

# DELTRONIC



Quality  
Measurement  
Since 1955

DH216  
Horizontal  
Optical  
Comparator  
System

Made in  
USA

When you think of accurate measurement, think of DELTRONIC. As a leader and innovator in high-accuracy products for over forty years, we have been designing and manufacturing systems and solutions for thousands of applications on a worldwide basis. We feel our success was achieved because our goal has always been to deliver quality products backed by excellent service at fair prices. It always will be.

## DH216 16" Horizontal Bench-Top Comparator System

### Standard Features

- Hi / Low Enhanced 150 watt Illumination System
- Full Usable 16" Viewing Screen
- 10" X axis and 6" Y axis Stage Travel
- Cross Roller Bearings
- Built-In Helix Stage
- Quick Release "X" Travel
- Sturdy All-Metal Design
- Erect Optical Image
- Bayonet Lens Mount
- Easy-View Vertical Screen
- Electronic Screen Protractor (ESP)
- Rotating Chart Clips



**Quick Change Bayonet Lens Mount**  
Provides for instantaneous magnification lens change without calibration. A standard feature.



**±15° Helix Stage**  
For thread-form measurement with vernier graduations in 5' increments. A standard feature.



**Electronic Screen Protractor (ESP)**  
Reads angles directly and will display angles to either a minute or 0.01 of a degree on an LED readout. ESP indicates angles from zero in either direction in both INCREMENTAL and ABSOLUTE modes. A standard feature.

# Electronic Measuring Systems



## Basic Digital Readout

### 612R

#### Standard Features

- 2 Axis Readout
- 3 Point Radius
- Polar Coordinates
- 9 Point Store and Recall
- Datum Reference
- Inch/Metric
- Preset

#### Options

- Automatic Edge Sensing



## Standard Digital Readout

### MPC-5

#### Standard Features

- 2 Axis Readout
- Alpha Display for Prompts
- 30 Point, Multi-Point Functions
- Radius, Angle, Line, Point, Skew, Scan and Datum Reference
- Inch, Metric, Polar, Preset, Centerline Complement
- 100 Store and Recall Point

#### Options

- 3 Axis Readout
- Programmable Footswitch
- Programmable Remote Keypad
- SPC Output
- Automate Measurement System (AMS)
- Automatic Edge Sensing



## Deluxe Measurement Software

### MPC-6

#### Standard Features

- 2 Axis Readout
- Message Window
- 30 Point, Multi-Point Functions
- Includes CAD/CAM
- Storage Window
- Radius, Angle, Line, Point, Skew, Scan, and Datum Reference
- Inch, Metric, Polar, Preset, Centerline Complement
- Includes G D & T

#### Options

- 3 Axis Readout
- SPC Output
- Automate Measurement System (AMS)
- Automatic Edge Sensing

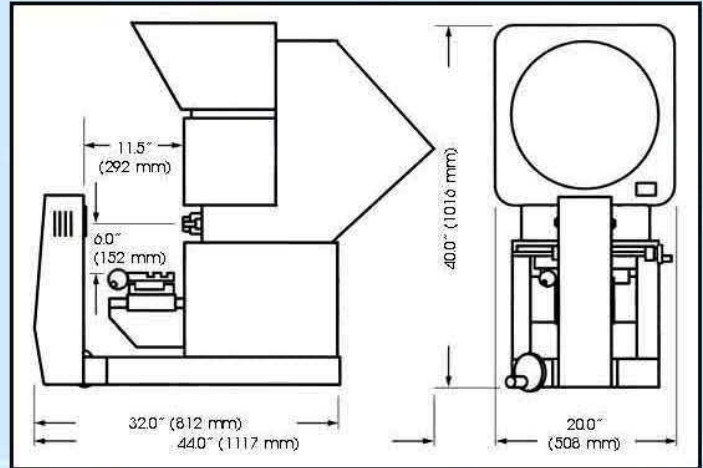
## Available Options

- Automated Measurement System (AMS), gives you automatic inspection
- Motorized Focus Axis
- Swing-Clear Lamphouse for Surface Measurement of Large Parts
- Motorized stage with joystick control
- Fiber-Optic Illumination for Surface Measurement
- Extended 12" X Axis Stage Travel
- Automatic Edge Sensing
- Comparator Cabinet

## SPECIFICATIONS

### Standard Features DH216

1. Fully usable 16" (405mm) viewing screen with edge-to-edge accuracy of 0.05%, 17.5" (445mm) glass screen
2. 10" X axis (254mm) and 6" Y axis (152mm) stage travel
3. Heat-treated nickel plated stage surface
4. Screen-locking mechanism
5. Digital Electronic Screen Protractor (ESP) with INC/ABS switchable displays 1' or .01°
6. Quick-change bayonet Lens Mount, no calibration needed
7. Vertical screen for easy viewing
8. Rotating Chart Clip System mounted on screen
9. Quick-release X axis clutch for rapid stage movement, with infinite fine adjustment
10. Erect image
11. ±15° Helix stage, 5' readout increment
12. Telecentric Lens System
13. 150 watt Profile Illumination System with hi / low intensities



#### Screen

17.5" (445mm) diameter glass screen  
 60° and 90° crossed lines  
 1' or 0.01° digital display

#### Magnification Lenses

10x, 20x, 25x, 31.25x, 50x, 100x

#### Magnification Accuracy

±0.05% contour  
 ±0.10% surface

#### Profile Illumination

Tungsten-Halogen bulb, 24 Volt, 150 Watt  
 Blower cooled

#### Surface Illumination

Tungsten-Halogen bulb, 24 Volt, 250 Watt  
 Fiber-Optic Delivery  
 Blower cooled

#### Work Stage

##### Standard

Travel X-axis 10" (254mm) and Y-axis 5" (127mm)  
 Surface Electroless Nickel Plated Steel; 15" (381mm) by 5" (127mm) with two dovetails.  
 Focus Travel 2.3" (58mm)

##### Option 1. Extended 12" X-axis Travel

Travel X-axis 12" (304mm) and Y-axis 5" (127mm)  
 Surface Electroless Nickel Plated Steel; 18" (457mm) by 5" (127mm) with two dovetails.

##### Option 2. Extended 18" X-axis Travel

Travel X-axis 18" (457mm) and Y-axis 5" (127mm)  
 Surface Hard Anodized Alum; 23" (584mm) by 5" (127mm) with two dovetails.

##### Option 3. Motorized X&Y Axis with Joystick

##### Option 4. Motorized Focus Axis

##### Option 5. Automated Measurement System - AMS

#### Lens Specification

- True Telecentric Design - total image stability.
- Magnesium fluoride coated for high performance lens transmission and contrast.
- Spherical aberration correction.
- Optional green filter is recommended for all magnifications other than 100x.

|   | 10x              | 20x              | 25x              | 31.25x           | 50x              | 100x             |
|---|------------------|------------------|------------------|------------------|------------------|------------------|
| Field of View<br>(largest diameter on screen) | 1.60"<br>40.64mm | .80"<br>20.32mm  | .64"<br>16.26mm  | .512"<br>12.95mm | .32"<br>8.13mm   | .16"<br>4.06mm   |
| Working clearance<br>lens to work piece       | 3.15"<br>80.00mm | 3.23"<br>82.04mm | 2.75"<br>69.85mm | 2.20"<br>55.88mm | 2.00"<br>50.80mm | 1.69"<br>42.93mm |

#### Electrical

115/230 Volts ~  
 50/60 Hz (24 Volts to all lamps)

#### Machine Weight

Net approximately 300 pounds,  
 shipping weight approximately 450  
 pounds. CE Approved

Distributed by: