

## AC Electromagnetic Yoke HCDX-Y2, HCDX-Y9



The HCDX-Y2 is an AC electromagnetic yoke, ergonomically designed to improve productivity. The yoke generates a strong AC magnetic field for the detection of surface indications during magnetic particle testing.

Lightweight with an ergonomic grip and trigger, the HCDX-Y2 is designed for the rugged demands of field inspection. Featuring replaceable spare parts body design, isolated trigger switch, power cord, mainboard, UV & white light lamp and legs all can be replaced by user, the HCDX-Y2 is easily serviceable not stop a job from getting done.

A super bright LED attachment is available as an optional item to help illuminate the inspection area while simultaneously magnetizing the part. All-in-one Kits are also available, including Red and Gray magnetic powders, a yellow paint marker, and cleaning cloth, for a full inspection kit in one convenient carrying case.

## **BENEFITS**

### **Increase inspector productivity and reduce physical fatigue**

- Less arm strain, wrist fatigue and physical stress help operators get more done due to the lightweight and ergonomic design.
- Easily position the yoke in any direction with lightweight, heavy-duty and powerful electronics components.

### **Keep tools in service with a design that's built to last**

- Cords and triggers can be easily replaced, so work doesn't stop and tools aren't scrapped due to accidental damage.
- Prevent dust and dangerous water damage with an IP54 o-ring sealed housing.

## **FEATURES**

- Ergonomic, light-weight design
- IP54 sealed housing resists dust and water
- Field-swappable power cord
- Isolated, replaceable trigger switch
- Steel shields for leg protection
- Exceeds ASTM lifting specifications
- Convenient carrying case supplied with all yoke shipments
- Optional LED UV & White yoke light lasts longer and is more intense compared to traditional bulbs
- Two power supply modes are optional:
  - 110V/220V/240V Single-phase AC power supply (straight plug mode);
  - DC magnetization power supply (DC battery pack with digital display screen)
- Optional special waist pack can carry magnetized power battery, magnetic suspension, contrast agent etc.

## APPLICATIONS

Defect location: Surface Ideal for:

- Field Testing
- Difficult to reach areas
- Spot, weld and in-service inspections Defect examples:
- Seams
- Tears
- Shrink cracks
- Quenching cracks
- Fatigue cracks

## SPECIFICATION COMPLIANCE

JB/T7411-2012

ASTM E1444-05

ASTM E709

EN10228-1:1999

ISO 9934

ASTM E 3024

## Parameters index

| Model<br>Items                    | HCDX-Y2  | HCDX- Y9 |
|-----------------------------------|--|----------|
| Electrical Requirements           | AC110-115V 50/60Hz,AC220-230V 50/60 Hz,AC240V<br>50/60Hz |          |
| Waveform                          | AC   |          |
| Tangential Field Strength         | > 2kA/m at midpoint between legs / poles                 |          |
| Working temperature               | -10~+40°C  |          |
| Duty Cycle                        | 50%, max on time is 90 seconds                           |          |
| Ingress Protection (IEC<br>60259) | IP54   |          |
| Relative humidity                 | <80%   |          |
| Sensitivity                       | ASTM E1444-05,ASME 2007 page number V                    |          |




|                       |            |                |
|-----------------------|------------|----------------|
| DC power pack         | X          | ●              |
| AC working current    | AC2.2A     |                |
| DC working current    | X          | DC 1.5A        |
| Battery charging time | X          | 3 小时           |
| Battery working time  | X          | 6h             |
| Leg / Pole Span       | 0~220mm    |                |
| Leg size              | 22*22mm    |                |
| Power cord length     | 3M         |                |
| Lifting Force         | A C        | ≥7.1kg (69N)   |
|                       | D C        | ≥22.2kg (216N) |
| Weight                | Yoke       | 2.3kg          |
|                       | DC Battery | X ●            |

**Note:**“X”not included, “●”included

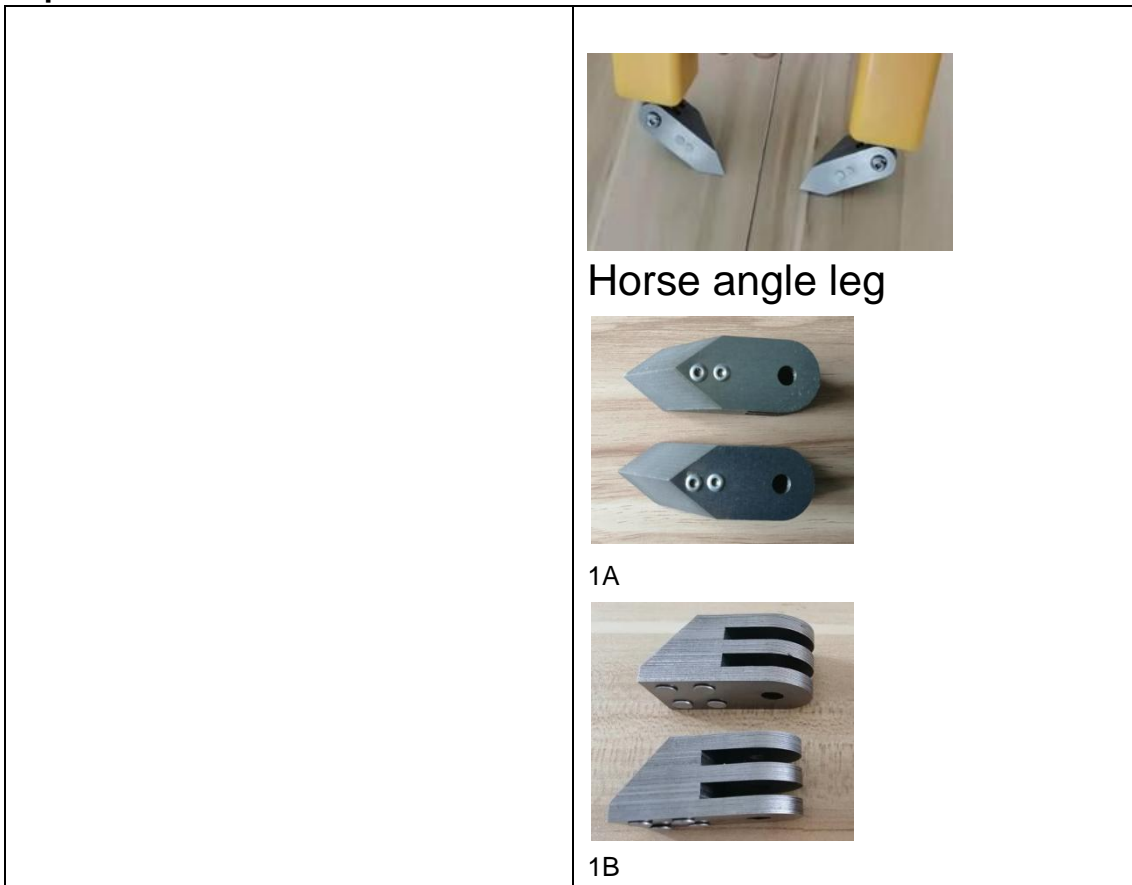




### Standard package

|  |   |
|--|---|
| <p>HCDX-Y2<br/>Yoke<br/>Power cord<br/>Calibration certificate<br/>Warranty card<br/>Carrying case</p>   |   |
| <p>HCDX-Y9<br/>Yoke<br/>Power cord<br/>Calibration certificate<br/>Warranty card<br/>Carrying case<br/>DC battery pack<br/>DC battery charger<br/>DC battery power cord<br/>DC battery bag<br/>Carrying case</p> | <br> <p>Product labels for DC battery packs:</p> <ul style="list-style-type: none"><li>Product Name: 产品名称: 手持式测厚仪 (Handheld Thickness Gauge)</li><li>Product Model: 型号Model: MT-500</li><li>Serial Number: 编号SN: 2103D033</li><li>Manufacturer: HUATEC GROUP CORPORATION</li></ul> |
|  |   |

## Optional accessories



### LED White lamp

White light illumination:  $\geq 2000$  Lux  
 Light source height: 92mm  
 Exposure range: 220\*100mm  
 Lamp size: 82\*22mm (L\*W)



### LED UV Lamp

Ultraviolet wavelength: 365nm  
 Ultraviolet irradiance:  $\geq 2000$  uw/cm<sup>2</sup>  
 Light source height: 92mm  
 Exposure range: 220\*100mm  
 Lamp size: 82\*22mm (L\*W)



**Waist pack 4pcs per set**

Belt, suspension waist pack. Yoke waist pack, battery waist pack



**Weight Lift Test Bar**

10lbs/40lbs/50lbs/4.5kg/12kg/18kg



**QQI shims**

