



Proportional Caliper

INTRODUCTION

The Proportional Caliper device is used to determine flat, elongated, or flat and elongated particles in coarse aggregates. Please refer to ASTM D4791 for the full test procedure.

FEATURES

- Constructed of 7-gauge steel with a yellow zinc coating for durability
- Four position options for 1:2, 1:3, 1:4, and 1:5 ratios.
- Easily switch between ratios by moving the black knob to the desired position
- 6 x 16 inch base with four rubber feet for added stability.

DEFINITIONS

- Flat Particles have a ratio of width to thickness greater than a specified value.
- Elongated Particles have a ratio of length to width greater than a specified value.
- Flat and Elongated Particles have a ratio of length to thickness greater than a specified value.

PROCEDURE

Adjust the caliper to the required ratio setting by moving the black knob to the desired position.

- Flat Particles: set the larger opening equal to the maximum particle width. The particle is flat if the maximum thickness can be placed through the smaller opening.
- Elongated Particles: set the larger opening equal to the maximum particle length. The particle is elongated if the maximum width can be placed through the smaller opening.
- Flat and Elongated Particles: set the larger opening equal to the maximum particle length. The particle is considered flat and elongated if the maximum thickness can be placed through the smaller opening.

MAINTENANCE

Very little maintenance is required for the Proportional Caliper. Clean the caliper before each test to remove foreign particles that may affect results. Every six months, add a drop of oil into the ratio hole for smooth operation. Periodically inspect parts for wear to ensure compliance with ASTM D4791.

Warranty

Humboldt Mfg. Co. warrants its products to be free from defects in material or workmanship. The exclusive remedy for this warranty is Humboldt Mfg. Co., factory replacement of any part or parts of such product, for the warranty of this product please refer to Humboldt Mfg. Co. catalog on Terms and Conditions of Sale. The purchaser is responsible for the transportation charges. Humboldt Mfg. Co. shall not be responsible under this warranty if the goods have been improperly maintained, installed, operated or the goods have been altered or modified so as to adversely affect the operation, use performance or durability or so as to change their intended use. The Humboldt Mfg. Co. liability under the warranty contained in this clause is limited to the repair or replacement of defective goods and making good, defective workmanship.

Humboldt Mfg. Co.

875 Tollgate Road
Elgin, Illinois 60123 U.S.A.

U.S.A. Toll Free: 1.800.544.7220

Voice: 1.708.468.6300

Fax: 1.708.456.0137

Email: hmc@humboldtmfg.com

Testing Equipment for



Construction Materials

HUMBOLDT

www.humboldtmfg.com