Myocardial Solutions
HARP®

The only FDA 510k-cleared software to analyze myocardial strain using tagged cardiac MR images

You’re seeking to move beyond the traditional boundaries in cardiac care and research, to explore new and innovative ways of diagnosing, treating, and monitoring heart disease. Why not rely on an state-of-the-art tool that is uniquely capable of helping you achieve your goals? Myocardial Solutions’ patented HARP (for HARmonic Phase methodology) is considered the gold standard in quantifying cardiac regional function.

HARP detects and measures what other software tools cannot: the precise degree and location of regional dysfunction, revealing early indications of disease and abnormalities.

As the first and only FDA 510 K cleared software for the analysis and quantification of tagged MR images, HARP provides the technology to precisely measure irregularities in the heart muscle, and pave the way for more effective and proactive treatment.

HARP Value

- Ensures precise diagnosis of heart disease by analyzing cardiac regional function (strain), revealing information that is unobtainable by other methods
- Supports early detection and early treatment intervention before there is a major problem
- Produces strain maps that pinpoint the exact degree and location of regional dysfunction
- Provides quantitative monitoring and feedback on therapies and treatments
- Maps regional function with ease

HARP Benefits

- Measures and analyzes myocardial contraction and ventricular contortion
- Quantifies the motion of all hard segments, including regional strain and twisting of the left ventricle
- Pinpoints the precise degree and location of regional dysfunction
- Detects any presence of mechanical dyssynchrony

It’s all about Wall Motion

Measuring wall motion and strain indicates how regions of the myocardium are functioning, and can be a powerful and sensitive predictor of impending problems with the heart. At the onset of a disease, healthy regions of the myocardium compensate for the affected ones, and global functional measures such as ejection fraction (EF) fail to reveal a problem.

HARP is considered the gold standard in cardiac MRI strain analysis. Images can be analyzed using this cutting edge technique to provide measurable feedback before apparent visual indications.
HARP Features

- Automatic generation of cardiac bull’s-eye diagrams depicting myocardial strain
- Color coded images for sharply defined quantification of regional function
- 17 segment model and strain curves
- Easy user interface for importing and analyzing images; exporting results as movies, images, tables and reports; and exporting measurements to excel files, bull’s-eye and time resolved graphs, and other representations of cardiac function

HARP: An integrated component of VIRTUE™

HARP is a module of the VIRTUE suite of fully integrated, advanced cardiac MRI quantification offerings from Myocardial Solutions. VIRTUE provides a comprehensive, end-to-end Cardiac MR image quantification solution for diagnosing and assessing heart disease and abnormalities in all regions of the heart. VIRTUE is a scanner- and vendor-independent solution. In addition to HARP, the suite also includes:

- Cine, SIA, TIA - Global function (cine), perfusion, and delayed enhancement analysis
- FLOW - Measures blood flow velocity
- T1/T2/T2* - Includes T1 and T2 mapping for measuring fibrosis, edema, ECV, and T2* for measuring myocardial iron content

Myocardial Solutions provides innovative software analysis tools focused on healthcare. We are well known for HARP®, the first FDA 510k-cleared software for tagged MR images, which is a component of our complete, end-to-end solution for the analysis and quantification of cardiac magnetic resonance images.