# **HUMBOLDT**

## H-3031CL Continuous-Load Beam Breaker



The Humboldt H-3031CL Portable, Continuous-Load, Concrete Beam Breaker is a great quality control tool for contractors, DOTs and consultants for quickly and accurately determining flexural strengths of concrete using  $4" \times 4" \times 14"$  test beams.

The H-3031CL incorporates a continuous, screw jack to provide a continuous application of force against the test beam. By providing a continuous force, these beam breakers comply can be used as an accurate quality control tool to determine whether curing concrete has met a specified flexural strength. In this type of application, a known flexural strength value is determined and is used as a go/ no-go test parameter.

The H-3031CL beam breaker is constructed of lightweight aluminum, making it extremely portable for use at even the most remote of job sites.

Self-contained, portable concrete beam tester, which accurately and easily determines flexural strengths of 4" x 4" x 14" test beams, which are placed on rollers that are 12" apart. The hydraulically driven unit uses a centerpoint loading method that provides continuous readings to the break point and retains the maximum reading to eliminate losing the break-point data. The gauge will then reset to zero for repeat tests. The lightweight aluminum unit features a 8,000 lbf. x 100 lbf. The unit is calibrated by measuring the load applied on a calibrated load cell.

The factory calibration is supplied at gauge readings of 10% FS, FS and 3 readings in between. Three load cell readings are averaged at each point to establish the correction for each point.

### **Continuous-Load Beam Breakers**

#### Also Available:

Humboldt also offers continuous-load beam breakers for determining flexural strengths of 6" x 6" cross-section test beams. These hydraulically driven units use a center-point loading method, which supply continuous readings up to the break and capture the maximum reading for recording. The gauge also resets to zero for repeated tests.

Lightweight aluminum unit has dual registration of modulus of rupture between 10,000 lbf. and 0–4,500 kgf. Calibration is accomplished by measuring the load applied on a calibrated load cell.

The factory calibration is supplied at gauge readings of 10% FS, FS and 3 readings in between. Three load cell readings are averaged at each point to establish the correction for each point.

These beam breakers are constructed of lightweight aluminum, making them extremely portable for use on even the most remote of job sites.

The 16" H-3030CL and the 18" H-3032CL use a single, center point loading configuration, while the 18" H-3033CL uses a three-point configuration. All models can quickly provide a pre-load pressure using the manual hand pump on the hydraulic cylinder. From there a continuous pressure can be applied using the rotating handle.



#### Concrete Beam Molds, Heavy-Duty

Concrete Beam Molds, heavyweight, machined .375" steel. The sides of the one-piece mold hinge to the base and the ends hinge to the sides. Fastened with wing nuts. Reusable. Fast and easy to assemble and use. Easy to strip, clean, knock-down and store. Molds give accurate specimens for center or third-point loading tests.

Description	Ship wt.	Part No.
6" x 6" x 21" (152 x 152 x 533mm)	54lbs (24.4kg)	H-3005
6" x 6" x 24" (152 x 152 x 610mm)	67lbs (31kg)	H-3010
6" x 6" x 30" (152 x 152 x 762mm)	70lbs (31.7kg)	H-3015
6" x 6" x 36" (152 x 152 x 914mm)	80lbs (36kg)	H-3020

#### Concrete Beam Mold, Plastic

Durable, lightweight copolymer plastic beam mold utilizes simple thumb screws for ease of stripping, cleaning and assembly. The lightweight design requires no tools and weighs less than one quarter of the weight of a conventional mold. Will not rust, reusable, inexpensive.

Description	Ship wt.	Part No.
6" x 6" x 21" (152 x 152 x 533mm)	9lbs (4kg)	H-3009

#### Concrete Beam Mold, Lightweight

Lightweight, stamped-steel, hinge-free beam mold is collapsible. Can be disassembled in to individual, interchangeable parts. Fastened with wing nuts.

Description	Ship wt.	Part No.
6" x 6" x 22" (152 x 152 x 559mm)	29.2lbs (13kg)	H-3007
4" x 4" x 14" (102 x 102 x 356mm)	20lbs (9.1kg)	H-3004







**Humboldt Mfg. Co. www.humboldtmfg.com** 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