

TABLE 1 NEGATIVE CORRECTIONS IN MM TO THE DISTANCE MEASURED WITH A YAMAYO CARBON STEEL TAPE

Tape Tension N (kgf)										
Distance measured	10 (1)	20 (2)	30 (3)	40 (4)	50 (5)	60 (6)	70 (7)	80 (8)	90 (9)	100 (10)
50m	12.1	10.8	9.4	8.1	6.7	5.4	4.0	2.7	1.3	0
60m	14.5	12.9	11.3	9.7	8.1	6.5	4.8	3.2	1.6	0
70m	17.0	15.1	13.2	11.3	9.5	7.6	5.7	3.8	1.9	0
80m	19.4	17.3	15.1	13.0	10.8	8.6	6.5	4.3	2.2	0
90m	21.9	19.4	17.0	14.6	12.1	9.7	7.3	4.9	2.4	0
100m	24.3	21.6	18.9	16.2	13.5	10.8	8.1	5.4	2.7	0

Note: The tape has been calibrated with a standard pull of 100N (10kgf)

$$\text{Correction (mm)} = (P_0 - P)L/EA$$

where P_0 = Tape tension at calibration (kgf), P = Tape Tension (kgf), L = Distance measured (mm), E = Young's Elastic Modulus (kgf/mm²),
 A = Cross-sectional area of the tape (mm²) for the Yamako carbon steel tape $A = 1.75\text{mm}^2$ and $E = 2.11 \times 10^4 \text{ kgf/mm}^2$