



Report VN721 133823.1 Test Report

Applicant

Kaindl KG Wals
Kaindlstraße 2
5071 Wals
Austria

Reference

Sandra Grumböck

Application

Summary of the results of the determination of the coefficient of friction according to EN 13893.

Test material

Laminate floor coverings

Material used in testing was anonymized for laboratory purposes. A detailed sample list is contained in the report.

Issuing and Signatures

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Translation

Authorised for Institute
Ing. Hannes Vittek

A handwritten signature in blue ink, reading 'i.v. Zambich', written over a dotted line.

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1 Order

1.1 Chronology

Date	Received	Order
11.09.2017	11.09.2017	Summary of the results of the determination of the coefficient of friction according to EN 13893.

1.2 Samples

Nr.	Received	Sample Identification	Tested in Report
1	2004-08-25	"ST"	49828, Muster 1
2	2004-08-25	"AH"	49828, Muster 2
3	2004-08-25	"SS"	49828, Muster 3
4	2004-08-25	"SC"	49828, Muster 4
5	2004-08-25	"BG"	49828, Muster 5
6	2004-08-25	"SP"	49828, Muster 6
7	2004-08-25	"FL"	49828, Muster 7
8	2004-08-25	"MO"	49828, Muster 8
9	2004-08-25	"BS"	49828, Muster 9
10	2012-08-14	"AG"	69443, Muster 1
11	2012-08-14	"AT"	69443, Muster 2
12	2012-08-14	"HG"	69443, Muster 3
13	2012-08-14	"LM"	69443, Muster 4
14	2012-08-14	"PO"	69443, Muster 5
15	2012-08-14	"SF"	69443, Muster 6
16	2012-08-14	"SG"	69443, Muster 7
17	2012-08-14	"SJ"	69443, Muster 8
18	2012-08-14	"SM"	69443, Muster 9
19	2012-08-14	"SR"	69443, Muster 10
20	2014-09-18	"AV - Wire Brushed"	74783, Muster 1
21	2015-04-21	"LG"	VNJF 080312.1, Muster 1

(Unless otherwise stated samples are provided by the customer.)

1.3 Preliminary note

The following results were obtained in the reports listed under point 1.2 and are summarized below.

2 Findings / Tests performed

2.1 Description of specimen

Tested sample: 1 - 21

The tested samples are laminate floor coverings according to EN 13329 "Laminate floor coverings – Elements with a surface layer based on aminoplastic thermosetting resins – Specifications, requirements and test methods" with different surface types.

2.2 Determination of dynamic coefficient of friction in dry condition

Tested sample: 1 – 9

Test conditions

According to ÖNORM EN 13893

Test apparatus: GMG 100

Sliding material: Building group consisting of 2 leather and 1 shoe rubber glider.

Number of measurements: 5 each, evaluation is taken only from measurements 3-5

Test climate: 20±2 °C, 65±5 % relative air humidity

Deviation from the standard: In lack of sufficient material the measurements were accomplished only in length direction.

Tested sample: 10 - 21

Test conditions

According to EN 13893

Test apparatus: GMG 200 SC

Sliders: Group consisting of two leather- and one rubber-slider

Number of measurements: 5 each, evaluation is taken only from measurements 3-5

Test climate: 23 ± 2°C / 50 ±5% relative air humidity

Test results

Sample	Designation	Length direction				Cross direction			
		Measurement			Mean value	Measurement			Mean value
3	4	5	3	4		5			
1	"ST"	0,47	0,46	0,46	0,46	--	--	--	--
2	"AH"	0,42	0,42	0,39	0,41	--	--	--	--
3	"SS"	0,52	0,53	0,52	0,52	--	--	--	--
4	"SC"	0,56	0,49	0,47	0,51	--	--	--	--
5	"BG"	0,56	0,56	0,55	0,56	--	--	--	--
6	"SP"	0,54	0,52	0,53	0,53	--	--	--	--
7	"FL"	0,58	0,51	0,52	0,54	--	--	--	--
8	"MO"	0,32	0,32	0,32	0,32	--	--	--	--
9	"BS"	0,58	0,54	0,57	0,56	--	--	--	--
10	"AG"	0,56	0,55	0,57	0,56	0,47	0,45	0,53	0,48
11	"AT"	0,65	0,70	0,65	0,67	0,64	0,63	0,63	0,63
12	"HG"	1,11	1,11	0,89	1,04	0,76	0,84	0,85	0,82
13	"LM"	0,56	0,59	0,58	0,58	0,58	0,59	0,59	0,59
14	"PO"	0,66	0,62	0,64	0,64	0,59	0,57	0,53	0,56
15	"SF"	0,75	0,64	0,66	0,68	0,58	0,56	0,58	0,57
16	"SG"	0,72	0,71	0,71	0,71	0,61	0,61	0,59	0,60
17	"SJ"	0,62	0,62	0,60	0,61	0,61	0,55	0,54	0,57
18	"SM"	0,40	0,37	0,43	0,40	0,36	0,41	0,38	0,38
19	"SR"	0,63	0,67	0,63	0,64	0,55	0,54	0,52	0,54
20	"AV - Wire Brushed"	0,53	0,53	0,49	0,52	0,50	0,54	0,54	0,53
21	"LG"	0,57	0,59	0,57	0,58	0,58	0,56	0,55	0,56

Evaluation

All results mentioned above meets the requirement of the **technical class DS** according to EN 14041.

2.3 Diagrams of determination of dynamic coefficient of friction

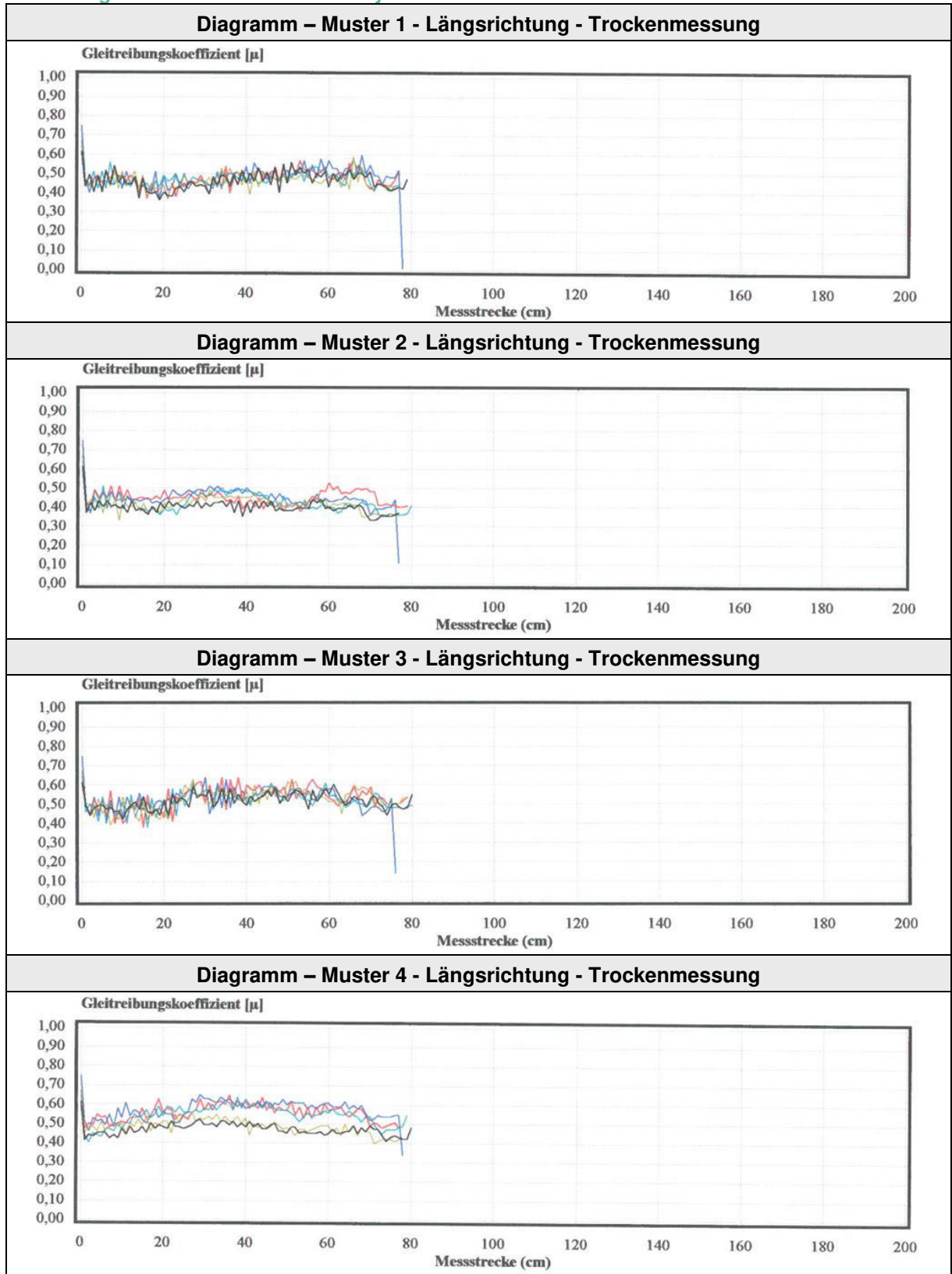
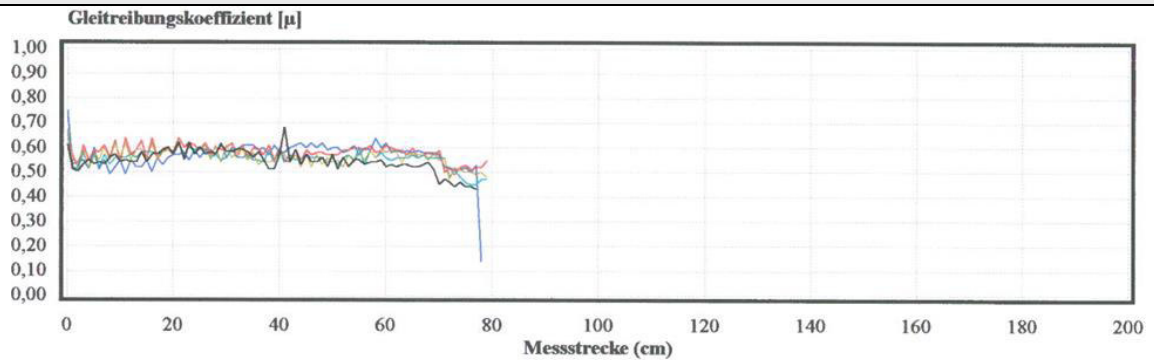
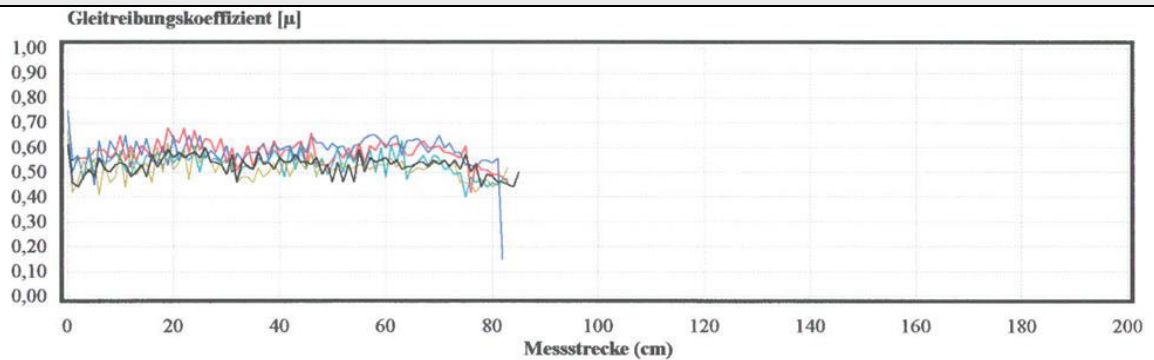
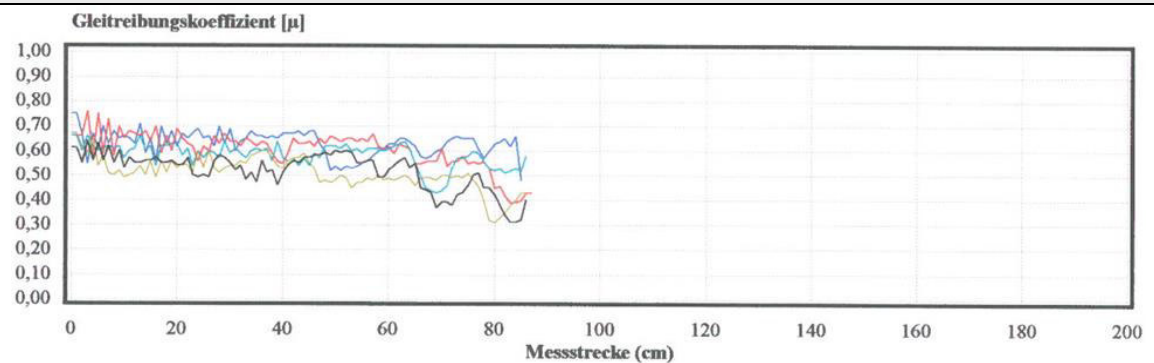
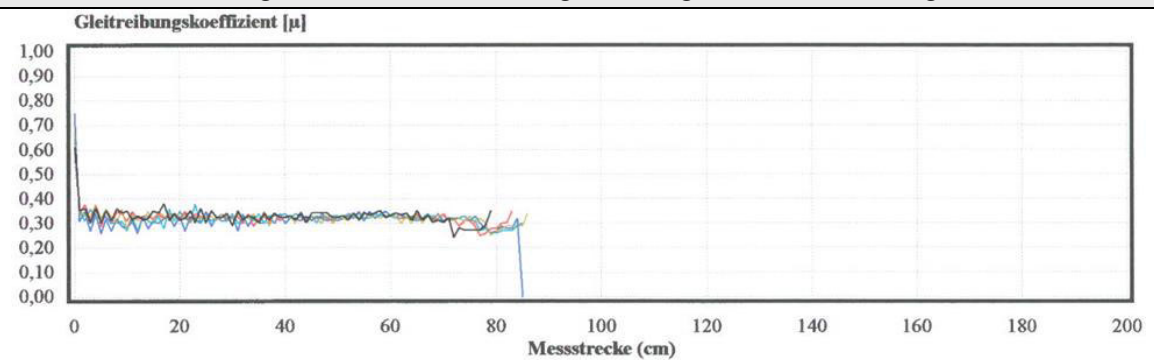
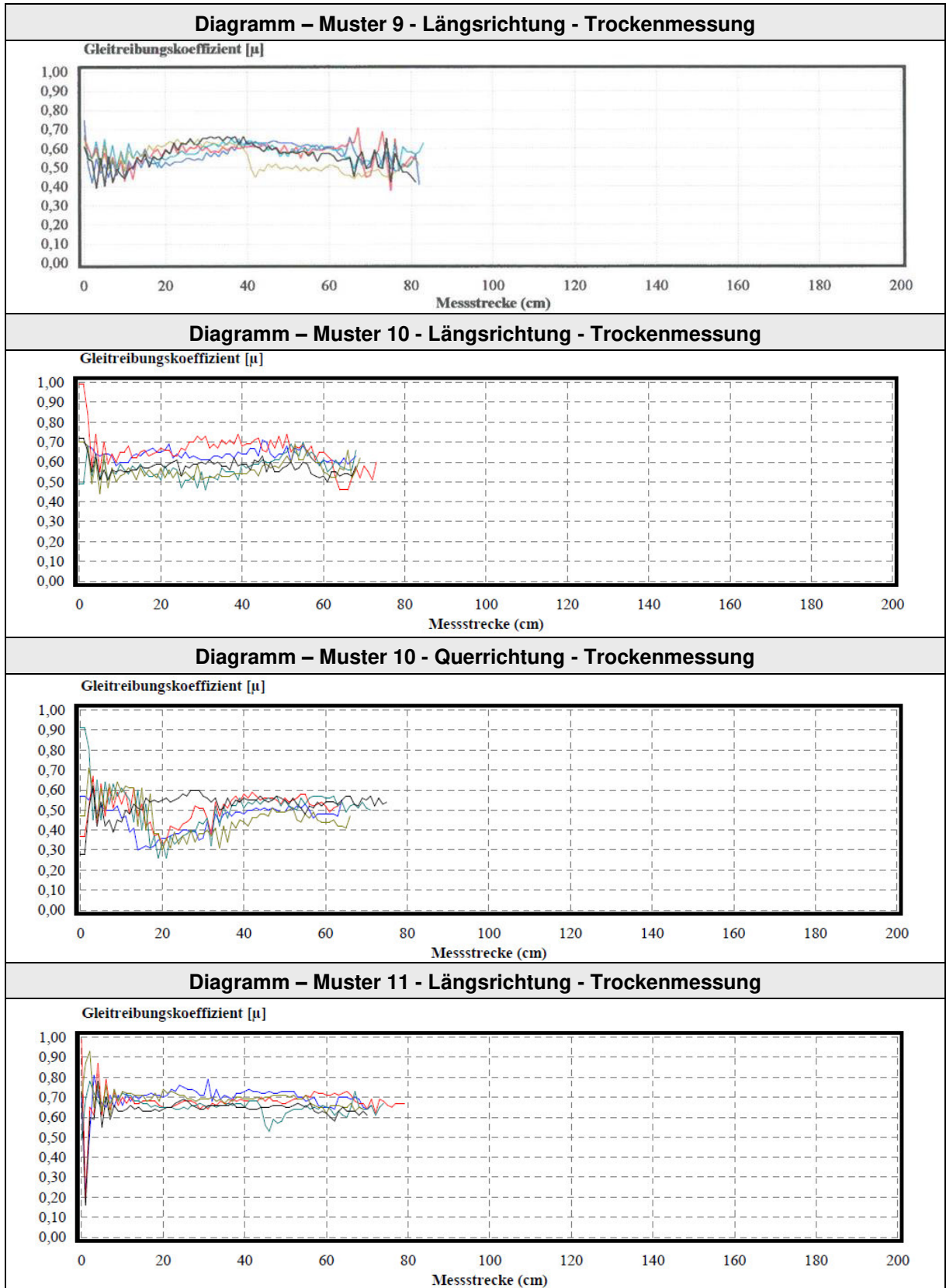


Diagramm – Muster 5 - Längsrichtung - Trockenmessung**Diagramm – Muster 6 - Längsrichtung - Trockenmessung****Diagramm – Muster 7 - Längsrichtung - Trockenmessung****Diagramm – Muster 8 - Längsrichtung - Trockenmessung**



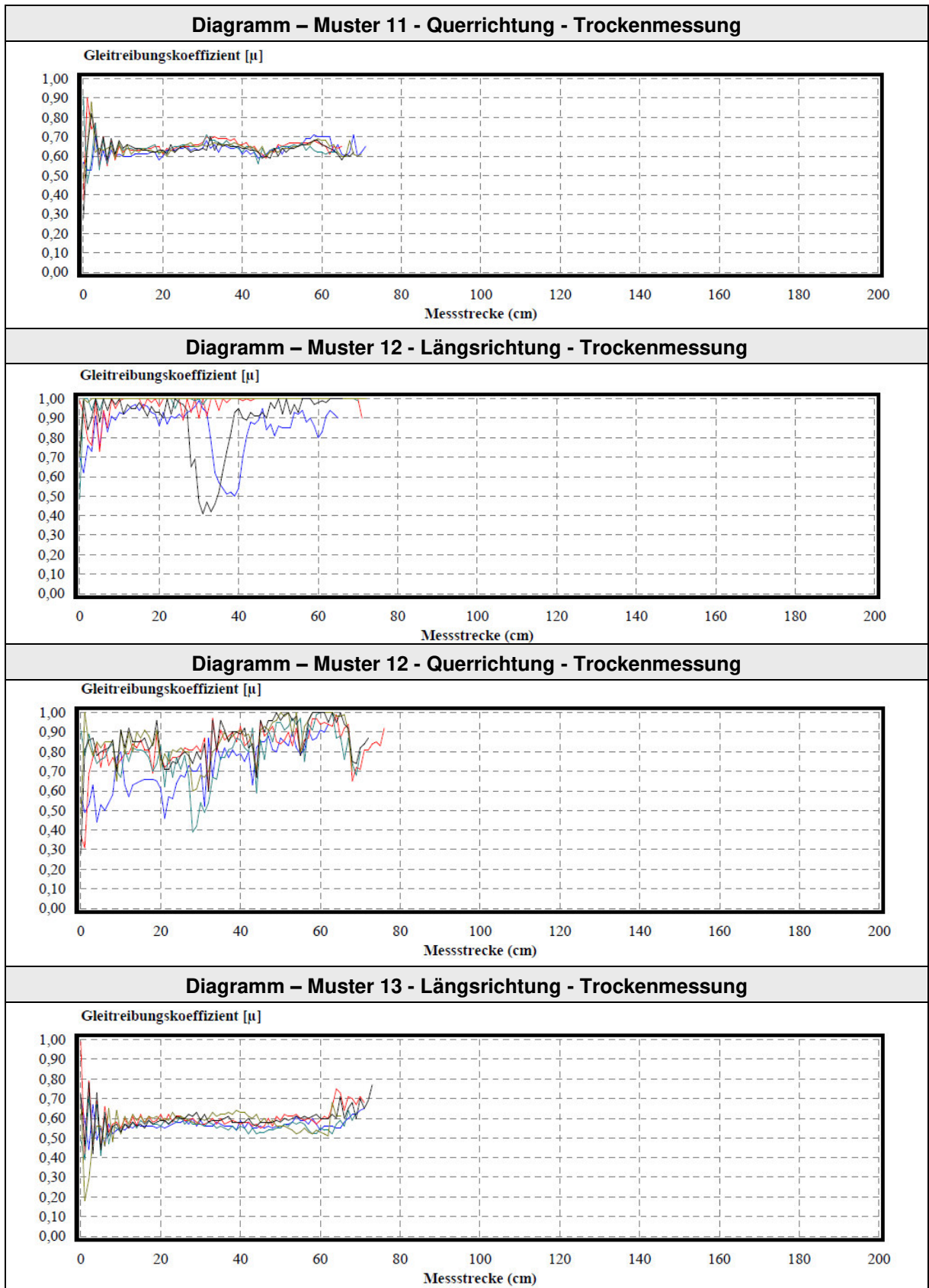


Diagramm – Muster 13 - Querrichtung - Trockenmessung

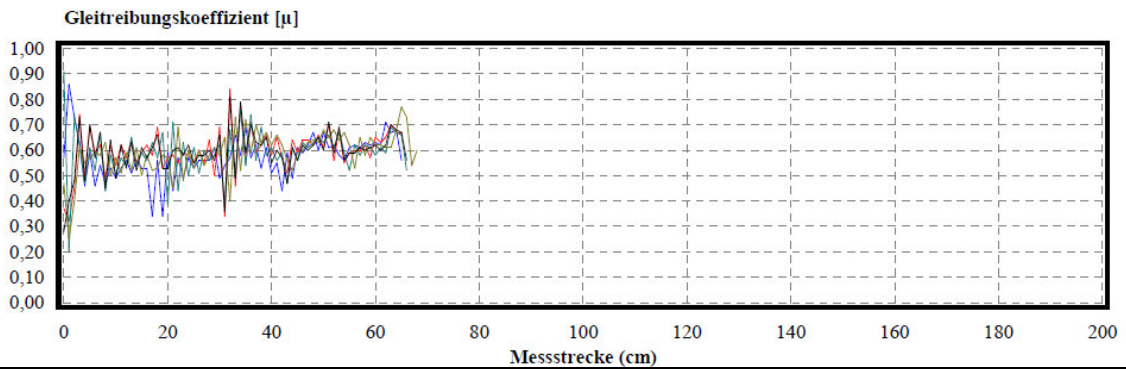


Diagramm – Muster 14 - Längsrichtung - Trockenmessung

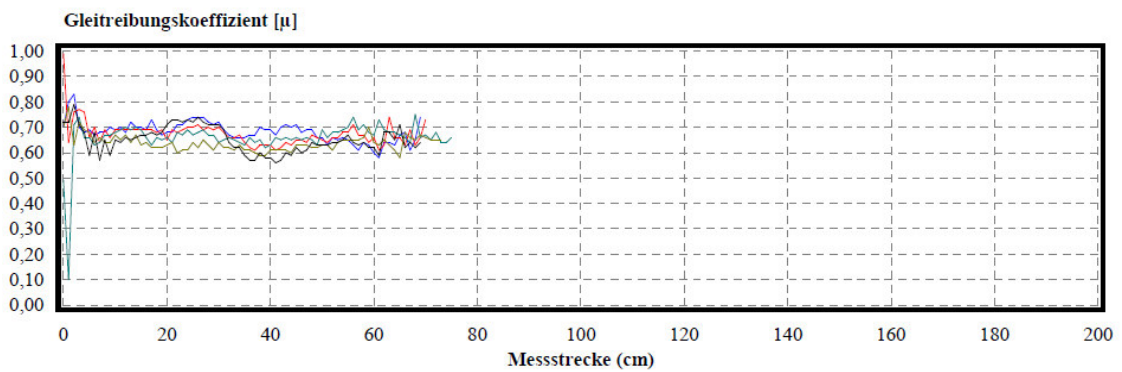


Diagramm – Muster 14 - Querrichtung - Trockenmessung

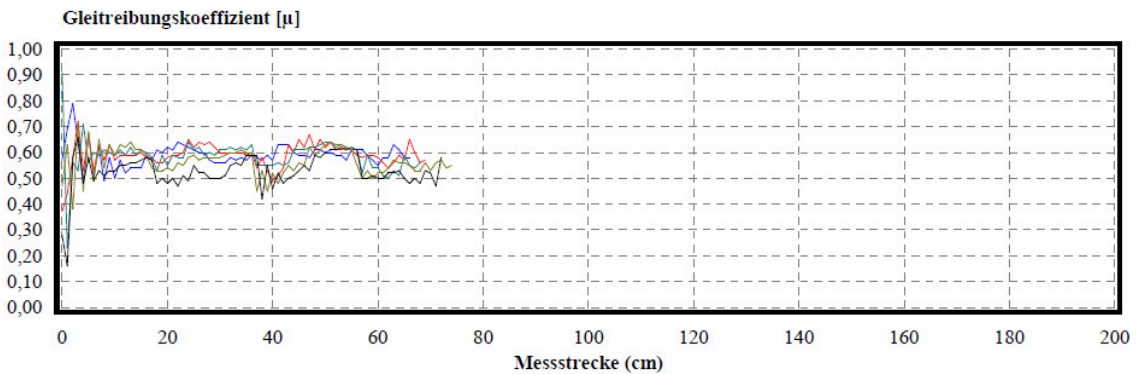


Diagramm – Muster 15 - Längsrichtung - Trockenmessung

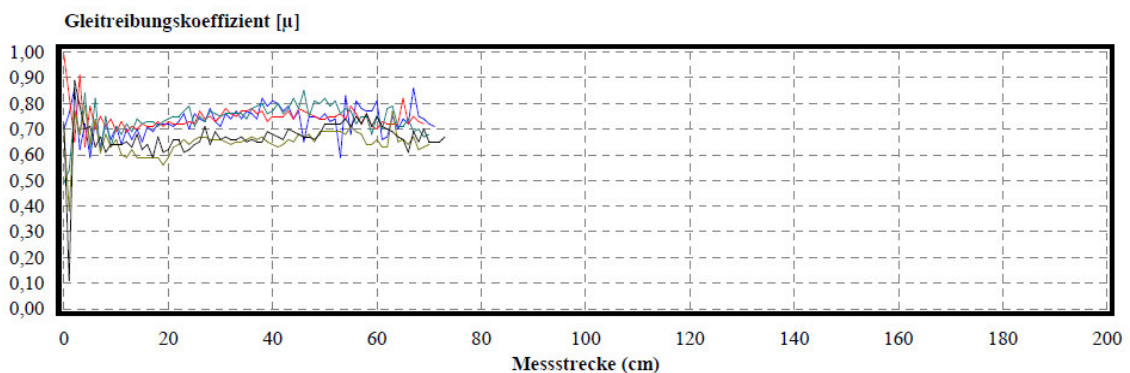


Diagramm – Muster 15 - Querrichtung - Trockenmessung

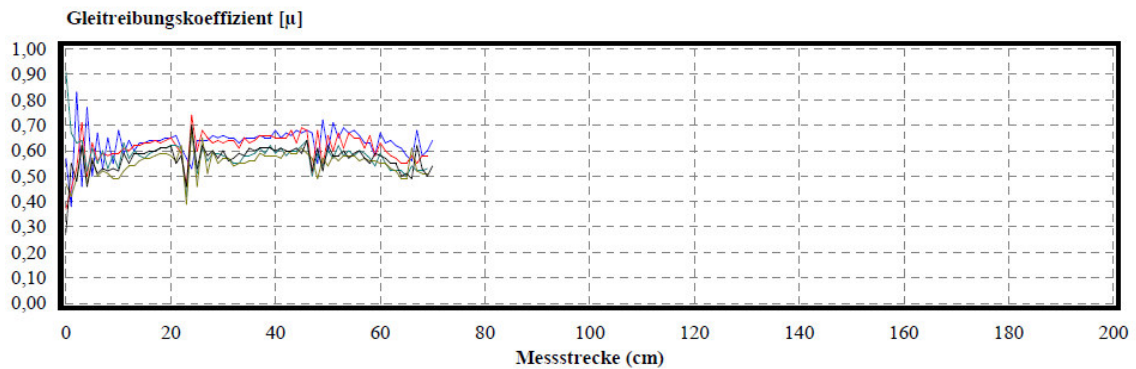


Diagramm – Muster 16 - Längsrichtung - Trockenmessung

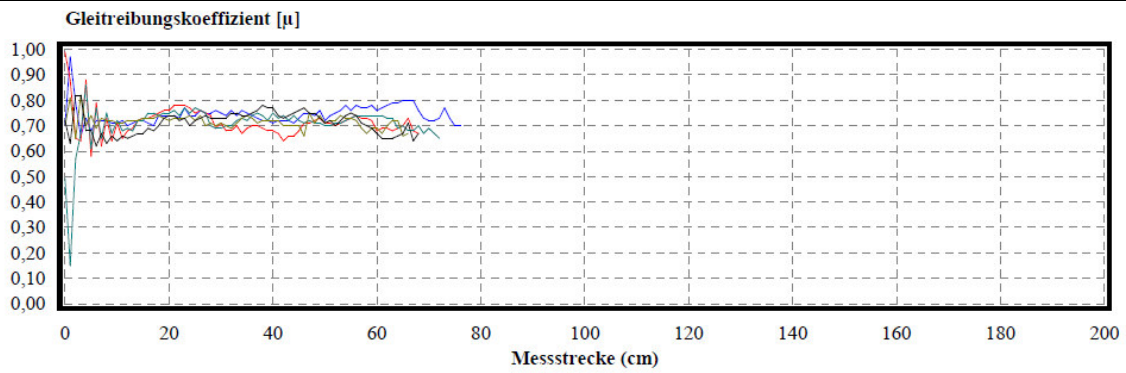


Diagramm – Muster 16 - Querrichtung - Trockenmessung

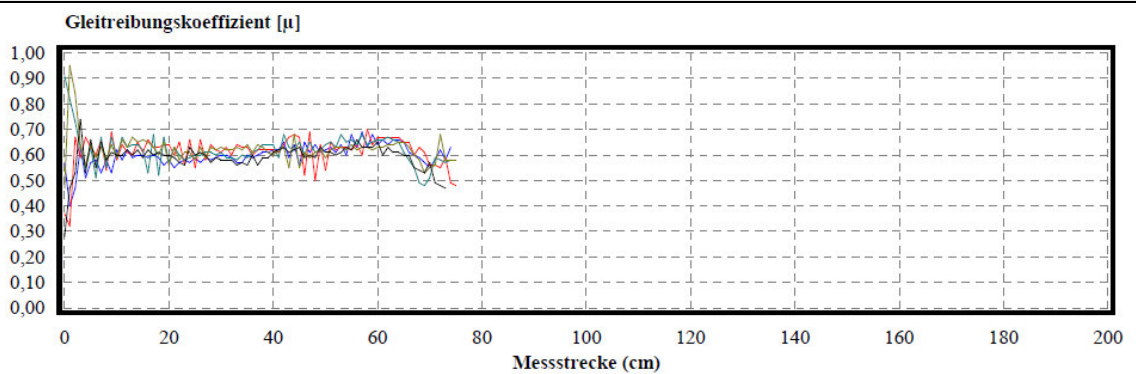


Diagramm – Muster 17 - Längsrichtung - Trockenmessung

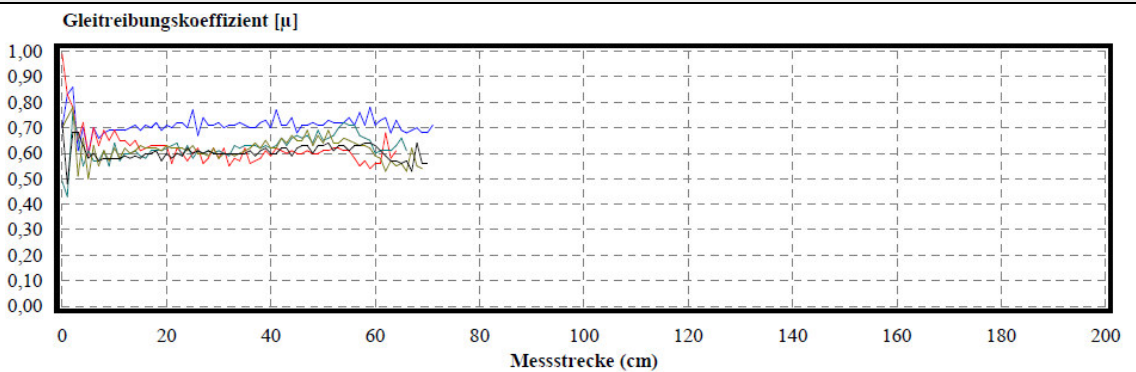


Diagramm – Muster 17 - Querrichtung - Trockenmessung

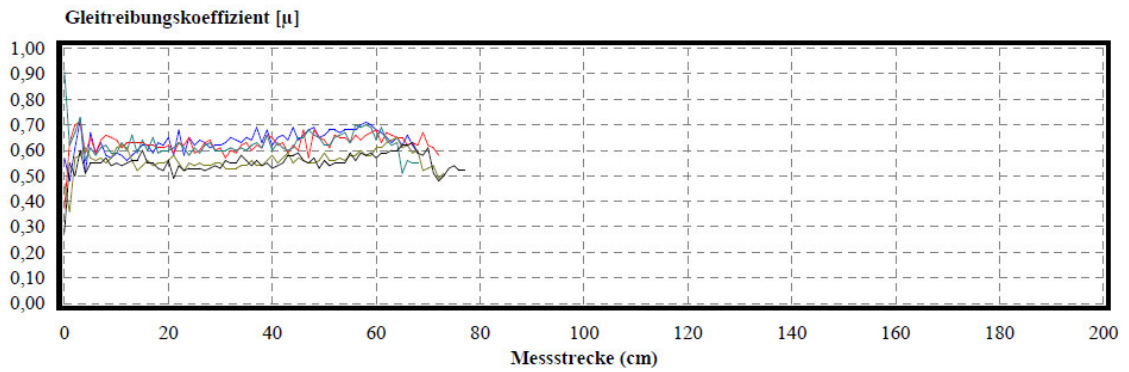


Diagramm – Muster 18 - Längsrichtung - Trockenmessung

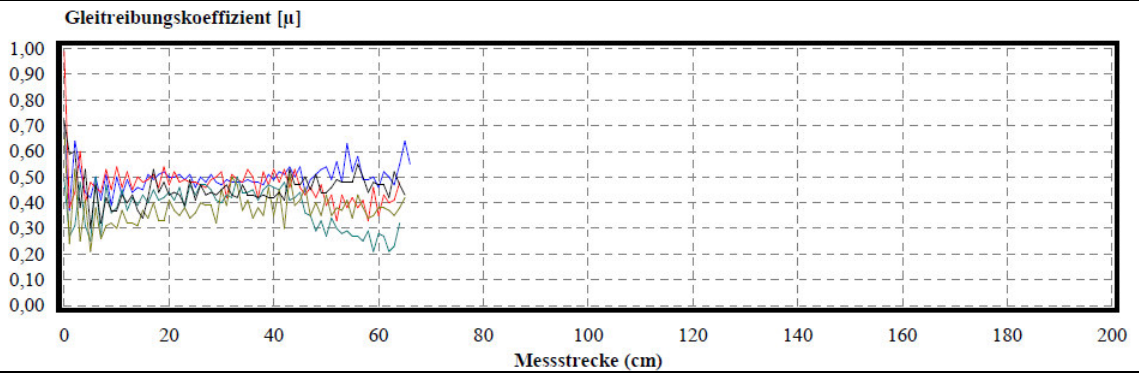


Diagramm – Muster 18 - Querrichtung - Trockenmessung

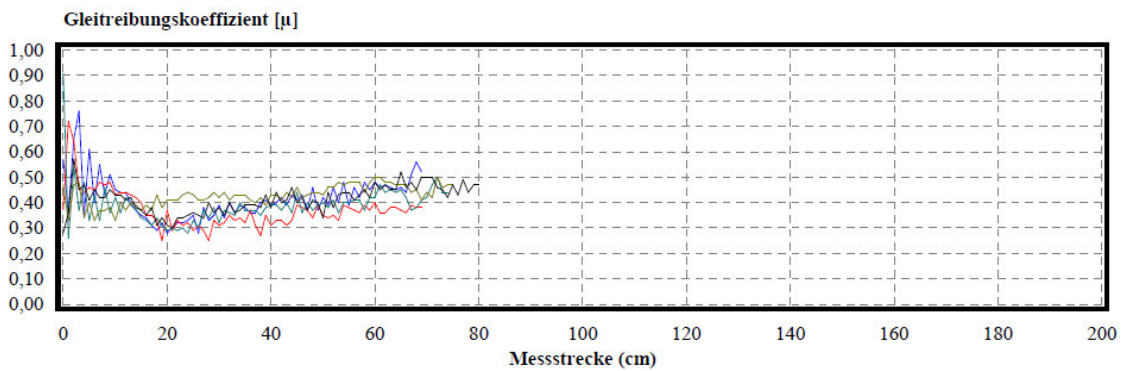
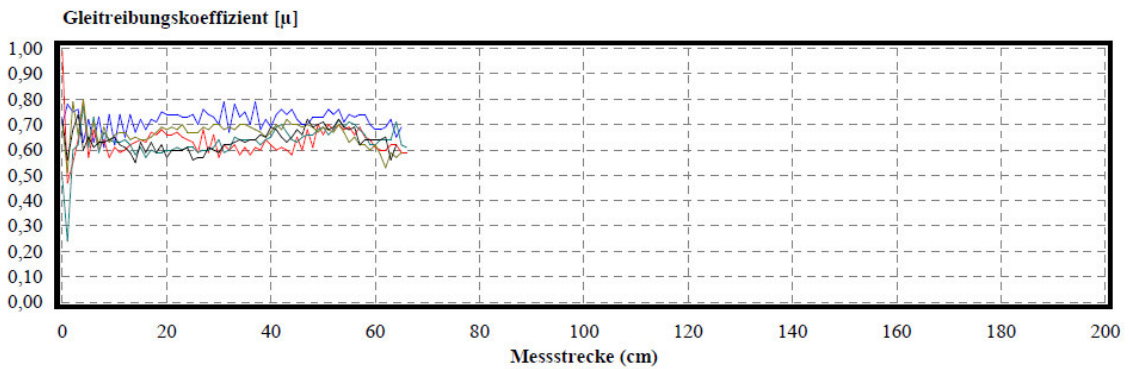
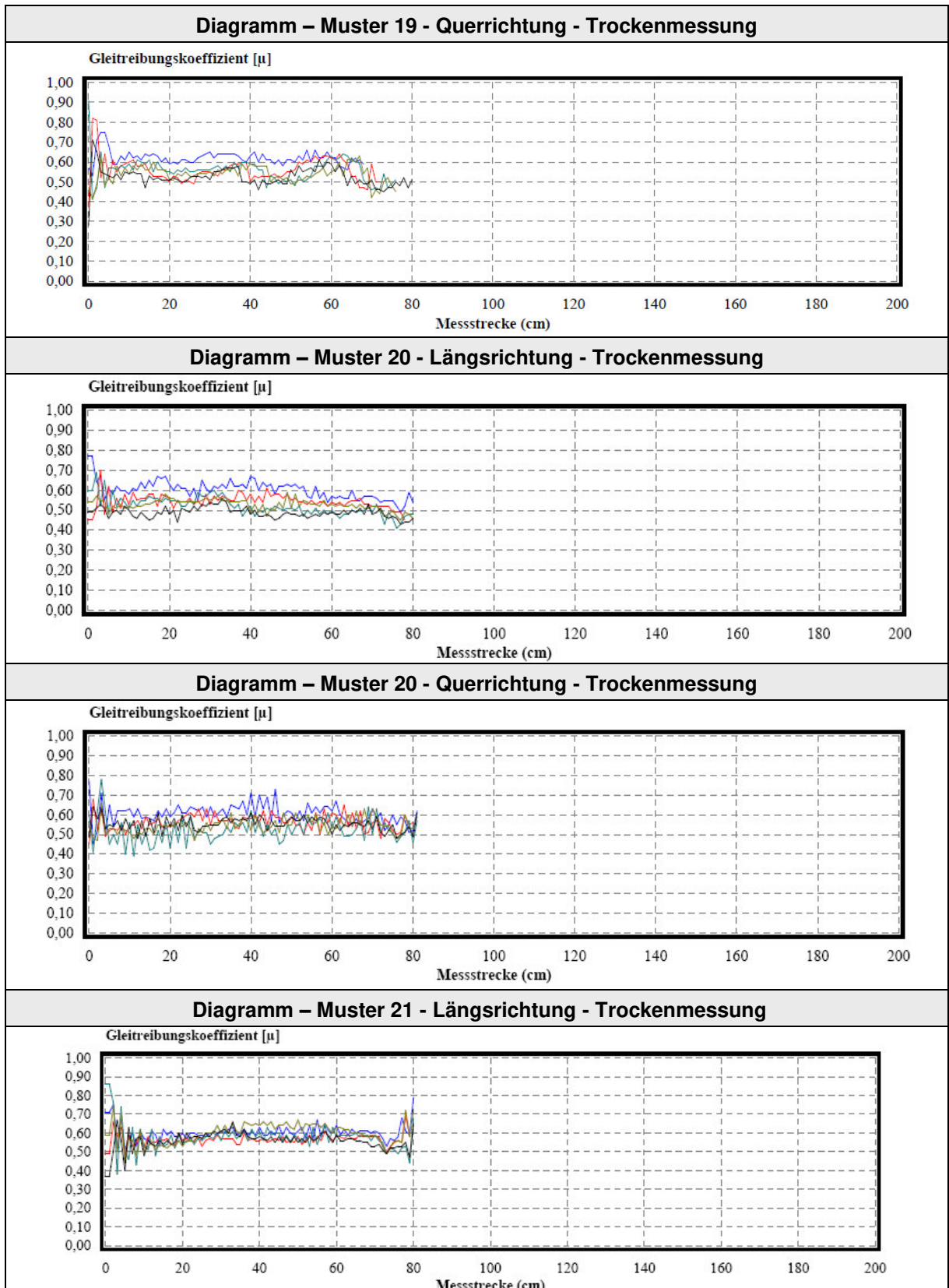
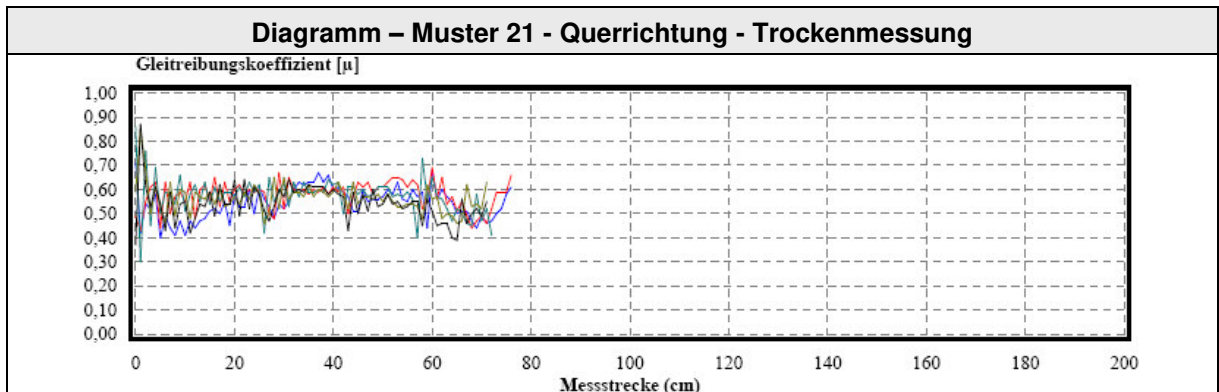


Diagramm – Muster 19 - Längsrichtung - Trockenmessung







3 Remarks

Validity

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