

<b>Prüfbericht-Nr.:</b> <i>Test Report No.:</i>	50189171 001	<b>Auftrags-Nr.:</b> <i>Order No.:</i>	174092330	Seite 1 von 11 <i>Page 1 of 11</i>
<b>Kunden-Referenz-Nr.:</b> <i>Client Reference No.:</i>	685445	<b>Auftragsdatum:</b> <i>Order date:</i>	10.10.2018	
<b>Auftraggeber:</b> <i>Client:</i>	<b>Xiamen Kseng Metal Tech Co., Ltd.</b> 3F, Huixin Wealth center, No.891, Fanghu North 2 <sup>nd</sup> Road, Huli District, Xiamen, Fujian 361000.P.R. China			
<b>Prüfgegenstand:</b> <i>Test item:</i>	<b>Maximum pull-out capacity test for standard tile interface and rail assembly</b>			
<b>Bezeichnung / Typ-Nr.:</b> <i>Identification / Type No.:</i>	<b>PV hook</b>			
<b>Auftrags-Inhalt:</b> <i>Order content:</i>	<b>Maximum pull-out capacity test for standard tile interface and rail assembly</b>			
<b>Prüfgrundlage:</b> <i>Test specification:</i>	<b>According to client's requirement</b>			
Wareneingangsdatum: <i>Date of receipt:</i>	2018.09.25	See details in clause 9.		
Prüfmuster-Nr.:	174092330-01-174092330-05			
Prüfzeitraum:	2018.10.09 - 2018.10.10			
Ort der Prüfung:	Guangzhou			
Prüflaboratorium:	TÜV Rheinland (Guangdong) Ltd			
Prüfergebnis*:	Siehe Sonstiges / See Other			
<b>geprüft von / tested by:</b>		<b>kontrolliert von / reviewed by:</b>		
10.10.2018	Yakov Yang / Project engineer	11.10.2018	Susie Ni / Reviewer	
<b>Datum</b>	<b>Name / Stellung</b>	<b>Unterschrift</b>	<b>Datum</b>	<b>Name / Stellung</b>
<i>Date</i>	<i>Name / Position</i>	<i>Signature</i>	<i>Date</i>	<i>Name / Position</i>
<b>Sonstiges / Other:</b> N/A				
<b>Zustand des Prüfgegenstandes bei Anlieferung:</b> <i>Condition of the test item at delivery:</i>		<b>Prüfmuster vollständig und unbeschädigt</b> <i>Test item complete and undamaged</i>		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend 4 = ausreichend 5 = mangelhaft P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n) N/A = nicht anwendbar N/T = nicht getestet				
Legend: 1 = very good 2 = good 3 = satisfactory 4 = sufficient 5 = poor P(ass) = passed a.m. test specification(s) F(ail) = failed a.m. test specification(s) N/A = not applicable N/T = not tested				
<b>Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens.</b> <i>This test report only relates to the a. m. test sample. 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.</i>				

**Prüfbericht-Nr.: 50189171 001**  
*Test Report No.:*

Seite 2 von 11  
*Page 2 of 11*

**Liste der verwendeten Prüfmittel**  
***List of used test equipment***

<b>Prüfmittel</b> <i>Test equipment</i>	<b>Prüfmittel-Nr. / ID-Nr.</b> <i>Equipment No. / ID-No.</i>	<b>Nächste Kalibrierung</b> <i>Next calibration</i>
Tensile Machine	1.200	2019-07-01
Height gauge	1.15	2019-08-15
Feeler gauge	1.187A	Initial calibration only
Electronic scale	TCS-A12	2019-06-12

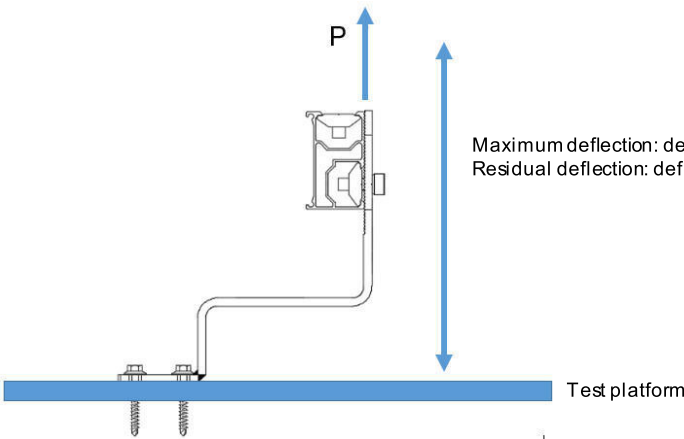
\*\*\*To be continued\*\*\*

Prüfbericht-Nr.: 50189171 001  
Test Report No.:

Seite 3 von 11  
Page 3 of 11

**Produktbeschreibung**  
**Product description**

1	<b>Produktdetails</b> <i>Product details</i>	Standard tile interface and rail assembly
2	<b>Maße</b> <i>Dimensions</i>	1) Standard tile interface/0,495kg/ 17mm*18mm*15,5mm 2) Rail assembly /0,420kg/500mm*35mm*60mm
3	<b>Bedienelemente</b> <i>Operating elements</i>	./.
4	<b>Ausstattung / Zubehör</b> <i>Equipment / Accessories</i>	./.
5	<b>Verwendete Materialien</b> <i>Used materials</i>	./.
6	<b>Sonstiges</b> <i>Other</i>	./.

7	<b>Test item and requirement</b>
	<p><b>Maximum pull-out capacity test for standard tile interface and rail assembly</b></p> <p>1: Cut the rail to a length of 500mm; 2: Fix rail on testing platform using standard tile interface in the center of the rail. 3: Apply upward load P (by using straps on each side of the standard tile interface) to the rail right above the standard tile interface progressively, till 5mm vertical displacement is recorded then cycled incrementally by 2mm, until an unload deflection reading of approx. 5mm is recorded. The test load is returned to zero for each cycle. The applied force, related maximum deflection and residual deflection will be accordingly recorded. 5 repetitive tests will be carried out.</p>  <p>Maximum deflection: deflection during loading progress. Residual deflection: deflection after load removed.</p> <p>Test platform</p>

Prüfbericht-Nr.: 50189171 001  
Test Report No.:

Seite 4 von 11  
Page 4 of 11

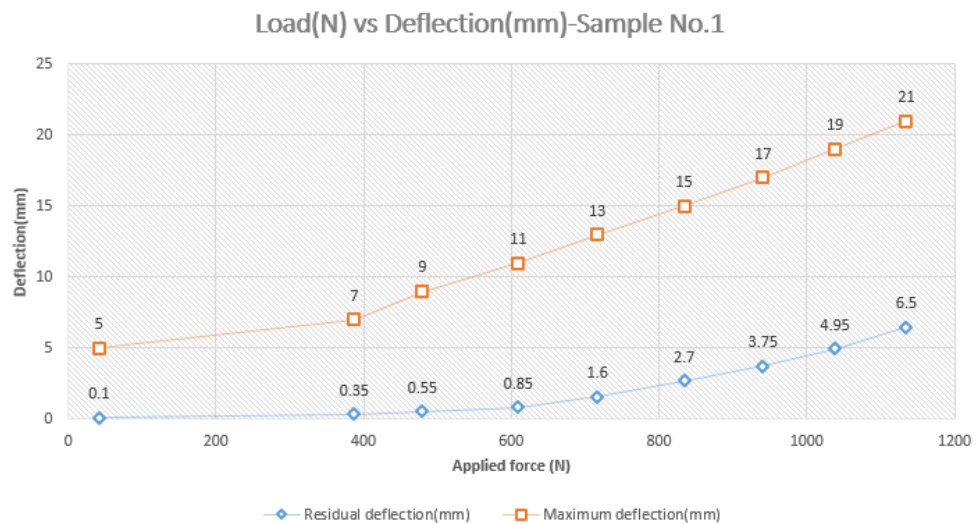
Absatz	According to client's requirement	Messergebnisse - Bemerkungen	Bewertung
Clause	Anforderungen - Prüfungen / Requirements - Tests	Measuring results - Remarks	Evaluation

**8 Test result**

**Sample No.1**

Applied force (N)	Maximum deflection (mm)	Residual deflection (mm)
41,8	5	0,10
387,3	7	0,35
479,6	9	0,55
609,3	11	0,85
716,4	13	1,60
833,8	15	2,70
940,7	17	3,75
1038,1	19	4,95
1134,7	21	6,50

**Plot :**



Prüfbericht-Nr.: 50189171 001  
Test Report No.:

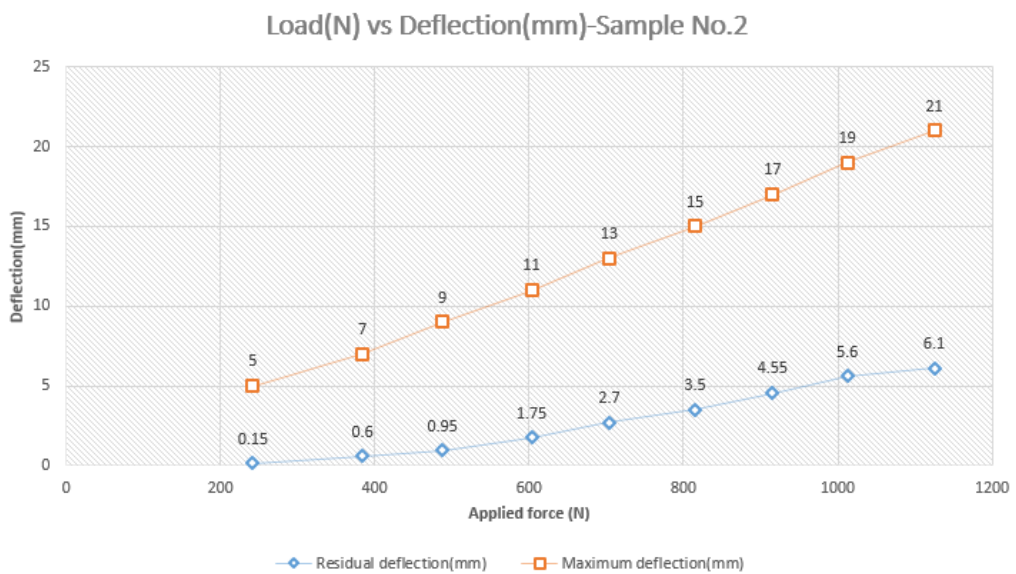
Seite 5 von 11  
Page 5 of 11

Absatz	According to client's requirement	Messergebnisse - Bemerkungen	Bewertung
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**Sample No. 2**

Applied force (N)	Maximum deflection (mm)	Residual deflection (mm)
242,1	5	0,15
384	7	0,6
487,6	9	0,95
603	11	1,75
703,8	13	2,7
815	15	3,5
915,41	17	4,55
1012,2	19	5,6
1124,8	21	6,1

**Plot:**



Prüfbericht-Nr.: 50189171 001  
Test Report No.:

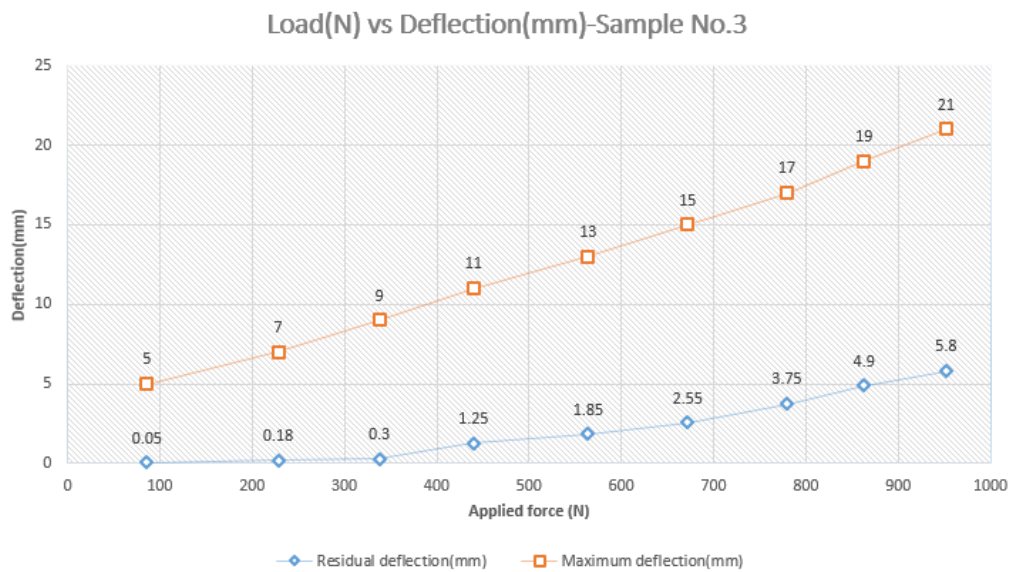
Seite 6 von 11  
Page 6 of 11

Absatz	According to client's requirement	Messergebnisse - Bemerkungen	Bewertung
Clause	Anforderungen - Prüfungen / Requirements - Tests	Measuring results - Remarks	Evaluation

**Sample No. 3**

Applied force (N)	Maximum deflection (mm)	Residual deflection (mm)
86	5	0,05
228,14	7	0,18
337,77	9	0,3
439,72	11	1,25
564,03	13	1,85
671,73	15	2,55
779,25	17	3,75
862,85	19	4,90
951,69	21	5,80

**Plot:**



Prüfbericht-Nr.: 50189171 001  
Test Report No.:

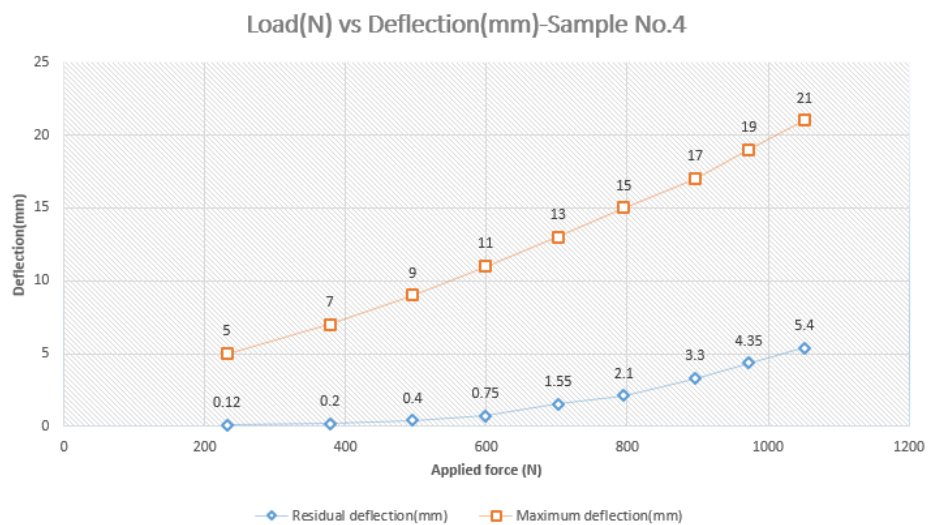
Seite 7 von 11  
Page 7 of 11

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Clause	Anforderungen - Prüfungen / Requirements - Tests	Measuring results - Remarks	Evaluation

**Sample No. 4**

Applied force (N)	Maximum deflection (mm)	Residual deflection (mm)
231,22	5	0,12
377,59	7	0,20
495,04	9	0,40
598,56	11	0,75
701,73	13	1,55
795,03	15	2,10
896,13	17	3,30
972,51	19	4,35
1051,32	21	5,40

**Plot:**



Prüfbericht-Nr.: 50189171 001  
Test Report No.:

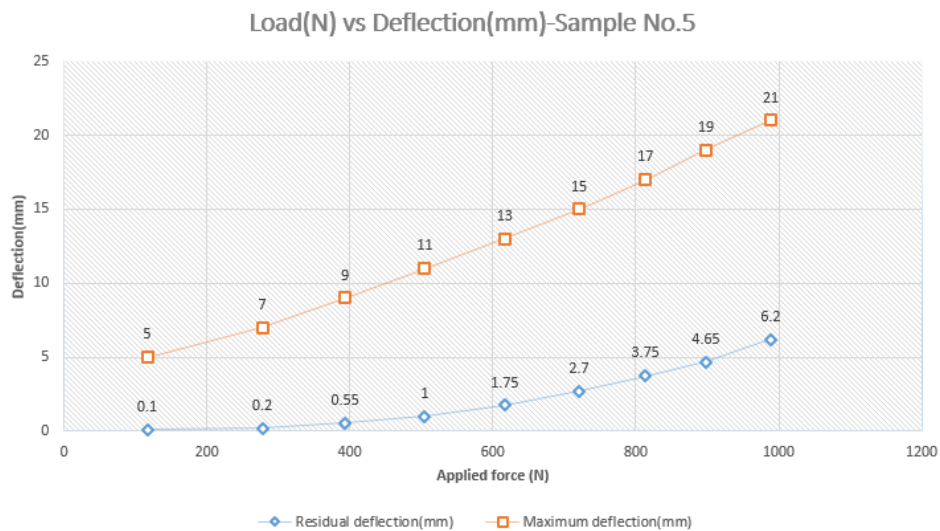
Seite 8 von 11  
Page 8 of 11

Absatz	According to client's requirement	Messergebnisse - Bemerkungen	Bewertung
Clause	Anforderungen - Prüfungen / Requirements - Tests	Measuring results - Remarks	Evaluation

**Sample No. 5**

Applied force (N)	Maximum deflection (mm)	Residual deflection (mm)
116,37	5	0,10
277,35	7	0,20
393,23	9	0,55
504,75	11	1,00
616,59	13	1,75
720,51	15	2,70
813,39	17	3,75
898,09	19	4,65
988,58	21	6,20

**Plot:**

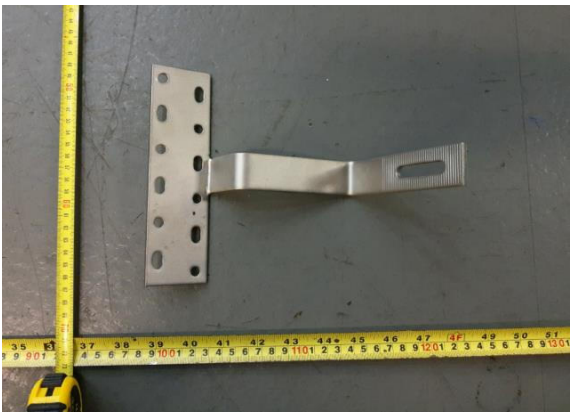
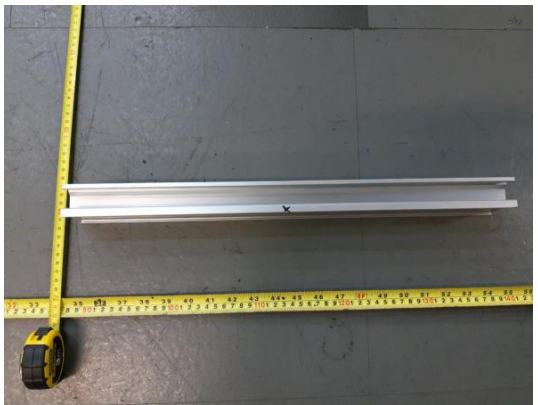
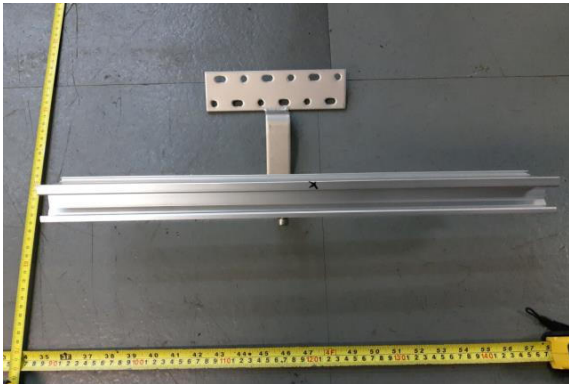
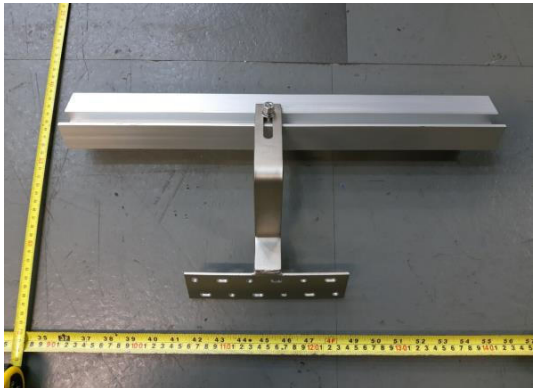
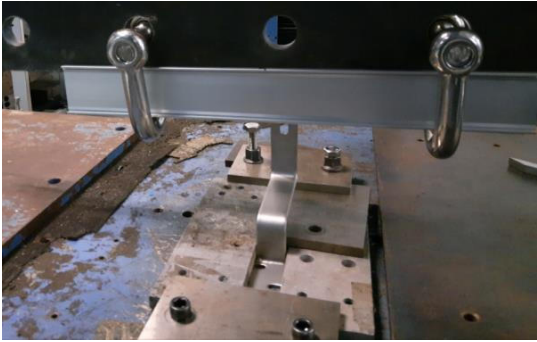





Prüfbericht-Nr.: 50189171 001  
Test Report No.:

Seite 9 von 11  
Page 9 of 11


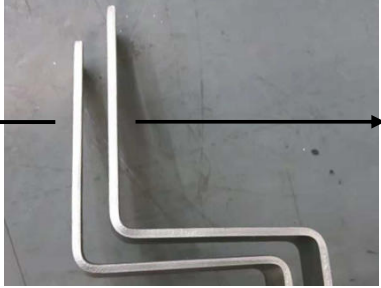

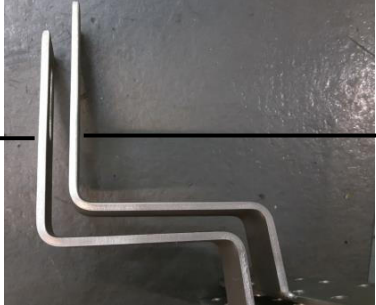

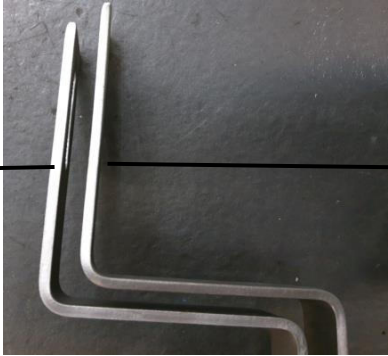
Absatz	According to client's requirement	Messergebnisse - Bemerkungen	Bewertung
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9	Photo		
9.1	Product photo		
			
	Standard tile interface	Rail	
			
	Assembly in whole	Assembly in whole	
9.2	Test photo		
9.2.1			
	Before test(Sample No.1)	Sample No.1	

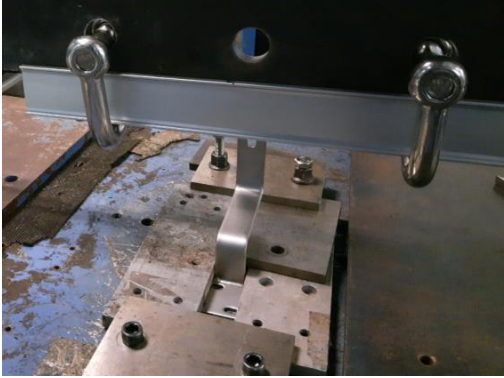
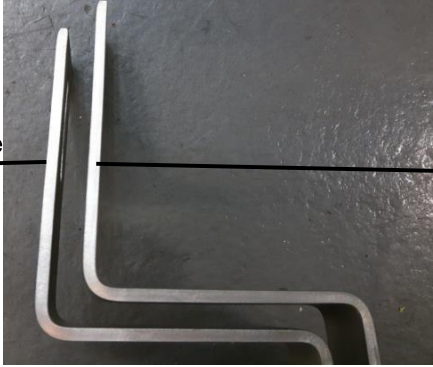
Prüfbericht-Nr.: 50189171 001  
Test Report No.:

Seite 10 von 11  
Page 10 of 11

Absatz	According to client's requirement	Messergebnisse - Bemerkungen	Bewertung
Clause	Anforderungen - Prüfungen / Requirements - Tests	Measuring results - Remarks	Evaluation

9.2.2	 <p style="text-align: center;"><b>Before test(Sample No.2)</b></p>	 <p style="text-align: center;"><b>Sample No.2</b></p>
9.2.3	 <p style="text-align: center;"><b>Before test(Sample No.3)</b></p>	 <p style="text-align: center;"><b>Sample No.3</b></p>
9.2.4	 <p style="text-align: center;"><b>Before test(Sample No.4)</b></p>	 <p style="text-align: center;"><b>Sample No.4</b></p>

<b>Prüfbericht-Nr.: 50189171 001</b>		Seite 11 von 11	
<i>Test Report No.:</i>		Page 11 of 11	
Absatz	<b>According to client's requirement</b>	Messergebnisse - Bemerkungen	Bewertung
Clause	Anforderungen - Prüfungen / <i>Requirements - Tests</i>	<i>Measuring results - Remarks</i>	<i>Evaluation</i>

9.2.5		
	<b>Before test(Sample No.5)</b>	<b>Sample No.5</b>

\*\*\* End of Report \*\*\*