

Siemens Healthineers Presents Particularly Cost-Efficient MRI Scanner - Magnetom Sempra



- 1.5 Tesla MRI scanner with innovative applications supports improved competitiveness and will potentially boost profitability for radiology providers
- · Up to 30% less energy consumption, higher uptime at lower running costs thanks to an innovative embedded service concept
- Standardized and automated examination workflows address the continuous trend towards industrialized healthcare
- · Complete MRI examinations in just ten minutes from preparing the patient to completing the examination

At this year's Annual Meeting of the Radiological Society of North America (RSNA) in Chicago, USA, the separately managed healthcare business of Siemens AG is presenting itself for the first time under its new brand name, Siemens Healthineers. The new name underlines the company's pioneering spirit and its engineering expertise in the healthcare industry. With a new strategic direction, Siemens Healthineers aims to enable healthcare providers around the world to meet their current challenges and to excel in their respective environments. Through products and solutions designed to increase efficiency and to reduce costs, Siemens Healthineers is setting new trends in healthcare together with its customers – working under the motto "Engineering Success. Pioneering Healthcare. Together."

In order to help its imaging customers become more competitive, Siemens Healthineers presents a new and particularly cost-efficient MRI scanner at the 2016 RSNA in Chicago. Thanks to low operating costs, innovative technologies, and an integrated Siemens Healthineers service concept, the 1.5 Tesla Magnetom Sempra MRI scanner will allow radiological practices and groups, as well as small and medium-sized hospitals to work profitably despite growing cost pressure in the industry. Additionally, its standardized workflows will help institutions achieve consistent, user-independent quality.

"With Magnetom Sempra, we're helping our customers keep pace with the market trend toward standardized healthcare, and to achieve better results at a lower cost of ownership," says Christoph Zindel, M.D., Senior Vice President of the Magnetic Resonance Business Line at Siemens Healthineers.

Achieving consistent MRI results, especially for follow-up examinations, is of utmost importance for radiology providers. However, high levels of staff turnover and very diverse patient populations can both have an equally negative impact on the quality of the results. With the MRI imaging software DotGO, Magnetom Sempra users can react flexibly to each case and to the condition of the individual patient, while standardizing the exam at the same time. Special technologies for examining the brain, spine, and large joints, known as Dot engines that automate and streamline the workflow, are included with the scanner as standard for the first time. They cover around three-quarters of the average examination volume, and help users increase productivity and avoid having to unnecessarily repeat scans.

Less artifacts and less noise

Given the competitive pressure in the healthcare industry and the rise in quality demands, clinical differentiation is becoming increasingly important for radiology providers. Magnetom Sempra features innovative applications that open up new possibilities for responding to these needs. Now, it is possible to scan in the presence of MR safe metallic implants with better visualization of soft tissue surrounding the implant and even patients with knee implants can be scanned with high quality – something that was often not possible in the past. The software platform also includes Quiet Suite technology, which reduces sound pressure during an MRI scan. The optimized gradient switching can reduce sound

pressure by up to $97\%^2$ in brain and musculoskeletal exams with comparable image quality. This is especially beneficial for anxious patients and provides a more positive patient experience during MRI exams. Intelligent sequences also reduce the scan duration. The system can achieve the necessary high image quality with just short breath-hold times, which means patients who have shortness of breath can now also be scanned.

Financial reliability with cost-effective technologies

The new highly efficient MRI scanner can increase productivity, while also reducing running costs. Ten minute exams with time- and image-optimized protocols cover most commonly scanned body parts. For example, a complete brain scan with the Magnetom Sempra takes just ten minutes – from positioning the patient on the table to finishing the examination. This will help both practices and hospitals operate profitably despite increasing financial pressure from cuts to scan reimbursement rates. The embedded Siemens Healthineers Connect Plan gives providers financial certainty and lowers total cost of ownership by delivering remote service, and ensures higher uptime.

In order to reduce overall operating costs, Magnetom Sempra is equipped with Eco-Power technology, which monitors and controls the state of the helium used to cool the magnet. In stand-by mode, Eco-Power monitors the helium cycle and controls the cooling and re-liquefaction of the helium more efficiently. This can reduce energy consumption by up to 30 percent in stand-by mode – compared to running the scanner without this technology. A supplementary feature, Zero Helium boil-off technology, prevents the helium from evaporating. This means operators can avoid expensive gas refills, and the downtimes they would require.

Magnetom Sempra deliveries will begin in the second quarter of 2017.

Source & Image Credit: Siemens Healthineers

References:

1 510(k) pending.

2 Compared to the same device without Quiet Suite technology. Data on file. Results may vary.

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