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Deutscher Akkreditierungs Rat
DAP-PL-3415.00

Test report
no. 20-1/06

1.	Client and manufacturer	Mayer & Co. Beschläge GmbH A-5020 Salzburg
2.	Name of test item	Window fittings of various designs
3.	Test order / Test basis	Test in accordance with DIN 50021:1988-06
4.	Test result	The test was passed according to the test order in compliance with the specifications and assessment criteria of the applicant.
5.	Test date	22. February 2006
6.	Place of testing	PIV Prüfinstitut Schlösser und Beschläge Velbert
7.	Date of test report	7. March 2006
8.	Scope of test report	1 cover sheet 5 pages of enclosures
9.	Additional terms for this test report	1. Our terms of business apply 2. The test results only relate to the tested test item (no. 2) 3. The test report may not be changed and only published in its entirety.
10.	Signature	..... by order H. Wichert

Prüfinstitut Schlösser & Beschläge PIV Velbert

PIV is an
Accredited test centre according to DIN EN ISO/IEC17025
Accredited certification office according to DIN EN 45011 (PIV CERT)
Monitoring and certification office according to State Building Regulations (LBO)
Test, monitoring and certification office according to building products law (BauPG)
RAL test centre for locks and fittings according to RAL-RG 607/ff
BAU-BG test centre for DIN 4422 (travelling gear rollers)
DIN CERTCO recognised test centre

Director of the Test Institute: Hans-Jürgen Kirchhoff, Dipl.-Ing.

Test report **according to DIN EN 50021:1988-06**		Test report no. 20-1/06 Test date: 22.02.2006
A	Client	Mayer & Co. Beschläge GmbH A-5020 Salzburg
A1	Product name	Single side-hung and tilt and turn opening fittings with **MACO „TRICOAT“** surface
A2	Test order Requirements	Corrosion test DIN 50021-SS - 600 hours with max. 5% white rust share - 1000 hours with max. 5% red rust share The requirements and assessment criteria are specifications from the applicant
A3	Required number of cycles	1000 hours
A4	With interim assessment and removal of a component from each group after	240/360/480/576/696/816/912 hours
A5	With final assessment after	yes 1000 hours
A6	With photo documentation	no
A7	The test result is to be recorded as a test report.	yes
A8	Appendix photos	---
A9	Measuring equipment used	MM 42 MM 38 MM --- MM ---
A10	Test bench	PS 20 PS --- PS --- PS ---
A11	Sample quantity	80

Description of the corrosion test

1. The test pieces are suspended in the appropriate devices so that no test piece can come into contact with condensation and drip water from another piece.
2. On completion of the entire test and during interim assessments the test pieces are rinsed with distilled water and dried with a soft woollen cloth without applying pressure.
3. The assessment is carried out immediately after drying.

Description of the object to be examined	Window fittings of various designs (see table for details)

Test device	Salt spray mist chamber: Dura-Köhler type HK 500 L

Preliminary test before the actual test

Existing faults		no

Abbreviations used	W = white rust, R = red rust

Component	Trend mechanism fix, size 0		Article no.	201621
Test piece	**Hours**	**Assessment white rust**	**Assessment red rust**	**Comments**
1-8	240	OK	OK	---
2-8	360	OK	OK	---
3-8	480	OK	OK	---
4-8	576	OK	OK	---
5-8	696	OK	R	below 5%
6-8	816	OK	R	below 5%
7-8	912	OK	OK	---
8-8	1000	OK	OK	---
Red rust formation on connecting rod				

Component	Right-angle gear drive size A		Article no.	201635
Test piece	**Hours**	**Assessment white rust**	**Assessment red rust**	**Comments**
1-8	240	OK	OK	---
2-8	360	OK	OK	---
3-8	480	OK	OK	---
4-8	576	OK	OK	---
5-8	696	OK	OK	---
6-8	816	OK	OK	---
7-8	912	OK	OK	---
8-8	1000	OK	OK	---

Component	Sash angle arm size 0		Article no.	202107
Test piece	**Hours**	**Assessment white rust**	**Assessment red rust**	**Comments**
1-8	240	OK	OK	---
2-8	360	OK	OK	---
3-8	480	OK	OK	---
4-8	576	OK	OK	---
5-8	696	OK	OK	---
6-8	816	OK	OK	---
7-8	912	OK	OK	---
8-8	1000	OK	OK	---

Component	Tilt closing part		Article no.	201486
Test piece	Hours	Assessment white rust	Assessment red rust	Comments
1-8	240	OK	OK	---
2-8	360	OK	OK	---
3-8	480	OK	OK	---
4-8	576	OK	OK	---
5-8	696	W	OK	below 5%
6-8	816	OK	OK	---
7-8	912	OK	OK	---
8-8	1000	OK	OK	---
White rust formation on upper round edge				

Component	Stay arm bearing pin (mounted in stay arm bearing)		Article no.	97543
Test piece	Hours	Assessment white rust	Assessment red rust	Comments
1-8	240	OK	OK	---
2-8	360	OK	OK	---
3-8	480	OK	OK	---
4-8	576	OK	OK	---
5-8	696	OK	OK	---
6-8	816	OK	OK	---
7-8	912	OK	OK	---
8-8	1000	OK	OK	---

Component	Flap hinge bracket DT 12/18-9		Article no.	201477
Test piece	Hours	Assessment white rust	Assessment red rust	Comments
1-8	240	OK	OK	---
2-8	360	OK	OK	---
3-8	480	OK	OK	---
4-8	576	OK	OK	---
5-8	696	OK	OK	---
6-8	816	OK	OK	---
7-8	912	OK	OK	---
8-8	1000	OK	OK	---

Component	Stay arm bearing DT 12/18		Article no.	201475
Test piece	Hours	Assessment white rust	Assessment red rust	Comments
1-8	240	OK	OK	---
2-8	360	OK	OK	---
3-8	480	OK	OK	---
4-8	576	OK	OK	---
5-8	696	OK	OK	---
6-8	816	OK	OK	---
7-8	912	OK	OK	---
8-8	1000	OK	OK	---

Component	Corner bearing DT		Article no.	201601
Test piece	Hours	Assessment white rust	Assessment red rust	Comments
1-8	240	OK	OK	---
2-8	360	OK	OK	---
3-8	480	OK	OK	---
4-8	576	OK	OK	---
5-8	696	OK	OK	---
6-8	816	OK	OK	---
7-8	912	OK	OK	---
8-8	1000	OK	OK	---

Component	Corner bearing flap hinge DT		Article no.	201602
Test piece	Hours	Assessment white rust	Assessment red rust	Comments
1-8	240	OK	OK	---
2-8	360	OK	OK	---
3-8	480	OK	OK	---
4-8	576	OK	OK	---
5-8	696	OK	OK	---
6-8	816	OK	OK	---
7-8	912	OK	OK	---
8-8	1000	OK	OK	---

Component	Cuff for tilt lock		Article no.	30898
Test piece	**Hours**	**Assessment white rust**	**Assessment red rust**	**Comments**
1-8	240	OK	OK	---
2-8	360	OK	OK	---
3-8	480	OK	OK	---
4-8	576	OK	OK	---
5-8	696	OK	OK	---
6-8	816	OK	OK	---
7-8	912	OK	OK	---
8-8	1000	OK	OK	---

pH value storage tank	Target 6.6-7.2	Actual 7.0
pH value precipitation	Target 6.6-7.2	Actual 6.8
Sodium chloride storage tank	Target 50 ± 5 g	Actual 49 g
Sodium chloride precipitation	Target 50 ± 5 g	Actual 48 g
Precipitation amount	Target 1.5 ml / h ± 0.5	Actual 1.7 ml
Measurement temperature	Target 23 ± 2° Celsius	Actual 22°

Assessment	The test was passed according to the test order in compliance with the specifications and assessment criteria of the applicant. Test date: 22.02.2006 Test engineer: O.Lechte

42551 Velbert, 9 March 2006