

AMTI

Compact Tandem Force-Sensing Treadmill



Mounting Options

• On top of the floor with stairs as shown

• Recessed into the floor. When recessed into the floor the handrails can be removed allowing the treadmill force platforms to be used as stationary force platforms

• Belts can be synchronized or controlled independently for each model

• Removable handrails

• Computer-controlled speed and incline

• Tandem belt design eliminates the requirement for the test subject to remain centered on the medial-lateral axis

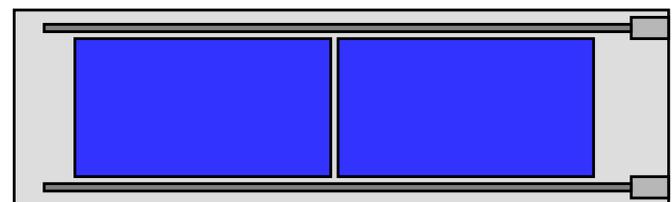
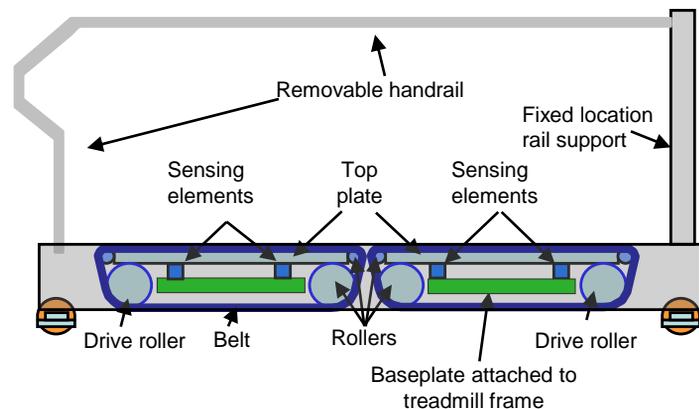
14 mm diameter rollers between belts and 1 mm space between belts makes two belts feel like one continuous belt

• Low-mass composite force plates with sensing elements located near the belt surface

• Tandem belt design eliminates loss of data caused by “double support” during walking

• High-performance digital motor controllers

Tandem treadmill side view
(schematic representation)



Top view

AMTI Force and Motion

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AMTI Compact Tandem Force-Sensing Treadmill



Rugged construction designed and built for the long run.....

The treadmill has a non-inclined height of 11 inches with no protrusions on the sides or ends. The end-to-end treadmill can be used as two floor-mounted force plates when incorporated into a walkway with its handrails removed. Control electronics are built into the treadmill; force plate and control cables are the only connections required between the treadmill and the operator area.

General Specifications

- Vertical forceplate capacity: 8800 N
- Horizontal forceplate capacity: 4500 N
- Speed: 0-20 kilometers per hour adjustable in .06 kilometer per hour increments
- Installed force platform resonant frequency 300 Hz (Fx, Fy End-to-End model)
 - Linearity: +/- 0.2 % FSO
 - Hysteresis: +/- 0.2 % FSO
 - Elevation up to 25% grade
- Reversible belt direction for uphill and downhill walking and running.
- One instrumented force platform (Fx, Fy, Fz, Mx, My and Mz) under each belt.
- Analog and digital outputs available for each force platform through supplied MSA-6 amplifiers
- Removable side and front handrails
- Handrail centers are 91 cm high and 91 cm apart
- Each belt measures 74 (L) X 66 (W) cm (end-to-end)
- Total belt coverage: 148 (L) X 66 (W) cm
- Overall dimensions including handrails: 203 (L) X 112 (W) X 125 (H) cm
- Power requirements: 208 VAC, 3-phase 20-Amp twist lock receptacle (Other voltage configurations available, consult AMTI)
- Weight: 400 Kg

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