Report of Performance Test

TITAN Retractable Fall Prevention Instrument "SB-20"

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SANKO CO., LTD.
Quality Assurance Section
Maruhashi

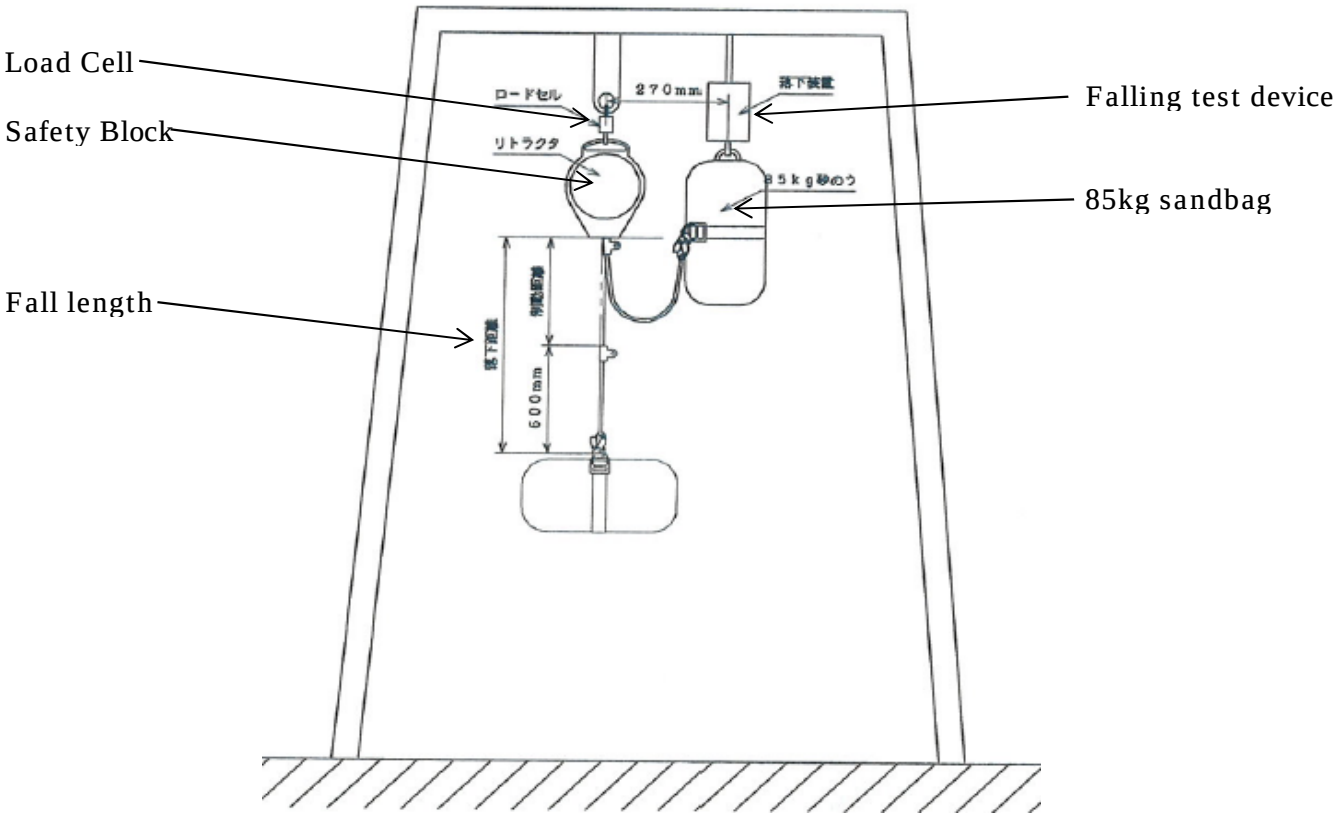
1 Item	TITAN Retractable Fall Prevention Instrument "SB-12" (Self Retracting Life Line)		
2 Testing Procedure	According to defined testing methon on "Structual Guidline for Safety Belt" based on the technical guideline of the National Institute of Occupational Safety and Health of Japan"NIIS-TR-No.35(1999)".		
3 Devices for test	Tensile Testing Machine	Capability	100kN
	Dynamic Warp Measuring Instrument	Capability	29.4kN
	Falling Test Tower	Hight	10m

4 Test Method

4.1 Shock Absorption Test of the Retractable Fall Prevention Instrument (hereinafer referred to as Safety Block)

As described below;

- Hang the Safety Block by the anchorage carabiner to a load cell hooked up to the Falling Test Tower
- Hang 85kg sandbag to the hook of the wire life line of the Safety Block
- Pull out the wire life line by 600mm and set the sandbag to the falling test device
- Have the sandbag free-fall
- Check if there is any break and/or fracture, impact value and fall length



Structual Guidline for Safety Belt

No break and/or fracture
Maximum impact Load : under 8.0kN,
Fall lengh : within 2.0m

Test Outcome

Make		Impact Load		Fall length		Any break and/or fracture
		Standard	Impact Value	Standard	600mm + Braking distance	
SB-20	Specimen 1	8.0kN and under	3.75kN	2.0m or less	1410mm	None
	Specimen 2		3.36kN		1340mm	None

4.2 Locking Performance Test of the Safety Block

Hang the Safety Block
Set a weight of 30kg to the Safety Block and drop the weight
Check if the lock function works well and unlock after the test

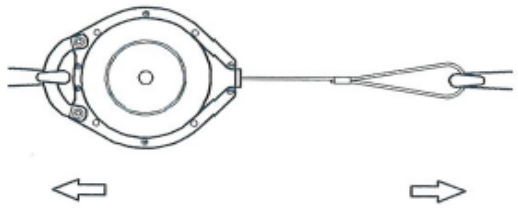
Structual Guidline for Safety Belt
It locks and keep locking until unlocked

Test Outcome

Make		Lock	Unlock
SB-20	Specimen 1	OK	OK
	Specimen 2	OK	OK

4.3 Strength Test of the Safety Block

As shown below;
Set the Safety Block and the Wire Life Line to tensile tester
Test the tensile load



Structual Guidline for Safety Belt
Must not be broken nor fractured under 11.5kN load
Nor become deformed so far forth as to lose its function

Test Outcome

Make		Standard	Outcome
SB-20	Specimen 1	11.5kN and more	Wire broken at 14.4kN
	Specimen 2		Wire broken at 14.2kN

End of the Report