



Table 6.1 Protocol for transverse load testing of the TKM 1 beam clip, series TKM1_quer_2210

TKM 1 beam clamp		Date: 25.10.2012				
Job number:		101 12 324				
Anchor size/Delivery date:		SMK Meister GmbH & Co. KG TKM 1 with threaded rod M8 Date of delivery note: 20.07.2012				
Test series:		Flange slope of the beam 14%, IPE 200 Series with clamp, TKM 1 Transverse load, beam not lubricated				
Test description:		Placement test with subsequent transverse load test, beam not lubricated				
Tester/technician		Dipl.-Ing. C. Kurz, Mr. P. Geiger				
Beam:	I-NP 200 see diagram	Hydraulic cylinder: HZ 013				
Threaded rod:	M8	Measuring frequency: 5 Hz				
Clamp:	TKM 1	Measuring box: KMD 029 (9.9881)				
Attachment Ø / t [mm] :	Traverse with threaded rod M8	Travel sensor: WA 047 (0.0774)				
Hammer:	1200 g	Measuring/controlcabinet: MS3				
Series: TKM1_quer_2210_		1	2	3	4	5
Date of test execution	(dd.mmy.yyyy)	22.10.2012				
Flange height clamping point	(mm)	11.30				
Position of clamp after fitting: left	(mm)					
fittingleft	(mm)	47.05	46.98	45.93	47.38	46.92
fittingright	(mm)	47.64	47.26	46.72	46.36	46.45
fittingaverage	(mm)	4.35	47.12	46.33	46.87	46.69
all hammer impacts: left	(mm)	13.54	16.80	14.23	16.95	14.30
all hammer impacts: right	(mm)	13.90	17.62	14.32	15.56	13.80
all hammer impacts: average	(mm)	13.72	17.21	14.28	16.26	14.05
Total shift when placed, average	(mm)	33.63	29.91*	32.05	30.62	32.64
Number of impacts		5	5*	5	6	5
Failureload N_{U}	(kN)	4.22	2.94	2.51	4.03	3.94
Average value N_{U}	(kN)	3.22				
Variation coefficient		27.60%				
Shift s for Failure load N_{U}	(mm)	6.98	3.53	3.52	6.55	3.94
Shift s for $0.5 \cdot N_{U} = 1.61 \text{ kN (mm)}$	(mm)	1.37	1.52	1.23	1.04	1.92
Average value s for $0.5 \cdot N_{U}$	(mm)	1.42				
Variation coefficient		23.50%				
Type of failure		A	A	A	A	A
Legend for type of failure A=Sliding off beam						
Comments: *) V2 by 2 additional hammer impacts subsequent bracing; additional shift: 5.445 mm -> Total shift V2: 29.91 + 5.45 = 35.36mm Shift caused partially by bending of the anchor rod						