



The portable **hand yokes** serve as testing units especially to check ferromagnetic parts when burn marks or annealing must not occur. When checking for wear, at revisions as well as for uncomplicated test tasks to be completed quickly the hand yokes are the perfect testing units.

TWM 220 N



The **TWM 220 N hand yoke** is an AC current instrument that can be directly connected to a 230 V AC supply. In conjunction with adjustable pole pieces it is ideally suited for testing uneven surfaces, tube bends, angle pieces etc.

Technical data

Ref. No.	071301
Electrical supply	230 V
Frequency	50 Hz
Pole cross section	28 x 22 mm
Weight - hand yoke	3.2 kg
Pull-off strength	18 kg AC

TWM 230 A



The **TWM 230 A hand yoke** is of similar construction to the TWM-N type, however, the switch on this model can be exchanged when it becomes worn, or faulty. We have also introduced a special switching circuit so that the yoke is switched on when the AC current is passing through zero, thereby greatly extending the life of the switch and the yoke.

Technical data

Ref. No.	071310
Electrical supply	230 V
Frequency	50 Hz
Pole cross section	28 x 22 mm
Weight - hand yoke	3.2 kg
Pull-off strength	18 kg AC

KWM 42



The **cross yoke KWM 42** consists of two AC yokes displaced by 90° so that both longitudinal and transverse cracks can be detected in one single operation. Two castors on each magnetic pole maintain a constant air gap and enable the yoke to be moved easily over the test surface. The KWM 42 is powered by a 3-phase supply through a separate transformer.

Technical data

Ref. No.	074001
Electrical supply	42 V
Frequency	50 Hz
Pole cross section	27 x 27 mm
Weight - cross yoke	10.8 kg
Pull-off strength	17 kg AC
Separate transformer	3 x 400 / 42 V / 50 Hz
Ref. No. (60 % ED)	074020
Weight transformer	23.6 kg

TWM 42 A/N



The AC **hand yoke TWM 42 A/N** operates at 42 V supplied from a separate transformer which is connected to a 230 V AC supply. This satisfies the VDE safety regulations so that the TWM 42 A/N can be used for testing in vessels, tubes and closed containers. Additionally the TWM/A is equipped with an exchangeable switch

Technical data

Ref. No.	072301
Ref. No.	072310
Electrical supply	42 V
Frequency	50 Hz
Pole cross section	28 x 22 mm
Weight - cross yoke	3.5 kg
Pull-off strength	17 kg AC
Separate transformer VDE 0551	230 / 42 V
Ref. No.	077110
Weight transformer	7 kg

Hand yokes

JWM 220



The AC hand yoke **JWM 220** is small in size, light in weight, and therefore handy to use. Its magnetization output is adequate to satisfy the majority of test requirements. Articulated pole pieces with twinknuckle adjustment are mounted on the yoke as standard fittings to extend the range of test applications and to ensure the optimum development of the magnetic field within the test piece.

Technical data

Ref. No.	075001
Electrical supply	230 V
Frequency	50 Hz
Pole cross section	24 x 28 mm
Weight - hand yoke	3.4 kg
Pull-off strength	7.3 kg AC

MAG-1



The **MAG-1 magnet** is ideal for the effective magnetization of components for crack detection, particularly where the use of electromagnetic yokes is impractical or prohibited for safety reasons. The hinged arms and rotating angled pole pieces facilitate the local inspection of a diverse range of components such as critical welds and automotive components. Protection bag is part of the scope of supply.

Technical data

Ref. No.	076051
Magnet material	Neodymium Iron Boron
Relevant specification	BS 6072
Poles	35 mm
Weight - hand yoke	3.02 kg
Pull-off strength	> 18 kg

BWM 220/12

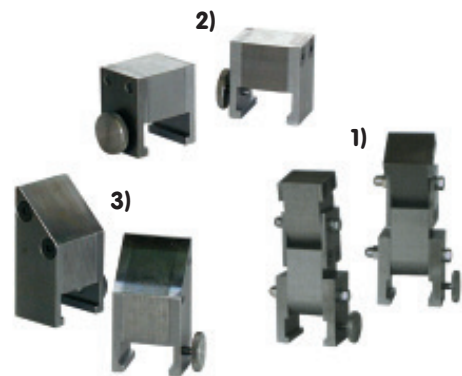


The AC hand yoke **BWM 220/12** is of compact construction and is particularly suitable for testing in locations which are confined or difficult of access. The AC hand yoke BWM 220/12 is designed to be connected both to 230 V AC and also, in conjunction with a transformer to 12 V DC.

Technical data

Ref. No.	073301
Electrical supply	230 V
Frequency	50 Hz
by transformer	12 V DC
Pole cross section	27 x 27 mm
Weight - hand yoke	2.9 kg
Pull-off strength	15 kg AC >57 kg DC
Transformer	12 V
Ref. No.	077120

Pole Pieces



Pole Pieces for the hand yokes TWM 220 N, TWM 42 N and TWM 230 A.

- 1) Articulated legs for inspection of angle pieces, tube bends and other uneven areas**
Ref. No. 077001
- 2) Protective poles to safeguard the pole areas**
Ref. No. 077002
- 3) 45° poles for fillet seam inspection**
Ref. No. 077003



Carrying case

For **hand yokes, UV lights and accessories.**

Carrying case made from wear-resistant plastic material to hold the following equipment:

1 AC hand yoke

TWM 220 N, TWM 230 A, BWM 220/12, JWM 220 or TWM 42 A/N (without transformer)

1 portable UV light

with standard transformer (no isolating transformer)

1 UV spare bulb

1 UV spare filter glass

1 set of pole pieces each

Ref. No. 136001

(case without contents)

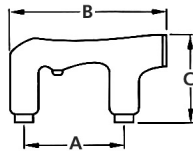
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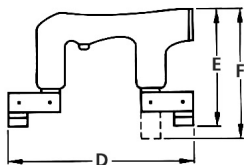
transportation/storage of **Labino portable UV-lights** instead of portable UV-lights.



Dimensions

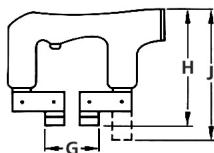


Unit type	A mm	B mm	C mm
BWM 220/12	168	260	113
TWM 220 N	168	268	158
TWM 42 A/N	168	268	158
TWM 230 A	168	268	158
MAG-1	200	200	177



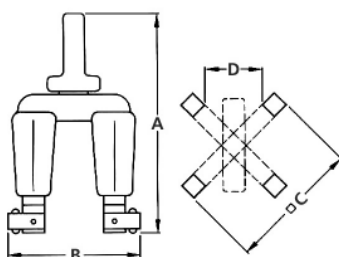
Unit type	D mm ¹⁾	E mm	F mm ²⁾
JWM 220	285	134	179
TWM 220 N	285	202	250
TWM 42 A/N	285	202	250
TWM 230 A	285	202	250

¹⁾ min. pole distance ²⁾ Height in straight position
with adjustable poles: fix mounted at JWM 220, can be mounted to all other TWM unit types (optional).



Unit type	G mm ¹⁾	H mm	J mm ²⁾
JWM 220	105	134	179
TWM 220 N	105	202	250
TWM 42 A/N	105	202	250
TWM 230 A	105	202	250

¹⁾ min. pole distance ²⁾ Height in straight position
with adjustable poles: fix mounted at JWM 220, can be mounted to all other TWM unit types (optional).



Unit type	A mm	B mm	C mm	D mm
KWM 42	320	205	195	80

ITW Tiede reserves the right to change at any time, without notice, the appearance or specification for product improvement or technical advancement.