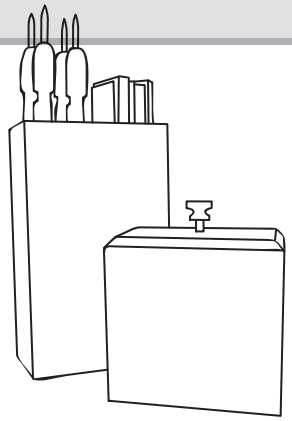
Moh's Kit Concrete Hardness Testing

DYNAMICDIAMOND TOOLING

Determine the Hardness of Your Concrete with the Mohs' Hardness Test Kit



Features

Hardness Points: Set of four double-ended hardness picks comprising eight hardness points for scratch testing concrete to determine the hardness relative to the Mohs' scale.

A 100 Grit Polishing Stone: to help keep the hardness points sharp.

Two hardness plates, a streak plate and a magnet: primarily used for testing various minerals.

Compact and Durable: Mahogany-finished wooden storage case.

Overview

The Mohs' Kit is used as a method to determine the hardness of a substrate by utilizing hardness picks that scratch the surface of the substrate. The Mohs' scale designates a value ranging from 1 to 10 with 1 being the softest and 10 being the hardest. With this method, one can determine the relative hardness of the substrate and determine the appropriate diamond bond that will be most effective from a production rate and cost effective standpoint.

DDT offers five (5) different diamond bonds ranging from Very Soft Floors (VSF) utilizing a Very HARD Bond to Very Hard Floors (VHF) utilizing a Very SOFT Bond. Use the following guide for selecting an initial diamond bond after scratch testing. Numbers that overlap will depend on the production rate desired. In other words, if you want faster production rates, use a softer floor diamond but at the expense of profits. For example: you selected a Medium Floor (MF) Diamond and desire a faster production rate at the expense of profits, one would change to a Hard Floor (HF) Diamond.

Scratch Test Hardnesses

VSF - **Very Soft Floor** (Orange) - scratch test hardness **3, 4**
SF - **Soft Floor** (Gold) - scratch test hardness **3, 4, 5**
MF - **Medium Floor** (Red) - scratch test hardness **4, 5, 6**
HF - **Hard Floor** (Black) - scratch test hardness **6, 7, 8**
VHF - **Very Hard Floor** (Purple) - scratch test hardness **7, 8, 9**

*scratch test testing should only be used as a guide

How To Perform The Test

To perform a scratch test with a hardness point, hold the hardness but use medium force in pressing down and dragging the hardness point across the substrate.

If it doesn't scratch the substrate, then the substrate is harder than your point. Then try to scratch the substrate with the next harder point and so on until the hardness point scratches the substrate. For example, if the No. 4 point does not scratch the substrate, but the No. 5 point does, then the substrate's hardness is between 4.0 and 5.0, or about 4.5.

For best results in hardness testing, the hardness points must be sharp, and the substrate's surface must be smooth and unaltered.

Maintaining Your Hardness Picks

Your hardness picks, especially the soft ones, will lose their sharp points with use, and your testing should be done with sharp points. The best sharpening method is to remove the dull point from the hardness pick body, insert it into a drill and sharpen it against a rotating grindstone or disc sander. Points No. 2 through 5 can be sharpened on garnet sandpaper or harder, while points 6 and 7 must be sharpened with an aluminum oxide, silicon carbide or harder stone abrasive. Your No. 8 and 9 points must be sharpened with a wet diamond abrasive, however, such hard points will seldom require sharpening.

If you're in the field away from your workshop, you can crudely sharpen the points using the 100 grit polishing stone included in your set. Eventually, after repeated sharpening, some hardness points, especially the softer ones, will have become short enough to require replacement points which are available from DDT.

Dynamic Diamond Tooling | ph: 407-298-7050 | fax: 407-298-7051
Sales@DynamicDiamondTooling.com | 2507 Silver Star Rd | Orlando, FL 32804