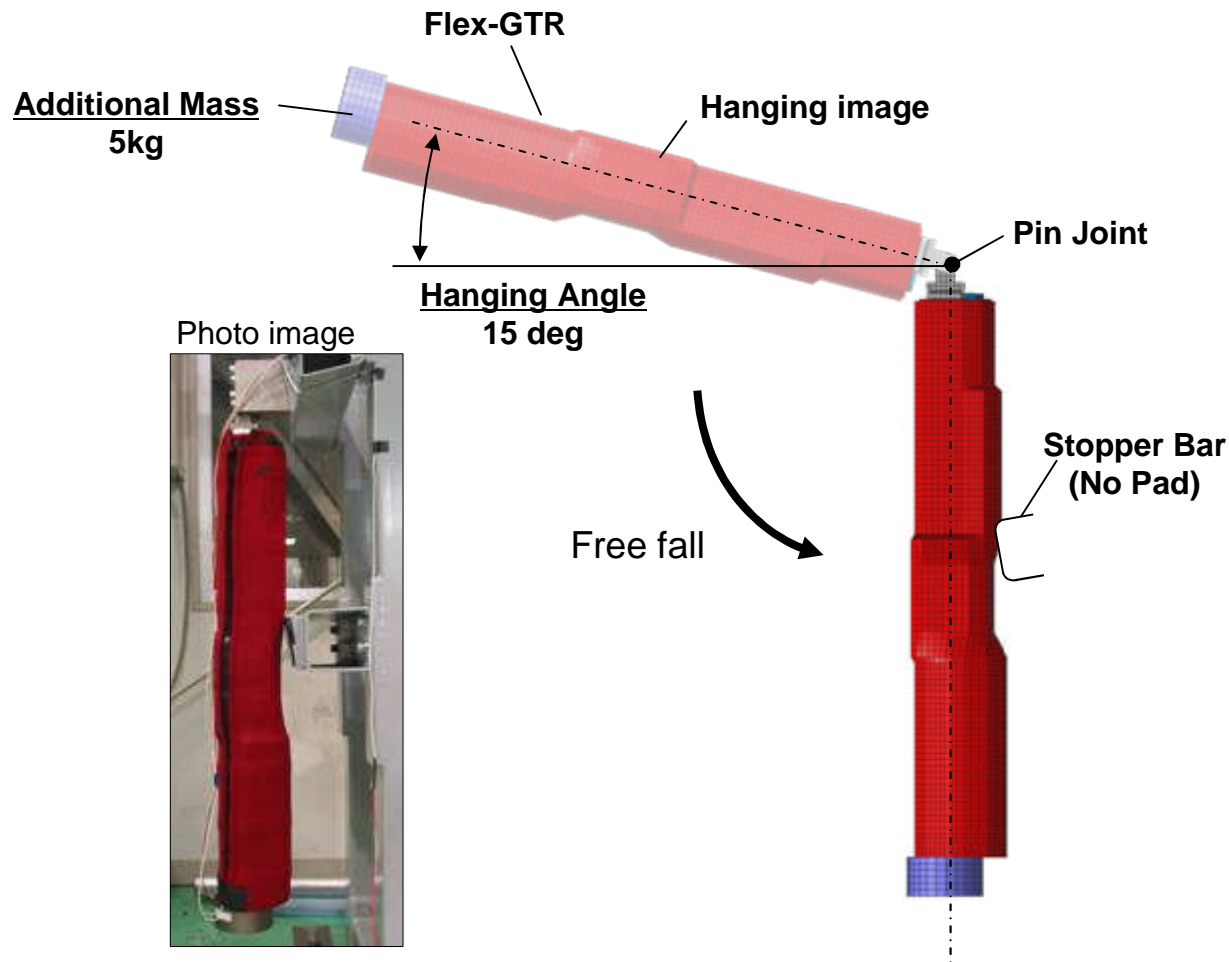


**Requirement Corridor (BASt-Method)
for Pendulum Type (Type 3) Dynamic Calibration Test Method**

TEG-120
1 Dec. 2009
JAMA-JARI

Pendulum Type (Type 3) Calibration Test Model
Upside down, with Additional Mass, **with Flesh, No Pad**



Requirement Corridor (BAsT-Method) for Pendulum Type (Type 3) Dynamic Calibration Test Method

- Test Data: JARI_Oct.22_2009 (SN03), JARI_Nov.24_2009 (SN01), Pendulum Type (Type 3) Dynamic Calibration Test Data
- Corridor Making Method: BAsT-Method

Corridor Making Method

BAsT-Method

- Upper Corridor: Max. x 1.05
- Lower Corridor: Min. x 0.95

Ref.: TEG-094

Test Data

Pendulum Test (Type-3)

Data: JARI_Oct.22_2009 (SN03), JARI_Nov.24_2009 (SN01)

	Femur-3 (Nm)	Femur-2 (Nm)	Femur-1 (Nm)	Tibia-1 (Nm)	Tibia-2 (Nm)	Tibia-3 (Nm)	Tibia-4 (Nm)	Knee-ACL (mm)	Knee-PCL (mm)	Knee-MCL (mm)	Knee-Acc (g)
JARI_SN03_Flesh_091022-01	79.61	133.46	193.91	259.26	200.79	151.56	102.05	10.37	4.23	23.96	60.41
JARI_SN03_Flesh_091022-02	79.17	133.11	193.98	258.84	200.43	151.65	102.61	10.21	4.34	23.98	61.50
JARI_SN03_Flesh_091022-03	79.16	133.46	194.63	259.33	201.29	152.76	103.18	10.13	4.42	23.98	61.98
JARI_SN03_Flesh_091022-04	79.71	134.15	196.06	257.02	197.70	148.65	99.84	10.21	4.40	24.09	59.40
JARI_SN03_Flesh_091022-05	80.25	134.34	196.11	255.60	196.12	147.36	98.68	10.22	4.43	24.14	61.12
JARI_SN03_Flesh_091022-06	85.65	138.99	198.89	257.69	198.31	149.61	100.55	10.26	4.47	24.32	61.61
JARI_SN01_Flesh_091125-01	78.57	127.57	186.21	247.51	195.18	142.35	99.03	9.49	5.01	24.22	51.01
JARI_SN01_Flesh_091125-02	84.98	134.85	191.94	248.52	195.54	142.83	99.49	9.65	4.92	24.49	58.91
JARI_SN01_Flesh_091125-03	83.21	132.98	190.56	248.57	195.56	142.83	99.42	9.55	5.00	24.47	58.33
JARI_SN01_Flesh_091125-04	83.42	132.27	189.21	250.03	197.51	144.34	100.69	9.64	5.04	24.65	57.99
JARI_SN01_Flesh_091125-05	85.99	134.79	191.56	250.59	197.25	144.33	100.80	9.56	5.10	24.64	58.07
JARI_SN01_Flesh_091125-06	83.63	131.20	188.09	249.77	195.95	142.31	98.81	9.64	5.11	24.78	58.49
Average	81.95	133.43	192.60	253.56	197.64	146.72	100.43	9.91	4.71	24.31	59.07
St.Dev	2.80	2.65	3.69	4.76	2.17	4.01	1.51	0.34	0.35	0.29	2.94
CV(%)	3.42	1.98	1.92	1.88	1.10	2.73	1.50	3.46	7.37	1.19	4.97

Pendulum Test (Type-3) Corridor

Data: JARI_Oct.22_2009 (SN03), JARI_Nov.24_2009 (SN01), Method: BAsT

	Tibia-1 (Nm)	Tibia-2 (Nm)	Tibia-3 (Nm)	Tibia-4 (Nm)	Knee-ACL (mm)	Knee-PCL (mm)	Knee-MCL (mm)
Average	253.56	197.64	146.72	100.43	9.91	4.71	24.31
Max.	259.33	201.29	152.76	103.18	10.37	5.11	24.78
Min.	247.51	195.18	142.31	98.68	9.49	4.23	23.96
St.Dev	4.76	2.17	4.01	1.51	0.34	0.35	0.29
CV(%)	1.88	1.10	2.73	1.50	3.46	7.37	1.19
Max. Ratio (%)	2.27	-1.85	-4.12	-2.74	-4.63	-8.58	-1.94
Min. Ratio (%)	-2.39	-1.24	-3.00	-1.74	-4.19	-10.03	-1.45
Upper Corridor	272.29	211.35	160.40	108.34	10.89	5.36	26.02
Lower Corridor	235.13	185.42	135.19	93.74	9.02	4.02	22.76
Upper Corridor Ratio (%)	7.4%	6.9%	9.3%	7.9%	9.9%	14.0%	7.0%
Lower Corridor Ratio (%)	-7.3%	-6.2%	-7.9%	-6.7%	-9.0%	-14.5%	-6.4%

Pendulum Test (Type-3): Up side Down, Additional Mass 5 kg, with Flesh

Max. Ratio: Max. / Average -1

Min. Ratio: Min. / Average -1

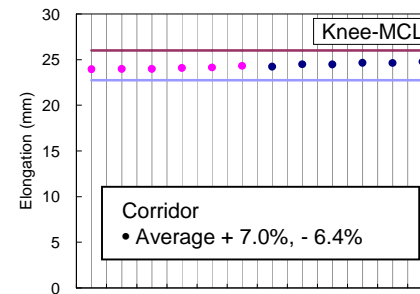
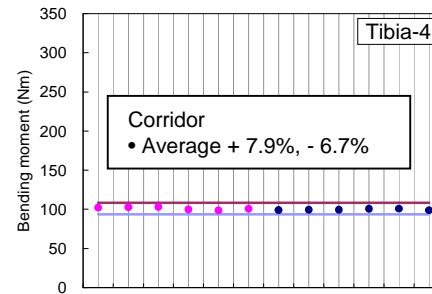
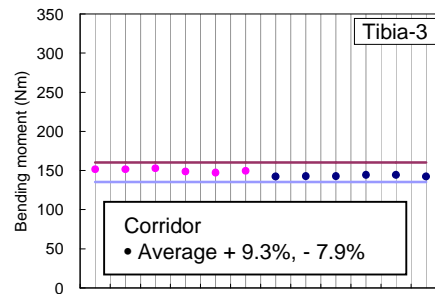
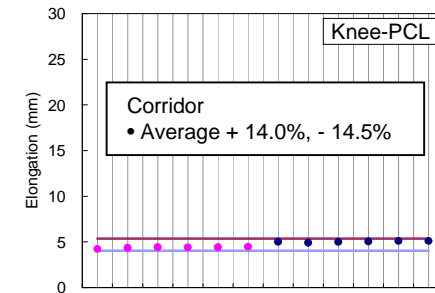
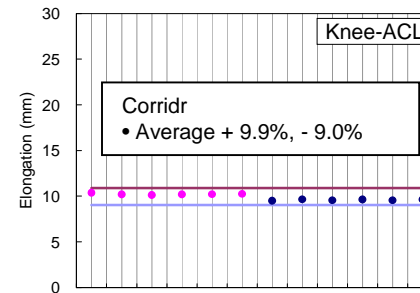
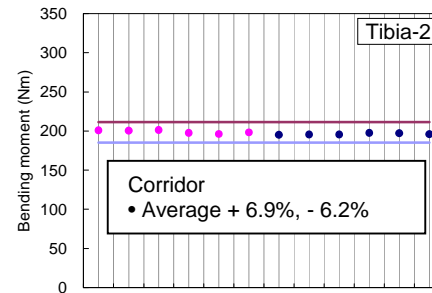
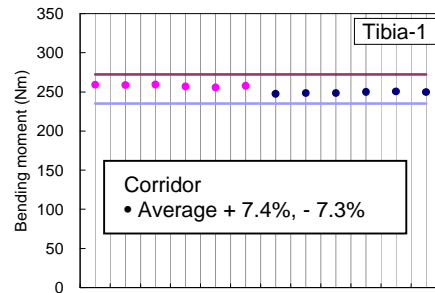
Upper Corridor Ratio: Upper Corridor / Average -1

Lower Corridor Ratio: Lower Corridor / Average -1

- All of the upper and lower corridors were made by using test data (Max. x 1.05, Min. x 0.95)

Requirement Corridor (BASt-Method) for Pendulum Type (Type 3) Dynamic Calibration Test Method

- Test Data: JARI_Oct.22_2009 (SN03), JARI_Nov.24_2009 (SN01), Pendulum Type (Type 3) Dynamic Calibration Test Data
- Corridor Making Method: BASt-Method



- Flex-GTR-proto. (SN03), JARI_Oct.22_2009
- Flex-GTR-proto. (SN01), JARI_Nov.24_2009
- Upper Corridor, Data: JARI_Oct.22_2009 (SN03), JARI_Nov.24_2009 (SN01), Method: BASt
- Lower Corridor, Data: JARI_Oct.22_2009 (SN03), JARI_Nov.24_2009 (SN01), Method: BASt

• All of the upper and lower corridors were made by using test data (Max. x 1.05, Min. x 0.95)