



SATRA Technology Centre Ltd
Wyndham Way, Telford Way, Kettering,
Northamptonshire, NN16 8SD United Kingdom
Tel: +44 (0) 1536 410000
Fax +44 (0) 1536 410626
email: info@satra.com
www.satra.com

Customer details: Kebe A/S
Sortevej 8
DK-8543 Hornslet
Denmark

SATRA reference: FUR0256943 /1718

Your reference:

Date of report: 31 May 2017

Samples received: 9 November 2016

For the attention of: Remigiusz Wodzinski

Date(s) work carried out: 9 November 2016 – 30 May 2017

TECHNICAL REPORT

Subject:

Testing of an electric reclining chair, described by the customer as the "Cowe-KEBE- Electric Chair", to BS 8474:2013, 110 kg Test Level, Clauses 5.2, 6 and 7 Only.

Conditions of Issue:

This report may be forwarded to other parties provided that it is not changed in any way. It must not be published, for example by including it in advertisements, without the prior, written permission of SATRA.

Results given in this report refer only to the samples submitted for analysis and tested by SATRA. Comments are for guidance only.

A satisfactory test report in no way implies that the product tested is approved by SATRA and no warranty is given as to the performance of the product tested. SATRA shall not be liable for any subsequent loss or damage incurred by the client as a result of information supplied in the report.

Please note uncertainty of measurement has not been applied to the results in this report. SATRA uncertainty of measurement values are available on request.

Report signed by: Geoff Bindley
Position: Department Manager
Department: Furniture and Floor Coverings

(Page 1 of 9)

ASSESSMENT OF THE COWE-KEBE- ELECTRIC CHAIR

As requested by Kebe A/S, SATRA have assessed the sample submitted, as detailed below.

SAMPLE SUBMITTED

Sample reference: Cowe-KEBE- Electric Chair
 Date received: 9 November 2016
 Testing completed: 30 May 2017
 Testing conducted by: P.Westley
 Reported by: G.Bindley

TESTS CARRIED OUT

BS 8474:2013 (*Furniture - Chairs with electrically operated support surfaces - Requirements*)
 The chair was tested at the 110Kg user weight level.

RESULTS

COWE-KEBE- ELECTRIC CHAIR

Clause	Test Description	Result
4	General requirements	
4.1	Edges and corners	N/T (see Note 1)
4.2	Tubular components accessible during use	N/T (see Note 1)
5	Strength and durability requirements	
5.1.2.3	Procedure (<i>Testing to EN 1728:2012 – see Table 1</i>)	N/T (see Note 1)
5.2	Durability of chair surface adjustment mechanisms (Annex A , 20,000 cycles)	Pass
6	Stability	
-	Testing to BS EN 1022:2005 – see Table 2	Pass
-	Riser Chairs (Annex B)	N/A
7	Control system requirements	
7.1.1	Motion lockout control	N/A
7.1.2	Manual operation only	Pass
7.1.3	Max' movement speed (loaded / unloaded)	Pass
7.1.4	Min' stopping speed	Pass
7.1.5	No movement when conflicting signals occur	Pass
7.1.6	Chairs without battery back-up system - Min' stopping time when mains power lost	Pass

Continued

7.1.7	Chairs with battery back-up system – Indication of charge level of battery (level to complete one cycle)	N/A
7.1.8	Chairs with battery operated reset system – Return to sitting position on loss of mains power	N/A
7.1.9	Chairs with battery back-up system – Min' stopping time and chair position when all power is lost	N/A
7.2	Control devices	
7.2.1	Marking to indicate movement direction	N/A
7.2.2	Minimum size of 10mm diameter (buttons etc)	Pass
7.2.3	Operation force less than 6N	Pass
7.2.4	Durability of control/indicator markings (Annex C)	N/A

Clause	Test Description	Result
8	Marking	
a)	Reference to BS 8474:2013	N/T (see Note 1)
b)	Name of manufacturer or supplier	N/T (see Note 1)
9	Information to be supplied by the manufacturer	N/T (see Note 1)
a)	Reference to BS 8474:2013	N/T (see Note 1)
b)	Name and address of manufacturer or supplier	N/T (see Note 1)
c)	Chair identification (model no, batch or date of m/f)	N/T (see Note 1)
d)	Safety warnings (1-8)	N/T (see Note 1)
e)	Assembly instructions (if applicable)	N/T (see Note 1)
f)	Maximum safe load	N/T (see Note 1)
g)	Instructions for safe operation	N/T (see Note 1)
h)	Information for operation of the motion lockout control	N/T (see Note 1)
i)	Statement as to chair being ready for use	N/T (see Note 1)
j)	Statement as to when chair not in use	N/T (see Note 1)
k)	Instructions for care and maintenance	N/T (see Note 1)

Table 2 – Clause 6 - Stability Requirements

Test	Test Description	Clause of BS EN 1022:2005	Result
1	Forwards overbalancing, all seating	6.2	Pass
2	Sideways overbalancing, all seating without arms	6.4	N/A
3	Sideways overbalancing, all seating with arms	6.5	Pass
4	Rearwards overbalancing, all seating with backs	6.6	Pass
5	Rearwards stability test, reclining chairs with footrest	7.5	Pass

*N/A denotes clause 'Not Applicable'.
N/T denotes clause 'Not Tested'.*

COMMENTS

Note 1: This Clause was not tested at the customers' request, as these Clause were previously tested, with the applicable tests achieving a 'Pass', under SATRA job reference FUR0251479.

CONCLUSION

The 'Cowe-KEBE- Electric Chair', supplied for testing by Kebe A/S, has satisfied the relevant requirements of BS 8474:2013 at the 110Kg user weight level to Clauses 5.2, 6 and 7 Only.



Front view of the 'Cowe-KEBE- Electric Chair'



Rear view of the 'Cowe-KEBE- Electric Chair'



Side view of the 'Cowe-KEBE- Electric Chair'



Side reclined view of the 'Cowe-KEBE- Electric Chair'

TERMS AND CONDITIONS OF BUSINESS

1. **GENERAL**
Work done or services undertaken are subject to the terms and conditions detailed below and all other conditions, warranties and representations, expressed or implied are hereby excluded.
2. **PRICES**
Prices are based on current material and production costs, exchange rates, duty and freight and are subject to change without notice.
3. **DELIVERY ESTIMATES**
Delivery estimates are made in good faith and date from receipt of a written order and full information to enable us to proceed. While SATRA or its subsidiaries (hereafter referred to as "SATRA") make every effort to fulfil them, such estimates are subject to unforeseen events and if not maintained, cannot give rise to any claim. Offers "ex stock" are subject to prior sale.
4. **CANCELLATION AND RETURNS**
Cancellation of orders for goods, services, training or consultancy is only acceptable by prior agreement of SATRA and a charge will normally be made.
5. **CLAIMS**
Claims for errors, shortages etc should be notified within 10 days of date of receipt. In the event of goods damaged in transit, packing materials should be retained for examination; otherwise no liability can be accepted.
6. **PAYMENT TERMS**
Payment terms are net 21 days from date of invoice. Failure to comply with the terms of payment may result in delayed delivery of goods and services and a review of the Customer's credit account. Should the customer become subject to an administration order, or becomes bankrupt or goes into liquidation, SATRA has a right to cancel any contract and discontinue any work. SATRA reserves the right to adjust US Dollar and Euro sales price where customer exceeds credit terms and where the exchange rate has moved more than 10% since invoicing.
7. **RETENTION OF TITLE**
All goods remain the property of SATRA until paid in full. Under no circumstances will a customer's purchase order override SATRA's Retention of Title clause. In the case of software, the ownership of the software remains with SATRA. Payment of invoices in full will entitle the customer to use the software under licence until (a) they cease to be a member of SATRA or (b) they cease trading. In both instances, the licence shall then revert to SATRA.
8. **GUARANTEE**
All goods manufactured by SATRA are guaranteed both as regards material and workmanship. Any part returned carriage paid, within twelve months from date of supply and found defective, will be repaired or replaced at SATRA's option free of charge. SATRA admits no liability for loss, damage or delay consequent on any defect in any goods supplied by SATRA.
9. **TEST REPORTS**
Results given in test reports refer only to samples submitted for analysis and tested by SATRA. A satisfactory test report in no way implies that the product tested is approved by SATRA and no warranty is given as to the performance of the product tested. SATRA shall not be liable for any subsequent loss or damage incurred by the Customer as a result of information supplied in a test report.
10. **TEST SAMPLES**
Unless otherwise agreed in advance, test samples will be disposed of 6 weeks after the date of the final report. If required, samples can be returned at the Customer's expense.
11. **RESPONSIBILITY**
Every effort is made to ensure accuracy in description, drawings and other information in correspondence, catalogues, etc but no warranty is given in this respect and SATRA shall not be liable for any error therein. SATRA carries out all tests and/or advises only on the basis that the same are carried out, made or given without any responsibility whether for negligence or otherwise. SATRA and its servants or agents will not be liable for any damage or loss direct or indirect of whatsoever kind, whether or not the same results directly or indirectly from negligence on the part of SATRA or its servants or agents.
12. **CONFIDENTIALITY**
Unless specifically excluded in the terms of an individual contract between SATRA and its Customer, the following shall apply to all reports, advice, drawings, photographs, specifications or data:
 - i. The above shall not be disclosed to third parties or used in litigation without the consent of SATRA.
 - ii. Where SATRA has given consent to disclosure, the Customer shall draw the attention of the third party to these terms of business and the basis on which SATRA undertakes test, reporting and advising. The Customer shall indemnify SATRA for any failure to do so.
 - iii. The above items are submitted to the Customer as confidential documents. Confidentiality shall continue to apply after completion of the business, but shall cease to apply to information or knowledge which may come into the public domain.
13. **CONSTRUCTION AND ARBITRATION**
The laws of England shall govern all contracts and the parties submit to exclusive jurisdiction of the courts of England, unless otherwise agreed.

Issue Date: 1st October 2009