# Hoffman Scratch Hardness Tester

## **Scrape Adhesion Test**

The Hoffman Scratch Hardness Tester was developed for the comparative evaluation of scratch resistance and adhesion of many types of coatings.

- Simple pocket size tester
- Ideal for field use and demonstrations

This instrument consists of a four-wheeled carriage, a scale arm graduated from 0-20 that is attached permanently to the carriage in a counterpoised condition about the pivot axis, and a scratch tool with a sharp circular rim mounted at 45° to the flat test surface.

## **Procedure**

To operate, attach riders to the scale arm at the numbered positions. The carriage is held down firmly by hand and moved in the opposite direction, to cause a trailing scratch. The large standard rider loads 100 g per division, while the small rider loads 25 g per division. This small rider may be used for making low-range measurements involving small increments of pressure, or it may serve as a vernier with the large rider in making more precise medium-range measurements.

### Scratch Hardness

The force necessary to cut through the film to the substrate.

### Adhesion

The force required to scrape a path through the film, when the stylus begins its motion on an uncoated portion of the panel.

Ordering Information		Technical Specifications	Technical Specifications		
Cat. No.	Description	Dimensions	Net Weight	Shipping Weight	
1610	Hoffman Scratch Tester	28 x 3.8 x 2.5 cm (11 x 1.5 x 1 in)	0.7 kg (1.5 lbs)	1.8 kg (4 lbs)	
	nplete with:				
	standard rider				
	ider and one extra scratching tool				
Carrying ca	se nstructions				
operating					
		Accessories			
Orderin	g Information Description	Accessories			
Orderin Cat. No.	g Information	Accessories Replacement			
Orderin Cat. No. 1611	g Information Description		y upper range of the Hc	ffman Scratch	
Orderin Cat. No. 1611	g Information Description Scratching Tool	Replacement	upper range of the Ho	ffman Scratch	
	g Information Description Scratching Tool	Replacement Equipped with friction clip for extending			



#### **Standards**

GE Aircarft Engine	E50TF61-S1
Group Spec.	
Naval Lab Spec.	WS12858 Part 4.5.5 Hardness