load on arm rests clause 6.13

Stacking seating clause 6.13.2

Number of stacking seating declared by the customer: 6

Maximum load: 25 kg

#### Test results:

Tool Toodito.		
Number of lifting cycles	Time of application s	Remarks
10	10	No defects

#### Note:

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#### **TEST REPORT**

251743 / 8

 Date received:
 23/05/18

 Date of test:
 04/06/18

 Date of issue:
 22/06/18

Sample name: TRILL armchair

NARDI S.P.A. VIA DELLE STANGA' 14 36072 CHIAMPO (VI) ITALIA

### Seat and back fatigue test EN 1728:2012+AC:2013

Seat and back fatigue test, clause 6.17

#### Test results:

Seat force N	Back force N	Number of cycles	Remarks
1.000	300	100.000	No defects

Note:

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#### **TEST REPORT**

251743 / 9

Date received: 23/05/18

Date of test: 11/06/18

Date of issue: 22/06/18

Sample name: TRILL armchair

NARDI S.P.A.
VIA DELLE STANGA' 14
36072 CHIAMPO (VI)
ITALIA

### Seat front edge durability test EN 1728:2012+AC:2013

Seat front edge durability test clause 6.18

#### Test results:

Points of application	Seat force N	Number of cycles	Remarks
100 mm back from the front edge	800	50.000	No defects

Note:

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NARDI S.P.A.



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#### **TEST REPORT**

251743 / 10

 Date received:
 23/05/18

 Date of test:
 14/06/18

 Date of issue:
 22/06/18

Sample name: TRILL armchair



VIA DELLE STANGA' 14 36072 CHIAMPO (VI) ITALIA

### Arm fatigue test EN 1728:2012+AC:2013

Arm fatigue test clause 6.20

#### Test results:

Force on arm rest N	Number of cycles	Remarks
400	30.000	No defects

Note:

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#### **TEST REPORT**

### 251743 / 11

 Date received:
 23/05/18

 Date of test:
 20/06/18

 Date of issue:
 22/06/18

Sample name:

NARDI S.P.A. VIA DELLE STANGA' 14 36072 CHIAMPO (VI) ITALIA

### Leg forward static load test EN 1728:2012+AC:2013

Leg forward static load test clause 6.15

TRILL armchair

#### Test results:

Forward horizontal force N	Balancing seat force N	Number of cycles	Remarks
500	1.000	10	No defects

#### Note:

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#### **TEST REPORT**

251743 / 12

 Date received:
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Sample name: TRILL armchair

NARDI S.P.A.
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ITALIA

### Leg sideways static load test EN 1728:2012+AC:2013

Leg sideways static load test clause 6.16

#### Test results:

Sideways horizontal force N	Balancing seat force N	Number of cycles	Remarks
390	1.000	10	No defects

#### Note:

According to EN 1728:2012, horizontal force has been reduced from 400 N to 390 N, to avoid tipping.

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#### **TEST REPORT**

251743 / 13

 Date received:
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 22/06/18

Sample name: TRILL armchair



NARDI S.P.A. VIA DELLE STANGA' 14 36072 CHIAMPO (VI) ITALIA

### Seat impact test EN 1728:2012+AC:2013

Seat impact test clause 6.24

#### Test results:

Mass of impactor kg	Height of drop mm	Number of drops	Remarks
25	240	10	No defects

Note:

The test has been carried out according to table 1 of EN 16139:2013, level L1 - general.

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#### **TEST REPORT**

251743 / 14

 Date received:
 23/05/18

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 20/06/18

 Date of issue:
 22/06/18

Sample name: TRILL armchair



# Back impact test EN 1728:2012+AC:2013

Back impact test clause 6.25

#### Test results:

Angle	Mass of impactor kg	Number of cycles	Remarks
38	6,5	10	No defects

#### Note:

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#### **TEST REPORT**

251743 / 15

 Date received:
 23/05/18

 Date of test:
 20/06/18

 Date of issue:
 22/06/18

Sample name: TRILL armchair

NARDI S.P.A. VIA DELLE STANGA' 14 36072 CHIAMPO (VI) ITALIA

### Arm rest impact test EN 1728:2012+AC:2013

Arm rest impact test clause 6.26

#### Test results:

Angle	Mass of impactor kg	Number of cycles	Remarks
38	6,5	10	No defects

#### Note:

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#### **TEST REPORT**

251743 / 16

 Date received:
 23/05/18

 Date of test:
 22/06/18

 Date of issue:
 22/06/18

Sample name: TRILL armchair

NARDI S.P.A. VIA DELLE STANGA' 14 36072 CHIAMPO (VI) ITALIA

### **Stability - EN 1022:2005**

Type of chair: fixed geometry

Minimum horizontal force for rearwards overturning of fixed back chair: 167 N

Forwards overturning

Horizontal force : 20 N does not overturn

Rearwards overturning

Fixed back chair

Horizontal force : 167 N does not overturn

Tilting chair in the rearmost position

Loading discs on the seat : /

Sideways overturning for chairs with arms

Horizontal force : 20 N does not overturn

Sideways overturning for chairs without arms

Horizontal force : /

Forwards overturning for chairs with footrest

Horizontal force : /

Test passed

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