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TÜV SÜD zertifiziert nach DIN EN ISO 9001 : 2008

Test report PB 18123 U*)

Client	ETS Europe BVBA Herentalsebaan 406/Unit D1 Belgium, 2160 Wommelgem
Object:	Examination of wear-resistance of industrial floor coatings
Specification:	DIN EN 13892-3:2015-03
Indication:	ECO RESIST
Editor / Person in charge:	Dipl.-Ing. Thorsten Hagedorn / Eric Kalks
Testing equipment / setup:	Wear testing machine according to Böhme-method

This report contents of 3 pages including cover page.

*) These test report is a transcription of test report 1827 from the 06.04.2018. Changes are the new client designation and the new product name for the tested material.

Weimar, 06.11.2018

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IAB – Institut für Angewandte Bauforschung Weimar gGmbH

1 Object

The IAB Weimar gGmbH was commissioned to carry out the testing of the wear resistance of an industrial floor coating. The test should be carried out on specimens provided by the AG according to DIN EN 13892-3. After the test, the results were classified according to DIN EN 13813: 2003-01 (wear resistance class).

2 Specimen

For the test, 3 specimens, consisting of a concrete with applied coating (about 3-5 mm), were delivered to IAB Weimar. It was stored at 105° C in a drying oven to constant mass. After cooling, the samples were tested one after another by the Böhme method.

3 Results

In each case after 4 test periods, the test specimens were removed, weighed and then rotated by 90 ° back into the sample holder. The test specimens determined after the test periods are shown in Table 1

Table 1: Dimensions and masses

Designation stated by client	Specimen number	Dimensions			Masses				
		Width	Thickness	Test Area	before wear	after 4 Test cycles	after 8 Test cycles	after 12 Test cycles	after 16 Test cycles
		[mm]	[mm]	[cm²]	[g]	[g]	[g]	[g]	[g]
1	18150	71,8	71,1	51,0	516,0	510,8	503,9	500,7	495,0
2		71,2	71,3	50,8	507,9	503,3	498,0	491,1	484,6
3		71,3	71,4	50,9	517,1	512,5	506,2	498,5	492,5

Since the surface to be tested is a coating, portions were prepared after the test to determine their bulk densities. The values are listed in Table 2.

Table 2: Values for determining raw density

Layer	Length	Width	Thickness				averaged Thickness	Volume	Mass	Density	averaged Density
	[mm]	[mm]	d1 [mm]	d2 [mm]	d3 [mm]	d4 [mm]	dm [mm]	[mm³]	[g]	[g/mm³]	[g/mm³]
1	71,41	70,70	2,99	2,51	2,33	2,25	2,52	12722,7	21,51	0,0017	0,0017
2	71,04	71,15	4,37	4,74	4,83	4,56	4,625	23377,0	40,55	0,0017	

The values obtained formed the basis for calculating the mean volume loss (Table 3). Based on the test value, the examined industrial floor coating ECO RESIST can be classified in the wear resistance class A15.

Table 3: calculation of mass and volume loss

Calculated Values				
Loss of Mass	Loss of Volume	Loss of Volume	Loss of Volume	Averages Loss of Volume
[g]	[mm³]	[cm³]	[cm³ / 50 cm²]	[cm³ / 50 cm²]
21,0	12353	12,3529	12,11	13,2
23,3	13706	13,7059	13,44	
24,6	14471	14,4706	14,19	

The results exclusively refer on the tested specimen / materials.

End of report