

Diagnosoft®

# V I R T U E

More than images, quantitative diagnosis

**Innovative MRI  
analysis with instant  
image quantification**



*The future of intelligent care*

5  
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-10  
-15  
-20  
-25

SENC



ANALYSIS

HARP®



COMPREHENSIVE

ENTERPRISE

CONNECTED



## Diagnosoft® VIRTUE delivers comprehensive, leading-edge capabilities in cardiac MRI quantification and analysis

Improving care of cardiovascular disease, the leading cause of illness and mortality in the U.S., requires precise and timely diagnosis of cardiac impairment. In addition, accurate and comprehensive in-depth measurement of cardiovascular function is critical to assessing the overall health of the heart.

Introducing Diagnosoft® VIRTUE, healthcare's most comprehensive, advanced and flexible suite of enterprise cardiac MRI quantification software solutions.

By supporting early detection and timely interventional treatment of cardiac abnormality and disease, Diagnosoft VIRTUE provides healthcare organizations with the innovative tools and remarkable potential to improve outcomes for cardiac patients.

### Comprehensive

With its five specialized, integrated modules, Diagnosoft VIRTUE delivers end-to-end, 360-degree perspective and analysis of regional and global heart function. Diagnosoft VIRTUE builds on Diagnosoft's well-established reputation for leadership in cardiac MRI quantification. Two of the software flagship modules — HARP and SENC — have transformed the industry by greatly expanding the scope and significantly enhancing the detail of cardiac MRI analysis.

No other software can rival Diagnosoft VIRTUE's far-reaching and finely tuned capabilities in measuring strain, motion, torsion and performance of the heart — particularly in the delicate layers, fine segmental walls and elusive structures of the myocardium. Diagnosoft VIRTUE helps cardiologists determine the exact degree and location of dysfunction and therefore empowers effective cardiovascular therapy.

### Advanced

Designed to meet today's expectations for seamless IT connectivity and integration, Diagnosoft VIRTUE provides enterprise-wide accessibility and functionality, and ensures interoperability with all technology platforms and hospital systems.

Cardiologists can harness Diagnosoft VIRTUE's industry-leading, patented cardiac MRI quantification tools and capabilities — and the vital diagnostic measurements they generate — at any facility, department and clinical setting within the healthcare enterprise.

By connecting and automatically updating to all applicable hospital systems, from EMRs to PACS systems, Diagnosoft VIRTUE improves the value of accessing enterprise data, and

supports more informed and effective clinical and financial decision-making.

Diagnosoft VIRTUE integrated image viewer facilitates daily workflow and image quantification. The image viewer is an interface that imports and populates thumbnail images of all patient scans to be analyzed. Viewer's patient/exam list makes it easy for users to plan and manage daily workload, and apply the appropriate quantification tools and measurement analysis for each patient.

Combining Diagnosoft® VIRTUE with Diagnosoft® PULSE, Diagnosoft's unique enterprise structured reporting tool (see sidebar.), enables cardiologists to quickly generate and distribute clinical reports that concisely outline diagnostic findings for other physicians directing the patients' course of care.

### Flexible

Because Diagnosoft VIRTUE leverages Diagnosoft® OMNEA enterprise middleware platform (see sidebar.), its modules interoperate with all technology and MRI platforms, enterprise hospital systems and IT infrastructures.

Hospitals and physicians can select the entire solution set or implement the specific module or mix of modules that meets their specific needs. As scanner-independent solutions, Diagnosoft VIRTUE addresses organizational demands for software flexibility, connectivity and value.

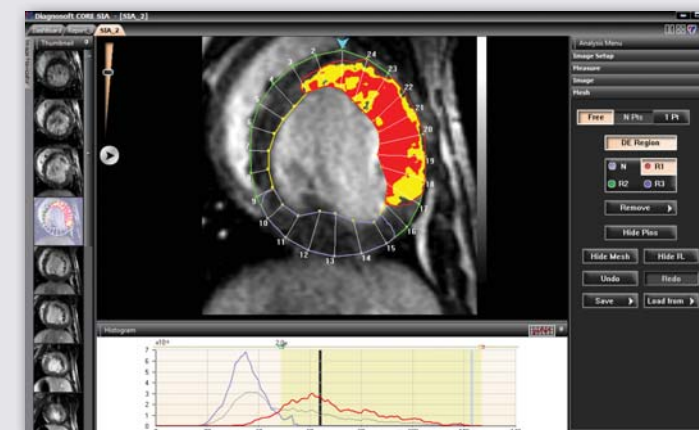
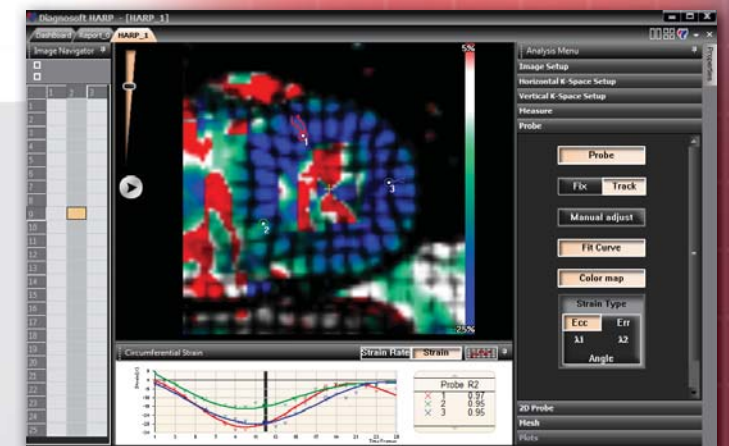
## The Diagnosoft® VIRTUE solution provides five integrated modules

### Diagnosoft® HARP®

HARP (for the HARmonic Phase method) is the only FDA 510k-cleared software to measure and analyze tagged cardiac MR images for diagnosing and assessing regional heart function and abnormalities.

With HARP's patented quantification technology, MR images are "tagged" by magnetizing the heart and surrounding tissues with a special pattern. Following these tag lines tracks the motion of the heart, providing rapid measurement and analysis of its movements, regional function and ventricular torsion.

*Color-coded images for better quantification of regional function*



*Visualization of hyper-enhanced region*

## Diagnosoft® SENC

SENC (strain-encoded) imaging technology and quantification tools detect, measure and monitor functional heart anomalies in the most detailed structures of the myocardium even in the thin, delicate wall of the right ventricle.

With its high-temporal image resolution and rapid imaging, Diagnosoft® SENC measures regional myocardium contraction, or relaxation, and pinpoints subtle regional variations in muscle contraction due to ischemia, myocardial infarction or other causes.

## Diagnosoft® CORE

Diagnosoft CORE provides essential cardiac MRI measurement and analysis by combining cine, perfusion and delayed enhancement quantification capabilities.

As the ideal, highly versatile automated tool for evaluating global cardiac function, stress function studies, time-intensity studies and delayed signal intensity studies, CORE improves efficiency of daily post-processing workflow while avoiding the ambiguity of visual MRI assessment.

## Diagnosoft® FLOW

Diagnosoft FLOW analyzes the blood flow of major heart vessels from phase contrast MR images, automatically segmenting the vessels to track changes of blood flow velocity through time in up to four regions.

By color-coding blood flow and applying quantitative measurements, Diagnosoft FLOW helps support improved diagnosis of heart disease and abnormality, and the delivery of appropriate care.

## Diagnosoft® STAR

Diagnosoft STAR leverages cardiac MR imaging to accurately analyze myocardial iron content through T2\* measurements. Using the software's optimized mathematical fitting algorithm, Diagnosoft STAR can predict heart failure caused by myocardial iron overload as well as accurately monitor iron-chelation therapy.

## Diagnosoft® OMNEA

Diagnosoft OMNEA is Diagnosoft's enterprise connectivity middleware platform, ensuring that all current and future Diagnosoft products meet IDN and hospital requirements for interoperability.

## Diagnosoft® PULSE

As the industry's first vendor-independent, enterprise structured reporting tool in cardiac MRI quantification, Diagnosoft PULSE enables physicians to quickly and automatically generate and distribute customized, CMRI reports.

## About Diagnosoft®

Diagnosoft develops advanced, enterprise-capable software solutions that enable healthcare organizations, physicians and other caregivers to take a more proactive, interactive and integrated approach to care and wellness.

Diagnosoft FUSION, a state-of-the-art clinical analytics and knowledge support system, provides clinicians with access to aggregated, longitudinal clinical patient data. FUSION's Clinical Intelligence and Insight Engine continuously monitors, sorts and displays pertinent and configurable patient data that caregivers can quickly review, analyze and act upon.

Diagnosoft VIRTUE, the industry's leading cardiac MRI quantification software, delivers unmatched detail and analysis of regional heart function, empowering early detection, accurate diagnosis and more effective treatment of heart disease and abnormality.

For more information, visit [diagnosoft.com](https://diagnosoft.com).

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