

# Ames

## Portable Rockwell Hardness Tester

**Accuracy, Repeatability, Traceability and Portability**

Ames hardness tester looks deceptively simple. It delivers the repeatable accuracy you need to anchor your quality system. In addition to the precision craftsmanship, Ames tester accuracy is guaranteed with the use of certified, traceable test specimens. These standard certified test specimens are traceable to the US Bureau of Standards.

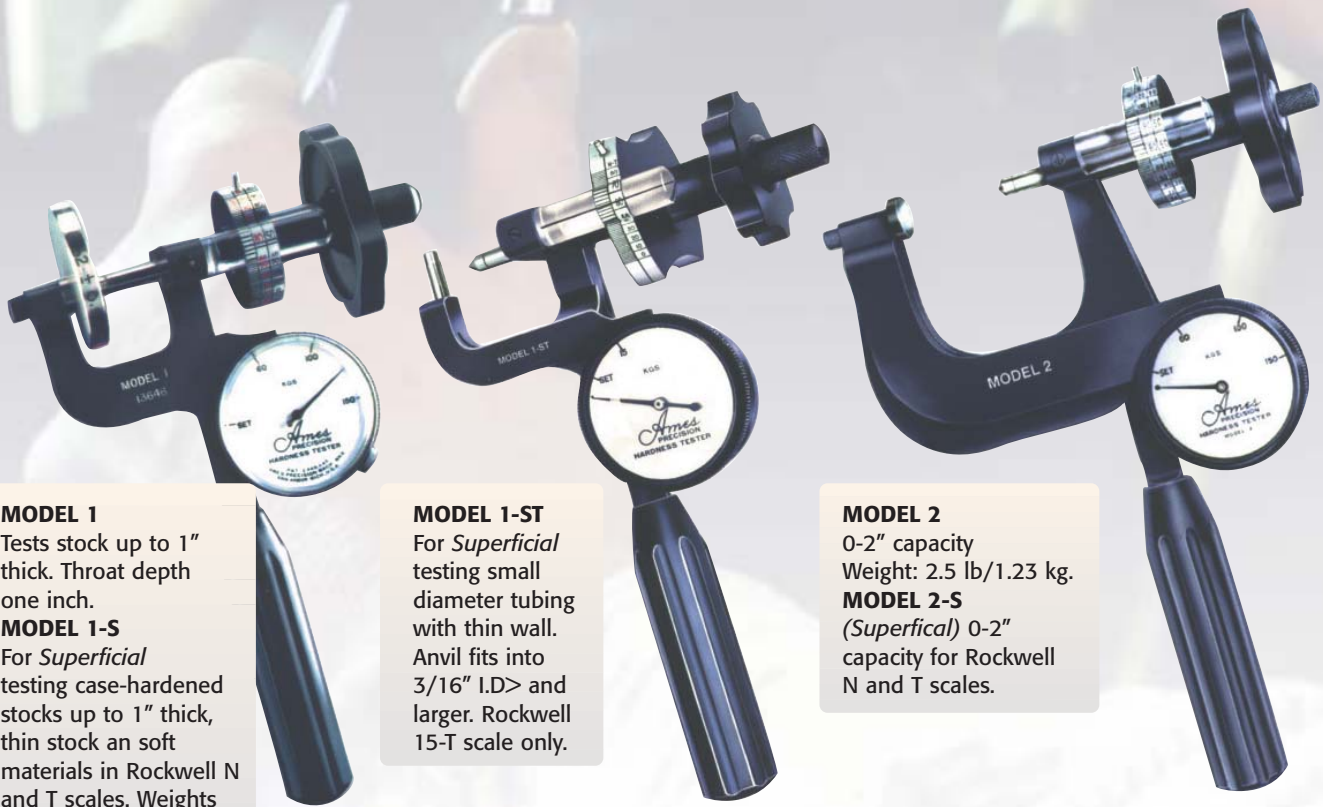
The light weight and easy handling of these portable hardness testers, let you perform accurate,

repeatable hardness tests wherever and whenever required. You don't have to cut samples and send them to a big bench tester or a lab.

Ames testers read directly in fifteen Rockwell scales: **A, B, C, D, E, F, G, H, K, L, M, P, R, S, and V**

Standard Ames testers read directly (with the correct penetrator).

*Superficial* models read in N and T scales.



### MODEL 1

Tests stock up to 1" thick. Throat depth one inch.

### MODEL 1-S

For *Superficial* testing case-hardened stocks up to 1" thick, thin stock an soft materials in Rockwell N and T scales. Weights 1.5 lb/0.68 kg.

### MODEL 1-ST

For *Superficial* testing small diameter tubing with thin wall. Anvil fits into 3/16" I.D. and larger. Rockwell 15-T scale only.

### MODEL 2

0-2" capacity  
Weight: 2.5 lb/1.23 kg.

### MODEL 2-S

(*Superficial*) 0-2" capacity for Rockwell N and T scales.

# PORTABLE ACCURACY IN MORE THAN 11 CONFIGURATIONS



## MODEL 1-4

0-1" capacity.  
Frame throat depth 4 inches. Weight: 3.25 lb/1.45 kg.

## MODEL 1-4-S

Superficial tester for Rockwell N and T scales.

## MODEL 4-2

0-4" capacity. Frame throat depth 2 inches. Weight: 3.25 lb/1.45 kg.

## MODEL 4-2-S

Superficial tester for Rockwell N and T scales. Weight: 3.25 lb/1.45 kg.

## MODEL 4-4

0-4" capacity. Frame opening and throat depth both 4 inches. Weight: 5.55 lb/2.5 kg.

## MODEL 8

0-8" capacity for Rockwell A, B, C and other scales. Frame depth 4". Measuring head may be removed and mounted on a tool holder of your own design. Weight: 8.25 lb/3.8 kg.

*Each Ames hardness tester is individually calibrated.*

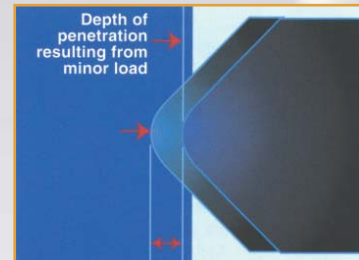
*Behind the signed certificate that comes with each instrument is a painstaking process involving 70 to 100 separate readings.*

## How Rockwell Hardness testing works

Manufacturers worldwide have recognized Standard E-110, defined by the American Society of Testing and Materials (ASTM) as the accepted parameters for hardness testing in using the Rockwell method.

A rounded penetrator of known hardness is forced into the test surface under a specific pressure load. A crude hardness reading could be taken from the depth of penetration.

To eliminate errors caused by surface variations, a minor load is applied and held while the tester is "zeroed." The real hardness reading measures the difference in penetration between the minor load and the major load.



## ACCESSORIES the right tools for the job



### BenchStand

Cast iron for solid support. Holds tester at a convenient angle, freeing hands for ease of use. Inner fibre sleeve won't scuff tester handle. Weight: 11 lb.



### The Standard Kit

Each Ames tester (as standard) comes complete with durable padded case, a set of hardness test specimens (3), 1 diamond and 1 1/16" ball penetrators, flat and "V" anvils. Models larger than 1" capacity also include a set of jaw opening adaptors.

### PENETRATORS

For each scale, you need the correct penetrator. They are interchangeable. **Diamond Penetrator** with 120° cone and spherical point:

Standard - for Standard Scales A, C, D  
Superficial - for Superficial Scale N

### Ball Penetrators

1/16" - for B, F, G, and T Scales  
1/8" - for E, H, K, and W Scales  
1/4" - for L, P, M, and X Scales  
1/2" - for R, S, V, and Y Scales



### ANVILS

The correct anvil helps ensure valid readings by making sure work does not move during load buildups. Anvils are interchangeable.

A - Raised flat for thin stock  
B - Convex for tube stock  
C - Round for larger round stock  
D - Vee for small round stock  
E - Standard Flat stock anvil

