



Manual

IML-RESI MD300

Status 08/2018

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Imprint



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IML-RESI MD300

Mechanical drilling instrument for preliminary inspections

Materials

The IML-RESI measuring instrument has been designed for use at wooden materials (trees, beams, poles). Inappropriate utilization may cause damages to the measuring system and/or the material to be examined.

Certainty of reading

The measuring results gained by utilizing the IML-RESI system are not self-explanatory, they require qualified interpretation. Any conclusions with respect to the examined object (e.g. tree) will be left to the sole responsibility of the person who examines. The manufacturer of the instruments will not be responsible for wrong interpretations and conclusions, he recommends the user to attend special seminars and training.

Conception

It was the intention of those who developed the IML-RESI system to make available a measuring system for practical utilization, which is easy to handle, sturdy and precise at the same time.

Structure of the system

As to stability, the IML-RESI system has been designed to meet the special requirements of practical examination of trees, structural timbers, poles, and wooden structural materials. During storage and utilization of the IML-RESI measuring system, you should generally avoid the contact of water and moisture, despite its splash-proof casing. Although the main components are protected against intake of water, you should in order to avoid malfunction or failure - consider that instruments are generally sensitive to moisture.

Note

As to your accumulator drill, please observe the manufacturer's safety and application instructions.

Guarantee conditions

The term of guarantee for the IML-RESI system is twelve months. Guarantee is based on the condition that the instrument will be used exclusively for the purposes it has been designed for and that the safety instructions below are observed. The manufacturer will not be liable for damages owing to inappropriate utilization or handling. The warranty for defects does not cover normal wear and tear (wearing parts) nor damages resulting from inappropriate or negligent handling and excessive strain that have not been provided in the contract of purchase. Please also refer to the manufacturer's 'General Terms of Business'.

Instructions for utilization

The user accepts the manufacturer's instructions for utilization, when he operates the instrument for the first time. The instrument must not be operated, unless the user has thoroughly read the present Instructions for Use. The manufacturer will not be liable for damages owing to inappropriate handling, employment of the instrument for purposes that are not provided in the present Instructions for Use, and non-observance of the safety instructions.

Safety instructions

The instrument must not be utilized but for the purpose described in the present Instructions for Use (examination of wood or material that is similar to wood). The manufacturer (vendor) will not be liable for inappropriate employment of the Instrument. The safety instructions of the manufacturers of other devices bought along with, or required for the operation of, this instrument will have to be observed.

In case of any manipulation of the instrument which does not necessarily require motor drive, the storage battery will have to be removed or the cable will have to be disconnected from mains supply. The safety covers will always have to be kept shut. Removal and/or bridging of safety facilities is strictly prohibited.

IML-RESI MD300

Application

How to hold the instrument

There is no special way of holding the IML-RESI measuring instrument. The measuring results do not depend in a certain orientation. You will, however, have to ensure your own stability during each measuring procedure, as, when the instrument penetrates the material to be examined, there will be forces acting in opposite direction of drilling.

Scope of delivery

Prior to familiarizing yourself with the instrument, please check whether the package contains all components comprised in the scope of delivery.

Scope of delivery (standard):

- Drilling attachment IML-RESI MD300 (drilling depth 300 mm)
- 1x Drilling needle (length 387 mm)
- T-wrench 2,5x100
- Manual

Optional

- Bosch Drill GSR 18V Li-Ion Professional (drill spindle for external commercial drill \varnothing 12 mm) (including 1 quick battery charger, 2x Premium Li-Ion batteries 18V 2,6 Ah and manual instruction)

Disposables (for supplementary orders)

- Drilling needles (length 387 mm) – Item No.: 3100317

Application

- For detection cavities, rot, cracks and remaining wall thickness
- Measuring of the drill bit depth penetration resistance by reading off the display

Preparation of the instrument

- charging the storage battery and insert into the BOSCH drill
- check or insert drilling needle

The measurement

The IML-RESI MD300 measures the axial penetration resistance of the rotating drill bit. (no torsion output). The axial force is felt by the user. During the drilling process you can read off the drilling depth by viewing the 1:1 scale on the instrument. If decay is detected the user mostly feels a sudden movement as quick penetration. Single annual rings of conifers can be felt as well!



Changing the drill bit IML-RESI MD300

Note

To ensure correct measuring results, you should check the drilling needle with respect to wear after every tenth drilling.

Required tools:

- Drilling needle (length 387 mm)
- T-wrench 2,5x100

Instructions

Changing the drill bit

To change the drill bit you have to completely extend the instrument (extend scale to ,0') so you can see the bore hole (the bore hole is located at 1,5 cm on the drilling depth scale) - see illustration 1.

Loosen the black set screw with the t-wrench 2,5 mm x 100 (max. 2-3 revolutions – counter clockwise) – see illustration 2! If dull drill bit still exists pull out of front area. Then insert new drill bit, move all the way to the end and tighten down the black set screw with t-wrench 2.5 mm x 100 - see illustration 3+4+5.

Figure 1



Figure 2



Figure 3

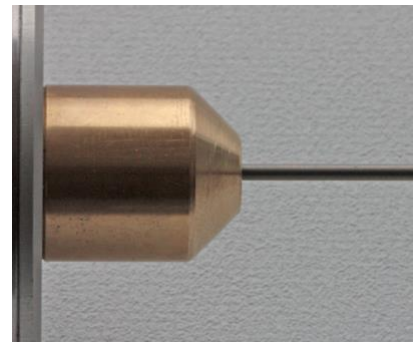


Figure 4

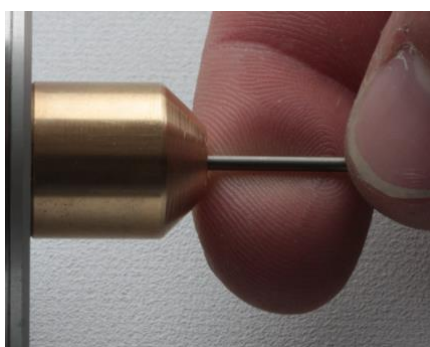
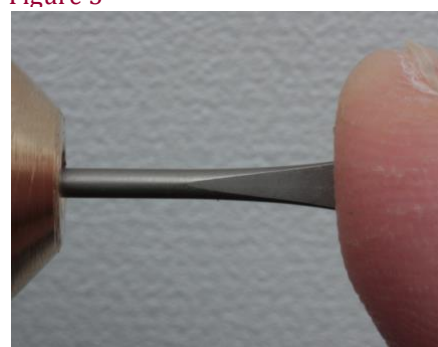


Figure 5



Instructions for Use: IML-RESI MD300

Hint:

When the bore lays on the edge, the drill bit will stand out just a little bit and therefore you will be able to check on the correct position of the drill bit – see illustration 6.

You can pull the drill bit to verify that it is indeed tightened down correctly.

Figure 6



Assembly of the battery operated drill IML-RESI MD300

Note

- Drill adapter for external battery operated drill: Diameter 12 mm

Instructions

Open drill chuck of the battery operated drill and attach to hexagon attachment. Then tighten all the way down! Charge battery and attach to battery operated drill!

IML-RESI MD300 in application



Notes

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