

# TRAINING ON ANTAM STANDARD CODE For TESTING OF KNAPSACK MISTERS CUM DUSTERS

**PART - 6 : MEASURING INSTRUMENTS, TOLERANCES AND TEST RIGS**



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**2nd Training of Trainers on ANTAM Codes  
Organized by ANTAM and CAMTC**


# **MEASURING INSTRUMENTS, TOLERANCES AND TEST RIGS**



BY


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No	Test items	Measuring device (example)	Accuracy	Notes
1	Rotational speed, rev/min		$\pm 0.5$	Tachometer
2	Anemometer		$\pm 0.1$	Portable anemometer or Pitot sensor

3	Time variation, s		$\pm 1$	Digital stopwatch
4	Noise variation, dB (A)		$\pm 0.5$	Sound level meter

5	Vibration, %		$\pm 10$	Accelerometer
6	Weight variation, kg		$\pm 0.05$	Weighing balance of sufficient accuracy


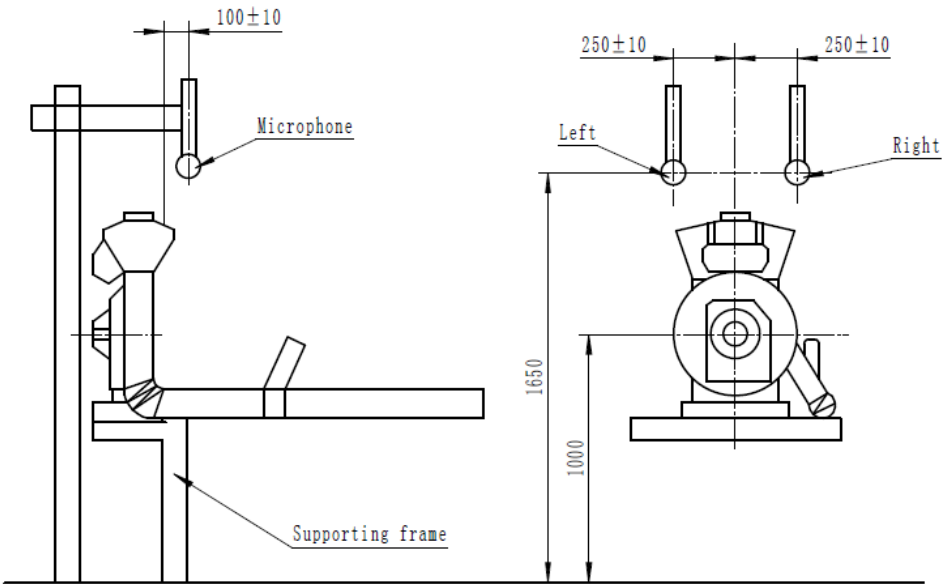
7	Weight variation, g		$\pm 0.05$	Weighing balance of sufficient accuracy
8	Pressure, % FS		+ 1 (< 10 kPa)	Pressure, % FS

9	Wind speed, $\text{m s}^{-1}$		$\pm 5\%$ FS	Anemometer
10	Temperature, $^{\circ}\text{C}$		$\pm 1^{\circ}\text{C}$	Thermometer

11	Relative Humidity, % FS		$\pm 1\%$	Hygrometer
12	Paint layer thickness	 <p>The image shows a digital coating thickness gauge (CAMTC) with a probe and six calibration standards. The gauge is white with a digital display and a keypad. The probe is connected to the gauge by a cable. The calibration standards are small, rectangular, and labeled with numbers. A small white card with Chinese text is placed in front of the standards.</p>	$2\ \mu\text{m}$ $\pm 3\%$	Digital coating thickness gauge

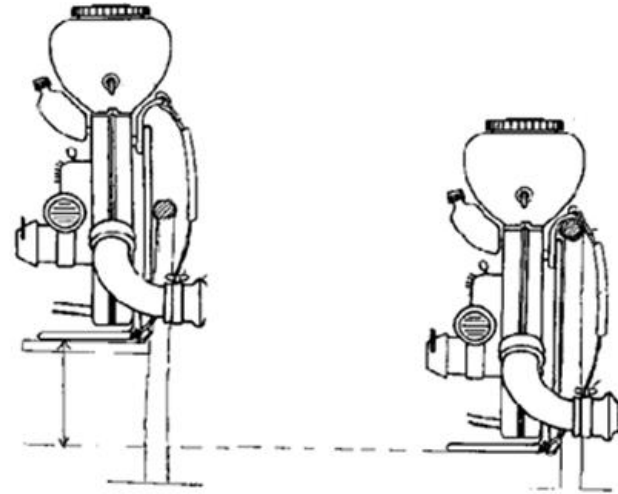


13	Distance, mm	 A vernier caliper tool, used for precise measurements, shown against a white background.	0.1 mm	Vernier caliper,
14	Distance, m	 A measuring tape, shown in its blue carrying case with yellow tape, used for measuring distances in meters.	0.01m	Mesuring tape, 0.01m

<p>15</p>	<p>Strength of material testing (N)</p>		<p>1N</p>	
<p>16</p>	<p>Test rig used to fix the mister cum duster for blower test, misting or dusting range and noise test</p>	<p style="text-align: right;">Dimensions in mm</p> 		

17

Test rig used for the strap test



**a) Release position**

**b) Impact position**

Test rig for fan overspeed test

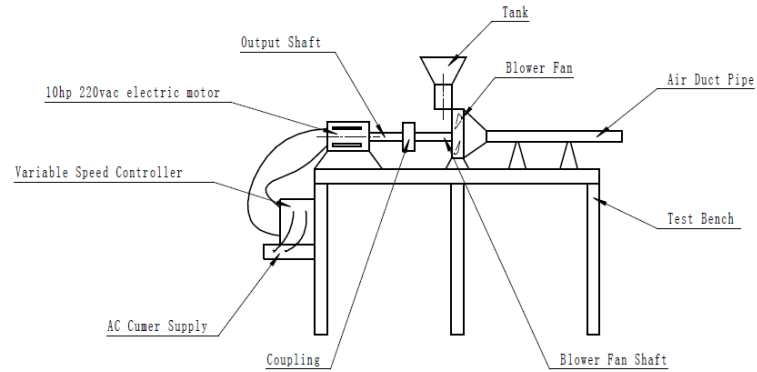


Figure Test rig for over-speed mister-cum-duster test

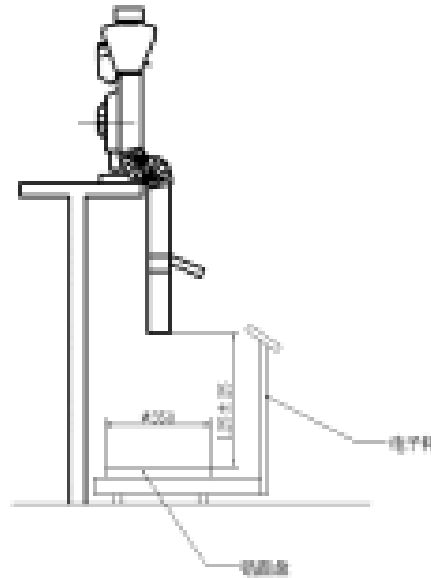
Aging box



$\pm 1\text{ }^{\circ}\text{C}$

Stove

Test rig for  
blower test  
acc. ANSI  
172.5  
Balance 5kg  
range



+/-  
10g