PREDICT's Proven Technology
PREDICT's pioneering Ferrography technology is an accurate and reliable process to predict wear conditions and failure potential of lubricated components. With Ferrography, maintenance actions can be recommended that optimize equipment utilization and productivity. The Ferrographic process and related equipment utilizes technology developed by PREDICT, which set a standard in diagnosis and successfully proven in laboratories throughout the world.

Ferrography is a technology developed by PREDICT whereby wear debris is separated from a lubricant. After separation, quantitative and qualitative evaluation is performed to determine severity, origin and development mechanism of the wear particles.

DR-5 Direct Reading Ferrograph
Machine wear condition monitoring
The DR-5 Ferrograph is a machine condition wear monitoring instrument providing basic wear trend data at a very low cost. It is easy to use, determines machine condition and provides results in minutes. This instrument can also be used as a stand-alone monitor for screening abnormal wear conditions requiring further analysis.

The DR-5 Ferrograph utilizes a magnetic gradient to trap and optically measure the amount of ferrous wear particles on a scheduled basis. This instrument establishes the baseline wear level for any piece of equipment. Any sudden increase in the wear trend level alerts the user to a potential machine problem prompting them for preventive action. The DR-5 bridges the gap between spectroscopy, lubricant condition monitoring and chip detectors. Spectrometers measure particles too small to indicate abnormal wear, whereas chip detectors measure particles so large that major component damage has already been done.

Features and Benefits:
• No limitations in machine or lubricant type being monitored.
• Data can be obtained quickly, generally less than 3 minutes.
• Simple instrument setup and operation.
• Auto-download of data to software application.
• Passport, Predict’s Windows®-based data Management and Analysis software performs automatic DR trending and notification of abnormal wear condition.
• The microprocessor-based DR incorporates internal diagnostics for reliable functioning. An LCD panel expedites instrument setup and initial startup.
• CE certified and operates with a universal power plug.
Software Trending
For laboratories using Predict's Passport data management and analysis software, automatic DR trending and abnormal wear condition notification is performed in a Windows®-based application.

Electronics
The DR is a microprocessor-based instrument with internal diagnostics ensuring reliable instrument functioning. An LCD panel facilitates instrument operating parameter settings and expedites run times.

**DR Specifications**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>12 in</td>
</tr>
<tr>
<td>Width</td>
<td>10.75 in</td>
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<tr>
<td>Height</td>
<td>21.5 in</td>
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<tr>
<td>Weight</td>
<td>20.5 lbs</td>
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<tr>
<td>Power</td>
<td>100 - 240v 50/60 Hz</td>
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<tr>
<td>Comm-Port</td>
<td>RS 422 or RS 232C selectable</td>
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</tbody>
</table>

**Product Support and Supplies**
All instruments are warranted for one year after purchase. Warranty repair is accomplished by sending the units back to PREDICT. Loaner units will be provided free of charge. Out-of-warranty repair is also conducted by PREDICT and includes charges for parts, labor and shipping back to customer. Loaners are provided for the cost of shipping only; no rental charges are applied. Prepackaged disposables are readily available with everything needed to start and maintain a Ferrographic wear particle analysis program. They include sample vials, precipitator tube assemblies, pipette tips, sample bottles, solvents and diluent oils. In addition, an Atlas of Wear Particles is available to assist the technician in interpreting particles.

PREDICT offers several basic and advanced Ferrography training classes each year for those new to Wear Particle Analysis or looking to expand their knowledge base. In addition to training classes in PREDICT’s Cleveland, Ohio, facility, on-site installation and instrument training is also available.

PREDICT also provides Ferrographic and Oil analysis services, complementing existing in-house programs.

*All supplies and accessories are warranted for 90 days.*

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For Further info on products and services provided by PREDICT, please see our website at [www.predictusa.com](http://www.predictusa.com)