Motor maintenance professionals, service and repair shops and manufacturers all need to assure their customers that the motors they sell or put into service will perform as expected. They require reliable motor test and analysis equipment that can determine if a motor was properly wound, or if any weaknesses in the insulation exist that would lead to premature failure.

Motor tests performed on static (i.e. off line, unpowered or out-of-service) motors often require the use of portable static motor test equipment such as the SKF Static Motor Analyzer - Baker DX. Users rely on the analyzer’s large front-panel touch screen user interface to view results, or they can print reports via the unit’s USB connection to a compatible printer.

SKF Surveyor DX software enables Baker DX operators to use a personal computer to store more test data, generate and view reports across the full spectrum of Baker DX tests, and share and compare analysis with other maintenance personnel using data from multiple analyzers.

With Surveyor DX, maintenance professionals can elevate quality assurance to new levels. The software stores and displays all surge waveforms for a complete armature, or for individual form-wound coils in an AC motor, and provides comprehensive details that prove a given motor was thoroughly tested. Surveyor DX makes it very easy to analyze hundreds of coils or bar-to-bar tests on a given armature, which instills confidence in operators about the quality of motor rewind work. Users can analyze trends to identify motors at risk of failure.

Surveyor DX software allows analysis and comparison of test results, and generates detailed reports which fully document the condition of the tested motors.
From analyzer to desktop
Surveyor DX is a software application that provides users the option to use a Microsoft Windows-based desktop or laptop computer to easily generate, view, print and archive Baker DX motor test results from an office or with a laptop in the field.

Results include data analysis from the following types of tests:
• low-voltage RLC (resistance, capacitance, inductance)
• phase angle, impedance and D/Q
• DC tests (polarization index, dielectric absorption, DC hipot and step voltage)
• surge tests of motors, coils and armatures

How Surveyor DX works
Surveyor DX imports Baker DX test data saved on a USB drive and stores it in a database. Data from multiple Baker DX analyzers can be stored in the same database. The data is accessible to multiple users to view, share, organize and archive any specific set of test data, results or analysis acquired from any Baker DX unit.

Quick view results
Surveyor DX provides representative views of printed reports for selected results. For DC test and surge graphs, the application includes a zoom feature and a cursor with x,y readout (on DC graphs).

Export compatibility with XML
Surveyor DX can generate reports in XML format that make them cross-compatible with other XML applications.

In addition to the Baker DX serial number and date/time stamp for each test result type, the test data includes all scalars and DC test tables. Data for graphs is also exported, and includes surge graph data and DC test graph data.

Database support
Surveyor DX currently works with Microsoft Access database. Future versions are planned to support SQL databases such as SQL Express RT2. Surveyor DX database files will have a .dxdb extension.

Surveyor DX reports
Surveyor DX generates the following types of reports, depending on the source data collected from the tester:
• Low-voltage/RLC: resistance, inductance, capacitance, D/Q, impedance, phase angle
• DC tests: PI, DA, DC high potential (hipot), step-voltage with DC graph
• Surge, three-phase: surge waveform, LL and pulse-to-pulse EAR, partial discharge
• Surge, coil/armature/span: reference vs. test EAR bar chart, thumbnails of each coil/bar vs. reference surge waveforms

Supported software
Surveyor DX works on the following 32-bit and 64-bit Microsoft OS platforms:
• Windows XP with Service Pack 3
• Windows Vista
• Windows 7
• Windows 10

The application is compatible with Internet Explorer 8 (or later) for opening mhtml files, and with Microsoft Word 2003 or later for creation of reports.

Languages supported
English, German, French, Spanish and Portuguese.

Report formats
Reports can be saved in Web format (html, htm), Web archive (mhtml, mht), MS Word 2003 (doc), 2007 and later (docx), and XML.