

## PERSONNEL TEST STATION

Code H24\* and H26\*

### Description

A digital instrument with a programmable IC at its heart that will test the resistance of an operator's grounding system. The H241/H261 will test the operator's wrist strap, the H243/H263 will test the operator's conductive footwear (e.g. shoes, heelgrinder or toe grinder) and the H245/H265 is capable of testing both wrist strap and conductive footwear. The instrument will indicate whether the resistance is in the ranges specified in IEC 61340-5 and EOS/ESD.

### Physical and Electrical specification

Dimensions	145 x 90 x 32mm	
Mass	0.1 kg excluding battery	
Power Supply	1 x 9 volt PP3 cell, preferably alkaline	
Batter life, typical	2500 tests, 5s per test	

	Footwear	Wriststrap
Low resistance limit	0.1 MΩ	0.75 MΩ
High resistance limit	10 and 35 MΩ	10 and 35 MΩ
Test voltage	maximum 24 volt	
Short circuit current	12μA max	



H26* test station includes	Code	Qty
Tester	H241/H243/H245	1
Footwear test panel (Exc. H2*1)	H214	1
Wall panel	RH2550E	1
Certificate of calibration		1
Product Information Sheet	PIS229	1

### Installation

1. Mount wall panel (if supplied) at eye level on a wall conveniently situated near the ESD Protected Area. Staff will use the test station upon entering the EPA.
2. Install a battery in the tester.
3. Put foot test plate on floor below panel. Connect it to the cord of the tester. (For H241 there is no footplate or connecting cord.)
4. Mount tester on the wall panel.

### Procedure to test wrist strap (Does not apply to H243)

1. Wear wristband. Choose one that fits snugly or adjust it to do so.
2. Connect the ground cord securely to the band using the snap connector.
3. Connect the other end of the cord to a matching termination on the tester.
4. Push the round metal button in the centre of the tester with one finger. The tester will now indicate whether the total resistance is within the acceptable range.
5. Green light and buzzer indicate that the total resistance is either less than 10MΩ or less than 35MΩ.



**Green = OK**

6. A red light indicates non-conformance.

**Red = FAIL**

Do not proceed in the usual manner but contact your supervisor or follow your company procedure.

7. Contact your supervisor if the battery low light comes on.

**Procedure to test footwear (Does not apply to H241)**

1. Wear shoes or heel grounders as prescribed.
2. Place each foot in turn on footwear test plate.
3. Push the contact plate on the tester with one or two fingers. The tester will now indicate whether the total resistance is within the acceptable range.
4. Green light and buzzer indicate that the total resistance is either less than 10M $\Omega$  or less than 35M $\Omega$ .

**Green = OK**

5. A red light indicates non-conformance.

**Red = FAIL**

6. Do not proceed in the usual manner but contact your supervisor or follow your company procedure.
7. Contact your supervisor if the battery low light comes on.

**Calibration**

The lower and upper limits of the resistance range are factory set and calibrated traceable to NAMAS standards prior to dispatch. They should be re-checked at least once a year by the user. Alternatively, we offer a calibration service. Use a calibration unit such as our product code H300.

The potentiometers are accessible through the two holes on the left-hand side of the case. The upper hole allows the upper limit to be adjusted, the lower hole the lower limit. Follow the procedure described on PIS082 (Available from Vermason Ltd on request).

**In case of non-conformance:**

The instrument measures the resistance of the external circuit between the metal contact button and the cord connectors or the foot test plate. The wristband and cords, the plate and the footwear, the connection to the operator, the operator's body resistance and the fingertip button contact are all part of the circuit. In case of a failure being indicated, determine whether the wriststrap or the footwear alone is failing by ensuring that the other elements of the circuit are sound.

**Note:** If 'battery low' light comes on, insert a new 9volt alkaline PP3 battery. The 'battery low' threshold is factory set at 6.5 volt.

*For further information, please contact*

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