IML PowerDrill®
Uncompromising Precision for Any Application
Applications
The IML PowerDrill® can be used wherever reliable and meaningful measurements are required.

Range of applications:
• Tree care inspection and management to maintain safe parks, roadways and forests
• Check stability of utility poles
• Diagnose decay in wooden playground equipment
• Inspect structural wood in timbered houses, bridges and buildings on stilts for vulnerabilities and safety risks

Advantages
• Compact, battery-powered drilling resistance measuring device with integrated system guidance
• Electronics in splash-proof housing
• Easy to use with clear menus and automatic measurement
• Adjustable feed speed up to 250 cm/min
• Adjustable drill speed up to 5000 rpm
• Automatic drill bit retraction
• Fast and easy changing of drill bit, either automatically or manually
• Robust, replaceable telescopic guide for drill bit
• Powerful 18V lithium-ion rechargeable battery

Product Features
• Easy-to-read, clear display
• Straightforward and fast digital data collection
• Prevents fatigue with ergonomic lightweight design
• High drilling performance with minimum power consumption
• Rugged, splash-proof aluminium housing
• Simultaneous recording of the drilling resistance and feed speed curve for improved identification of early & difficult to spot decay
• Automatic curve evaluation for utility poles and wooden playground equipment
The IML PowerDrill® is equipped with an electronic unit that gives clear support in taking, documenting and evaluating measurements.

Advantages of the electronic unit
- Large, easy-to-read display (139x37 mm)
- Intuitive menu controlled with help of navigation knob
- USB and Bluetooth interface for connecting to a PC or PDA
- Measurements stored in internal memory
- Scaling of measurement curves directly in the electronic unit for better curve interpretation
- Enter ID number and comments
- Pre-select drilling depth
- Automatic evaluation of measurements for timber poles and wooden playground equipment
- Automatic Needle Breakage Detection

Optional add-ons
The IML-RESI PD Series can be expanded and customised with additional modules and options.
- Increase memory to 50, 100 or 180 metres of measured curves
- Record feed curve
- Tilt sensor
- Scaling package
- Needle Breakage Detection
- Access control
- Remote control interface
- WoodInspector for automatic curve evaluation for timber poles and wooden playground equipment
- Additional handle and shoulder strap
- Bluetooth printer to print measurements on-site wirelessly

Display shows the following data:
- Drilling resistance and feed curve
- Feed speed and drilling bit rpm
- Number of measurements stored
- Free memory remaining
- ID-number/comment
- Date, time, battery level
- Drilling angle
- Needle Breakage Detection

Specifications
- Drilling depths: 200 mm to 1000 mm
- Energy source: Lithium-ion rechargeable battery
- Results: Electronic data storage, optional: Bluetooth printer
- Resolution: 0.02 mm/300 mm
- Feed stages: 5 feed stages, freely adjustable from 15 cm/min to 250 cm/min
- Rotation speeds: 5 rotation speed levels, freely adjustable from a min. 1500 rpm to a max. 5000 rpm
Evaluation and Documentation
Additional software modules for evaluation, scaling and documentation of measurement results

**IML Software Center PD Tools / PD Tools PRO**
Included in the IML-RESI PD Series is the standard PD Tools software package. The expanded PD Tools PRO is available as an extra option.

- **Standard PD Tools software features:**
  configuration, transmission, evaluation, magnification, printing and storing

- **Advanced PD Tools PRO software**
  includes the standard PD Tools features plus export, averaging, printing, cavity detector, tree ring analysis and simultaneous displaying of the measurement curve during drilling

**IML WoodInspector**
The IML WoodInspector is an add-on module for the PD Tools PRO software package. The comprehensive evaluation and analysis features of PD Tools PRO are further enhanced by technical innovations to make critical improvements in the traceability and efficiency of wood inspection.

**Functions**
- Graphical and numerical cavity detection
- Detection of decay and incipient decay
- Flexible and individual adaptation to user specifications and operating conditions
- Analysis of the feed data
- Automatic diameter detection allows the automatic withdrawal of the bit after exiting at specific drill angles
- Test results displayed immediately after the drilling

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**Measuring/object data**
<table>
<thead>
<tr>
<th>Measurement no.</th>
<th>91</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID-number</td>
<td></td>
</tr>
<tr>
<td>Drilling depth</td>
<td>23.97 cm</td>
</tr>
<tr>
<td>Date</td>
<td>18.09.2012</td>
</tr>
<tr>
<td>Time</td>
<td>16:39:50</td>
</tr>
<tr>
<td>Feed speed</td>
<td>200 cm/min</td>
</tr>
</tbody>
</table>

**Needle speed**
- 3000 r/min
- Needle state: ok, Tilt: -29°, Offset: 119/163, Avg. curve: off
- Diameter: 19 cm
- Level: 100%
- Direction: 0°
- Species: IML 1.00F
- Location: Pole
- Name:
- Program: Pole (IML 1.00F)
- Start/stop: 1.33 cm/ 22.78 cm
- Effective Length: 21.45 cm
- Decay detection: 14.62 cm/68%
- Cavity detection: 11.49 cm/54%
- Result: FAIL

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**Amplitude (%)**

**Drilling depth (cm)**

pic. shows IML WoodInspector analysing timber pole with decay
Safety and Service
As the leading manufacturer of measuring and test equipment for trees and wooden structures, IML offers a unique combination of experience and expertise in the use/interpretation of these devices.

- Annual service inspection to check, clean and calibrate the measuring device
- Worldwide service via a network of experienced distributors
- TÜV certified quality
- Measurement technique recognised for more than 20 years

Intensive Courses & Training
Become familiar with the features, measurement methods and technical applications of the device, know the proper use of the equipment and the correct interpretation of the values measured.

- Device instruction on-site
- Intensive courses for professional use of the equipment
- Interpretation and evaluation of measurement curves
- Individual seminars, workshops and in-house training