

# Pencil Hardness

## Wolf-Wilburn Pencil Hardness Tester

This Instrument is used to determine the scratch resistance of a surface using a sharpened pencil.

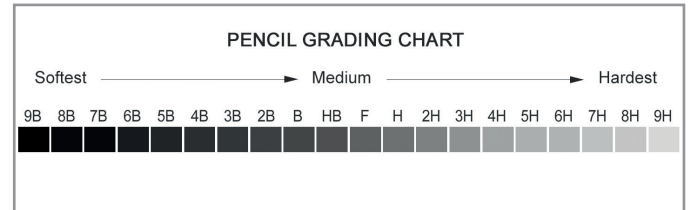
- Twenty pencils (grade 9B to 9H) are used with a standard holder
- Pencils are moved with a fixed pressure of 750 grams and a fixed angle ensuring the least amount of operator error
- Pencils can be easily exchanged to minimize down time during the test



## Measurement Principle

The purpose of scratch hardness tests is to determine the resistance of coating materials or lacquers to scratch effects on the surface. This test is of particular value for furniture or vehicle lacquers, but is also a useful aid in the development of synthetic resins or other film forming materials.

Pencil Hardness is measured by moving a pencil, sharpened and with the tip flattened, across a test surface at constant pressures. Different pencils of different hardnesses are evaluated and the test may either be a pass/fail test or a test until failure on the test surface is observed. The test report should include the type and hardness of the used pencils.



## Standards

ASTM D 3363  
ISO 15184  
DIN 13523-4  
ABS 3900-E19

Catalog Number	5800	9500
Short Description	Wolff-Wilborn Pencil Hardness	Pencil Hardness Tester Set

### Delivery Content

Pencil hardness tester  
Complete set of 20 pencils from 9B to 9H (5801)  
Pencil sharpener  
Abrasive 400 grit paper  
Manual  
Carrying case

Catalog Number	Short Description	Delivery Content
5801	Pencil set (20 pcs) for 5800	Complete set of 20 pencils from 9B to 9H
11710	Pencil Sharpener Dual - Point And Trim	
11709	Mitsubishi Certified Pencil Set 17/Set	
5802	Lead Holder, for 9500	
9512	Replacement Leads, Grade 6B, for 9500	12 pieces per pack
9513	Replacement Leads, Grade 5B, for 9500	12 pieces per pack
9514	Replacement Leads, Grade 4B, for 9500	12 pieces per pack
9515	Replacement Leads, Grade 3B, for 9500	12 pieces per pack
9516	Replacement Leads, Grade 2B, for 9500	12 pieces per pack
9517	Replacement Leads, Grade B, for 9500	12 pieces per pack
9518	Replacement Leads, Grade HB, for 9500	12 pieces per pack
9519	Replacement Leads, Grade F, for 9500	12 pieces per pack
9520	Replacement Leads, Grade H, for 9500	12 pieces per pack
9521	Replacement Leads, Grade 2H, for 9500	12 pieces per pack
9522	Replacement Leads, Grade 3H, for 9500	12 pieces per pack
9523	Replacement Leads, Grade 4H, for 9500	12 pieces per pack
9524	Replacement Leads, Grade 5H, for 9500	12 pieces per pack
9525	Replacement Leads, Grade 6H, for 9500	12 pieces per pack
15440	Sandpaper, 5 pack	