Raport z badań nr: *Test Report No.*:	**26634163-8/2020**	**Nr zamówienia:** *Order No.*:	84950080	**Strona 1 z 11** *Page 1 of 11* Załączniki / *Annex:1*
Nr referencyjny Klienta: *Client Reference No.*:	1667435	**Data zamówienia:** *Order date*:	2020.09.03	
Zleceniodawca:** *Client***:	COM40 Sp. z o.o. Sp. K. ul. Podkocka 4b, 63-460 Nowe Skalmierzyce			
Przedmiot badania:** *Test item***:	Non-domestic seating			
Oznaczenie / Nr typu:** *Identification / Type No.***:	CLASSIC 2			
Rodzaj zamówienia: *Order content*:	Safety test			
Podstawa badań: *Test specification*:	PN-EN 16139:2013-07^{A} (Clause 7 excluded) PN-EN 16139:2013-07/AC:2013-09E			
Data przyjęcia: *Date of receipt*:	2020.09.01			
Nr próbki *Test sample No.*:	P/20/299			
Czas badania: *Testing period*:	2020.09.22 – 2020.10.16			
Miejsce badania: *Place of testing*:	TÜV Rheinland Polska Sp. z o.o. ul. Lutycka 11, 60-415 Poznań			
Laboratorium badawcze: *Testing laboratory*:	Laboratorium Badawcze TÜV Rheinland Polska Sp. z o.o. Oddział Poznań – Hardlines ul. Lutycka 11, 60-415 Poznań			
Wynik badania*: *Test result**:	Pass			

Opracowane / *Compiled by :*			**Autoryzowane /** *Authorized by* :		
20.10.2020	Ł. Skrzypczak / Testing Specialist		20.10.2020	W. Sajewicz / Workroom Coordinator	
Data *Date*	**Nazwisko/Stanowisko** *Name/Position*	**Podpis** *Signature*	**Data** *Date*	**Nazwisko/Stanowisko** *Name/Position*	**Podpis** *Signature*

Inne / *Other*:

Test severity – L2

Stan przedmiotu badania po dostawie: *Condition of the test item at delivery*:	**Przedmiot badań jest kompletny i nienaruszony** Test item complete and undamaged

*Legenda:	1 = bardzo dobrze P(ass)-zgodne z podstawami kontroli/wymaganiami/specyfikacją	2 = dobrze	3 = zadowalający F(ail)-niezgodny z podstawami kontroli/wymaganiami/specyfikacją	4 = dostateczny N/A = nie dotyczy	5 = niedostateczny N/T = nie badano
** Legend:*	*1 = very good* *P(ass) = passed a.m. test specification(s)*	*2 = good*	*3 = satisfactory* *F(ail) = failed a.m. test specification(s)*	*4 = sufficient* *N/A = not applicable*	*5 = poor* *N/T = not tested*

Raport z badań odnosi się wyłącznie do otrzymanego/-ych i badanego/-ych obiektu/-ów i nie może być powielany w formie wyciągu bez zezwolenia Laboratorium. Raport nie upoważnia do korzystania z jakichkolwiek znaków oraz logo firmy TÜV Rheinland Group. **) Dane dostarczone przez Klienta
*This test report only relates to the received and tested sample/-s. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark TÜV Rheinland Group. **) Data provided by the Customer*

UWAGI/ REMARKS

Wyposażenie badawcze używane w czasie badań zostało wywzorcowane zgodnie z Harmonogramem wzorcowań i sprawdzeń. Wyposażenie spełnia wymagania zawarte w odpowiednich normach. Identyfikowalność używanego wyposażenia badawczego jest zapewniona przez zgodność z dyspozycjami systemu zarządzania. Szczegółowe informacje dotyczące warunków badań, wyposażenia i niepewności pomiaru są dostępne w Laboratorium Badawczym i mogą być dostarczone na żądanie.

The equipment used during the specified testing period was calibrated according to Test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the Laboratory and could be provided on request

Jak uzgodniono w umowie, dokument ten został podpisany wyłącznie w formie cyfrowej. TUV Rheinland nie sprawdziło i nie jest w stanie sprawdzić, które z wymogów prawnych lub innych odnośnych wymogów mają zastosowanie do niniejszego dokumentu. Taka weryfikacja leży w zakresie odpowiedzialności użytkownika tego dokumentu. Na życzenie Klienta TUV Rheinland może potwierdzić ważność podpisu cyfrowego za pomocą osobnego dokumentu. Wniosek taki należy skierować do Działu sprzedaży. Za taką dodatkową usługę będzie pobierana opłata środowiskowa.

As contractually agreed, this document has been signed digitally only. TUV Rheinland has not verified and unable to verify which legal or other pertaining requirements are applicable for this document. Such verification is within the responsibility of the user of this document. Upon request by its Client, TUV Rheinland can confirm the validity of the digital signature by a separate document. Such request shall be addressed to Sales department. An environmental fee for such additional service will be charged.

A – metoda badawcza akredytowana; P – podwykonawstwo; AP – metoda badawcza akredytowana u podwykonawcy

Wyniki badań z uwagą P są zlecane kompetentnym i zakwalifikowanym podwykonawcom i wyraźnie oznaczone w Raporcie z badań. Odchylenia od podstawy badawczej lub wymagań Klienta są wymienione w opisie metody (podstawy) badawczej w Raporcie z badań.

A – accredited method, P – subcontracted method; AP – method accredited by a subcontractor

The clauses with remark of P are subcontracted to qualified approved subcontractors and descripted under the respective test clause in the Test Report. Deviations of testing specification(s) or customer requirements are listed in specific test clause in the Test Report.

Lista użytego sprzętu badawczego
List of used test equipment

Urzadzenie pomiarowe *Test equipment*	**Numer urządzenia / ID-Nr** *Equipment No. / ID-No.*	**Nastepna kalibracja** *Next calibration*
Dimensions / weight	A/37/W/P-H.1	05.2021
	A/137/W/P-H.1	02.2022
	A/166/W/P-H.1	02.2022
Static / dynamic tests	A/1/W/P-H.1	09.2021
	A/2/W/P-H.1	09.2021
	A/4/W/P-H.1	09.2021
	E/5/S/P-H.1	03.2021
	E/6/S/P-H.1	03.2021
	E/50/S/P-H.1	03.2021
	E/51/S/P-H.1	03.2021
	E/61/S/P-H.1	03.2021
	E/62/S/P-H.1	03.2021
	E/63/S/P-H.1	03.2021
	A/68/W/P-H.1	09.2021
	E/72/S/P-H.1	03.2021
	E/99/S/P-H.1	03.2021
	E/100/S/P-H.1	03.2021
	E/108/S/P-H.1	03.2021
	E/159/S/P-H.1	03.2021

Lista użytego sprzętu badawczego
List of used test equipment

Urzadzenie pomiarowe *Test equipment*	Numer urządzenia / ID-Nr *Equipment No. / ID-No.*	Nastepna kalibracja *Next calibration*
	E/188/S/P-H.1	05.2021
	E/189/S/P-H.1	05.2021
	E/195/S/P-H.1	05.2021
	A/217/W/P-H.1	01.2021
Enviromental conditions	A/148/W/P-H.1	09.2021

1	**Szczegóły produktu** *Product details*	CLASSIC 2
2	**Wymiary / waga** *Dimensions / Weight*	2000x980x730 (without pillows)
3	**Elementy badane** *Operating elements*	---
4	**Wyposażenie/Akcesoria** *Equipment / Accessories*	---
5	**Zastosowane materiały** *Used materials*	---
6	**Różne** *Other*	**Próbka(-i) testowa(-e), jak również informacje o próbce, opis, szczegóły dotyczące produktu i jego przeznaczenia zostały dostarczone przez klienta.** *Test sample(s), as well sample information, description, product details and intended usage was provided by customer.*
7	**Sposób dostarczenia próbek:** *Test sample obtaining:*	□ 1) **pobrane przez Próbobiorcę Laboratorium TÜV Rheinland Polska** / Collected by Sampler - Laboratory TÜV Rheinland ■ 2) **pobrane przez Zleceniodawcę*:** / Collected by Principal*: □ 2.1) **dostarczone przez Próbobiorcę Laboratorium TÜV Rheinland Polska** / Delivered by Sampler Laboratory TÜV Rheinland □ 2.2) **osobiście**/personal receipt * ■ 2.3) **pocztą/kurierem** by post/courier * □ 3) **inne**/other ***Za reprezentatywność i przygotowanie próbek odpowiada Zleceniodawca w przypadku samodzielnego ich pobierania** *In the case when the samples are collected by the Principal, they are responsible for the samples representativeness*

Fig. 1	Fig. 2

PN-EN 16139:2013-07[A] (Clause 7 excluded)
PN-EN 16139:2013-07/AC:2013-09E

4 Safety		
4.1 General		
Wymagania / *requirements*	Spostrzeżenia / *remarks*	
The seating shall be so designed as to minimise the risk of injury to the user. All accessible parts (3.1) shall be so designed that physical injury and damage are avoided. This requirement is met when: a) accessible corners are rounded or chamfered; b) the edges of the seat, back rest and arm rests which are in contact with the user when sitting in the chair are rounded or chamfered; c) the edges of handles are rounded or chamfered in the direction of the force applied; d) all other edges are free from burrs and rounded or chamfered; e) the ends of hollow components are closed or capped. Movable and adjustable parts shall be designed so that injuries and inadvertent operation are avoided. It shall not be possible for any load bearing part of the seating to come loose unintentionally. All parts which are lubricated to assist sliding shall be designed to protect users from lubricant stains when in normal use.	⇨ No sharp edges. ⇨ See further section of the report.	☒ **P** ☐ **F** ☐ **N/A** ☐ **N/T**
4.2 Shear and squeeze points		
4.2.1 Shear and squeeze points when setting up and folding		
Wymagania / *requirements*	Spostrzeżenia / *remarks*	
Unless 4.2.2 or 4.2.3 are applicable, shear and squeeze points that are created only during setting up and folding, including tipping seat actions, are acceptable, because the user can be assumed to be in control of his/her movements and to be able to cease applying the force immediately upon experiencing pain. The edges of parts moving relative to each other and creating shear and squeeze points shall be as specified in 4.1.	Not applicable	☐ **P** ☐ **F** ☒ **N/A** ☐ **N/T**
4.2.2 Shear and squeeze points under influence of powered mechanism		
Wymagania / *requirements*	Spostrzeżenia / *remarks*	☐ **P** ☐ **F** ☒ **N/A** ☐ **N/T**
With the exception of tipping seats there shall be no shear and squeeze points created by parts of the seating operated by powered mechanisms, e.g. springs and gas lifts.	Not applicable	
4.2.3 Shear and squeeze points during use		
Wymagania / *requirements*	Spostrzeżenia / *remarks*	☒ **P** ☐ **F** ☐ **N/A** ☐ **N/T**
There shall be no shear and squeeze points created by forces applied during normal use as well as during normal movements and actions, see Table 1.	⇨ No shear and squeeze points created by forces applied according to Table 1.	

4.3 Stability		
4.3.1 General		
Wymagania / *requirements*	Spostrzeżenia / *remarks*	
The seating shall not overturn under the following conditions: a) by pressing down on the front edge of the seat surface in the median plane (3.8); b) by applying a load on the seat surface via the front corner; c) by leaning sideways on an item of seating with or without arm rests; d) by leaning against the back rest; e) by sitting on the front edge of the seat; f) by loading the foot rest.	⇨ During testing the seating remain stable.	☒ **P** ☐ **F** ☐ **N/A** ☐ **N/T**
4.3.2 Swivelling chairs		
Wymagania / *requirements*	Spostrzeżenia / *remarks*	
Requirements a) to e) are considered to be met if the seating complies with the relevant requirements of EN 1335-2. The requirement f) is considered to be met if the seating complies with EN 1022:2005, 6.3.	Not applicable	☐ **P** ☐ **F** ☒ **N/A** ☐ **N/T**
4.3.3 Non swivelling chairs		
Wymagania / *requirements*	Spostrzeżenia / *remarks*	☒ **P** ☐ **F** ☐ **N/A** ☐ **N/T**
Requirements a) to f) are considered to be met if the seating complies with EN 1022:2005.	⇨ During testing the seating remain stable.	
4.4 Rolling resistance of the unloaded chair		
Wymagania / *requirements*	Spostrzeżenia / *remarks*	
This subclause is only applicable to single seating units fitted with castors or wheels. The unloaded seating shall not roll unintentionally. This requirement is met when: — the rolling resistance is ≥ 12 N when tested in accordance with EN 1335-3:2009, 7.4; and — all castors are of the same type.	Not applicable	☐ **P** ☐ **F** ☒ **N/A** ☐ **N/T**
4.5 Safety of the construction		
Wymagania / *requirements*	Spostrzeżenia / *remarks*	
The following tests described in Clause 6, Table 1 are considered to be relevant to safety: Test No.: 1, 2, 4, 6, 7, 8, 9, 10, 12, 13, 14. Seating is considered to satisfy the safety requirements if, on completion of the relevant tests, the chair satisfies all requirements of Clause 5.	⇨ The standard assumptions included. ⇨ See further section of the report.	☒ **P** ☐ **F** ☐ **N/A** ☐ **N/T**

5 Safety, strength and durability requirements

Wymagania / *requirements*	Spostrzeżenia / *remarks*	
The chair shall be constructed to ensure that it does not create a risk of injury to the user of the chair under the following conditions: — sitting on the seat, both centrally and off-centre; — moving forward, backwards, and sideways while sitting in the chair; — leaning over the arm rests; — pressing down on the arm rests while getting up from the chair. These safety, strength and durability requirements are fulfilled when during and after testing in accordance with Table 1: a) there are no fractures of any member, joint or component; b) there are no loosening of joints intended to be rigid; c) no major structural element is significantly deformed; d) the chair fulfils its functions after removal of the test loads. The stability requirements are fulfilled when after testing in accordance with Table 1 the seating does not overturn.	⇨ Tested item fulfilled safety and strength requirements during and after testing in accordance with Table 1.	☒ **P** ☐ **F** ☐ **N/A** ☐ **N/T**

NO.	TEST	RESULT
1	Seat and back static load test	PASS
2	Seat front edge static load test	PASS
3	Vertical static load on back	PASS
4	Foot rest and leg rest static load test	N/A
5	Arm sideways static load test	PASS
6	Arm downwards static load test	PASS
7	Vertical upwards static load on arm rests	N/A
8	Seat and back durability test	PASS
9	Seat front edge durability test	PASS
10	Arm durability test	PASS
11	Foot rest durability test	N/A
12	Leg forward static load test	PASS
13	Leg sideways static load test	PASS
14	Seat impact test	PASS
15	Back impact test	PASS
16	Arm impact test	PASS
17	Drop test (multiple seating)	PASS
18	Auxiliary writing surface static load test	N/A
19	Auxiliary writing surface durability test	N/A

6 Test methods

Wymagania / *requirements*	Spostrzeżenia / *remarks*	
Seating shall be tested on the same sample for safety, strength and durability according to Table 1 and following the order listed in Table 1. The guidance for selecting level L1 or L2 with due respect for the end use of the product is given in Annex B.	⇨ The standard assumptions included. ⇨ The manufacturer chose test severity L2 - extreme use.	☒ **P** ☐ **F** ☐ **N/A** ☐ **N/T**

Table 1 — Safety, strength and durability tests *(1 of 2)*

Test	Reference	Loading [a]	Level	
			L1	L2
1. Seat and back static load test	EN 1728:2012, 6.4	Seat: force, N Back: force, N 10 times	1 600 560 (min. force, 410)	2 000 700 (min. force, 410)
2. Seat front edge static load test	EN 1728:2012, 6.5	Force, N 10 times	1 300	1 600
3. Vertical static load on back [b]	EN 1728:2012, 6.6	Force, N Seat load, N 10 times	600 1 300	900 1 800
4. Foot rest and leg rest static load test	EN 1728:2012, 6.8, 6.9	Force, N 10 times	1 300	1 600
5. Arm sideways static load test	EN 1728:2012, 6.10	Force, N 10 times	400	900
6. Arm downwards static load test	EN 1728:2012, 6.11	Force, N 5 times	750	900
7. Vertical upwards static load on arm rests	EN 1728:2012, 6.13.1, 6.13.2	Seat load, N Lift 10 times, during ≥ 10 s	250 or lift stack with max. 8 chairs of max. 25 kg	1 200
8. Seat and back durability test	EN 1728:2012, 6.17	Cycles Seat: 1 000 N Back [c]: 300 N	100 000	200 000
9. Seat front edge durability test	EN 1728:2012, 6.18	Cycles Force: 800 N	50 000	100 000

Table 1 *(2 of 2)*

Test	Reference	Loading	Level	
			L1	L2
10. Arm durability test	EN 1728:2012, 6.20	Cycles Force: 400 N	30 000	60 000
11. Foot rest durability test	EN 1728:2012, 6.21	Cycles Force: 1 000 N	50 000	100 000
12. Leg forward static load test	EN 1728:2012, 6.15	Force, N Seat load, N 10 times	500 1 000	620 1 800
13. Leg sideways static load test	EN 1728:2012, 6.16	Force, N Seat load, N 10 times	400 1 000	760 1 800
14. Seat impact test	EN 1728:2012, 6.24	Drop height, mm 10 times	240	300
15. Back impact test	EN 1728:2012, 6.25	Height of fall, mm/° 10 times	210/38	330/48
16. Arm impact test	EN 1728:2012, 6.26	Height of fall, mm/° 10 times	210/38	330/48
17. Drop test (multiple seating)	EN 1728:2012, 6.27.1	Drop height, mm 2 × 5 times	not applicable	450
18. Auxiliary writing surface static load test	EN 1728:2012, 6.14	Force, N 10 times	300	300
19. Auxiliary writing surface durability test	EN 1728:2012, 6.22	Cycles Force: 150 N	10 000	20 000

[a] Seat load on parts not undergoing test: 750 N.

[b] The test is only applicable for chairs without head/neck rest and for chairs with a height of the backrest < 1 000 mm above ground.

[c] No minimum force defined.

Przedstawione wyniki badań odnoszą się wyłącznie do otrzymanych i badanych próbek. Niepewność rozszerzona pomiaru dla k=2 wyznaczona jest dla poziomu ufności 0,95.
The presented test results refers only to received and tested samples. The expanded uncertainty of measurement for k=2 is determined for a confidence level of 0,95.

Załącznik nr 1 / *Annex No. 1*

Dokumentacja fotograficzna

Photo documentation

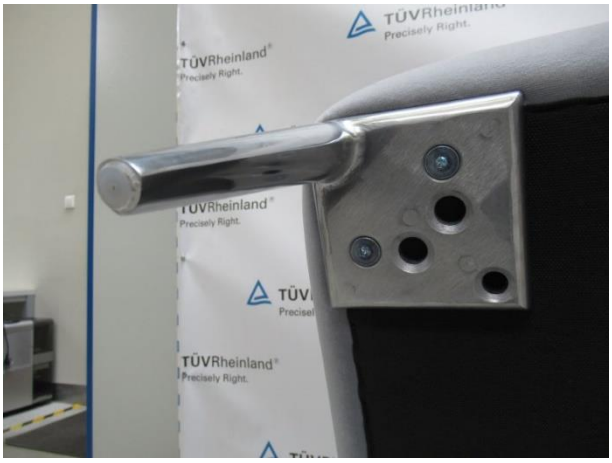
Fotografia / *Photo* 1
General view

Fotografia / *Photo* 2
General view

Fotografia / *Photo* 3
General view

Fotografia / *Photo* 4
Construction details

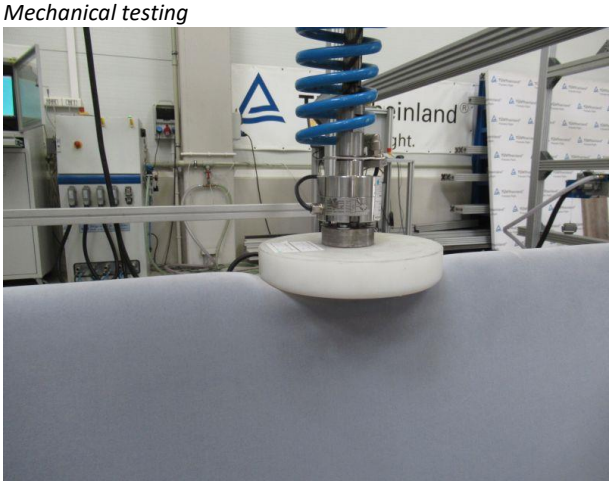
Fotografia / *Photo* 5
Construction details



Fotografia / *Photo* 6
Mechanical testing

Fotografia / *Photo* 7
Mechanical testing

Fotografia / *Photo* 8
Mechanical testing



Koniec raportu z badań
End of Test Report