SOMATOM Drive

Drive precision for all

siemens-healthineers.com/somatom-drive

International version.
Not for distribution or use in the U.S.

SIEMENS Healthineers

How can you overcome the challenges of tomorrow's healthcare?

The challenges faced in providing patients with the best possible care are seemingly countless, something which is also seen in the area of imaging, including CT. Patients' body types, ages, and medical conditions can vary considerably. So achieving fast, precise scans with uncooperative patients, those in altered mental states, or those with renal insufficiency puts added pressure on everyone involved.

Designed to powerfully enhance diagnostic quality and provide more precision, flexibility, and efficiency, SOMATOM® Drive is an exceptional new member of your radiological team – for all your patients, all your business needs, and, of course, your specific environment.

SOMATOM Drive – Drive precision for all

Drive precision for your patients

- Provide reliable diagnostic results across clinical disciplines, as well as a new quality of patient care
- Accept more patients than ever before and master urgent care
- Improve the CT experience for everybody involved

Drive precision for your environment

- Standardize your institution's quality of care to unseen levels
- Promote optimum performance at all times by simplifying routines and accelerating workflows

Drive precision for your business needs

- Allows you to implement unprecedented system-management efficiency
- Connects you to the CT practice of tomorrow, advancing new clinical fields and new technologies

Drive precision for your patients

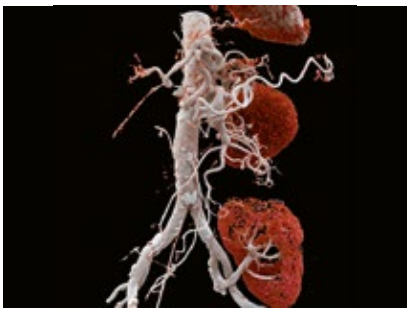
SOMATOM Drive provides reliable diagnostic results across all clinical disciplines and helps you achieve a new quality of patient care.

Pediatrics

Children are usually unable to understand breathing instructions and their young age also makes them more dose-sensitive. Turbo Flash mode helps eliminate motion artifacts without increasing the dose. Help dose-sensitive patients without limiting scan speed and temporal resolution.

Urgent Care

Urgent Care can take many forms: for example, accident and emergency medicine, pre- and postsurgical patients, unplanned outpatients, and ward patients with a significant change in state. SOMATOM Drive's unique 10 kV Steps and CARE kV facilitate higher power at lower kVs, making it even easier to achieve the right dose for each individual patient.



Critical Care

Critical Care patients need access to high quality, consistent imaging, without time-consuming and costly aftercare procedures. SOMATOM Drive can significantly boost your vascular imaging potential by harnessing the low-kV power of both X-ray tubes together, to provide a potential reduction in contrast media for a wider range of patients.

Lung Imaging

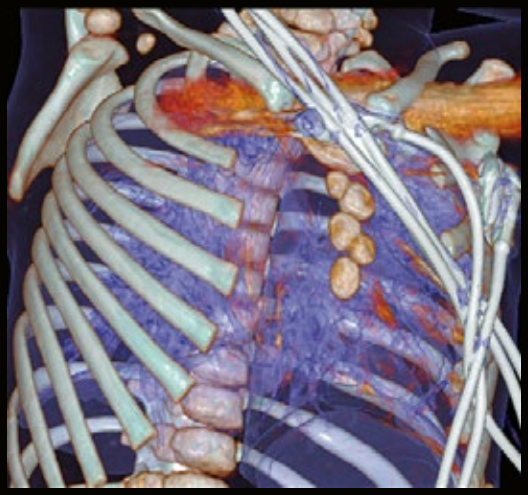
Imaging of the thorax for lung-related pathologies requires reductions in dose and improvements in image quality. For lung cancer screening, the SOMATOM Drive comes with two Tin Filters, which allow high-pitch Turbo Flash scans to be performed. This reduces dose and motion artifacts, which is especially important for lung cancer screening.

Cardiovascular Imaging

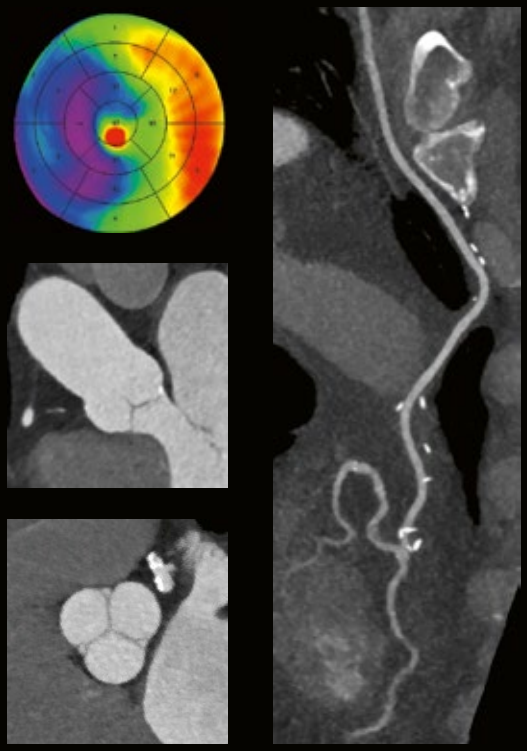
An increase in referrals for cardiovascular imaging, and the complexity of the patients needing scans, means you not only need to stop motion in the coronaries, but to stop lung and patient motion as well. There is a major advantage when scanning the whole heart with fast, true in-plane temporal resolution, combined with High Power 70 & 80 for an even higher level of dose precision for the patient.

Orthopedics

Fractures and dislocations of extremities may require surgical interventions and ongoing follow-up. Imaging extremities with Tin Filters leads to a significant dose benefit over several examinations, bringing the dose of a CT scan to that expected of a routine X-ray, with significantly more information.



70 kV Turbo Flash modes for low dose in highly sensitive, moving patients[1]



Precise patient dose even with full functional study incl. valves & LIMA bypass graft at below 7 mSv. Long-range cardiac imaging without compromising image quality[2]

10 kV Steps enable more precise selection of kV for each patient[3]

Spectrally shaped scans with Tin Filter (Sn140 kV) for low-dose lung imaging without apical artifacts, e.g., streaking, even in larger patients[2]

Low-kV and low-contast (<50 mL) imaging for virtually all patients – here, for example, with renal impairment and claudication of the vessels[2]

Drive precision for your environment

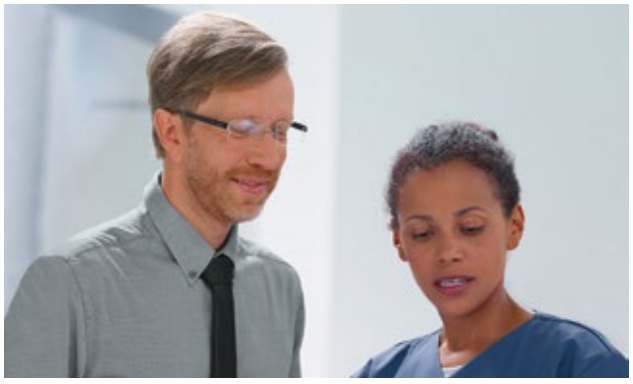
With SOMATOM Drive, you can upgrade your standardization of quality of care and heighten your process efficiency by introducing automated workflows. It also helps you simplify daily routines and reach a new level of modernization.

Safeguard correct and consistent positioning

Accurate patient positioning is essential for safe, error-free CT imaging with no rescans and time loss. With its game-changing FAST Integrated Workflow with FAST 3D Camera, SOMATOM Drive helps you to consistently acquire the right body region at the right dose.

Overcoming challenges in your environment

The future of patient positioning is at the touch of a button. Improve your workflow and get closer to your patients with SOMATOM Drive's highly integrated Touch Panels.



Automation drives precision in challenging environments

Overcome workflow bottlenecks and staff training challenges with Siemens Healthineers' unique fully and semi-automated FAST and CARE features, as part of the DistinCT Imaging bundle.

Automation drives precision in overburdened environments

Siemens Healthineers' unique automated image creation features, included in the DistinCT Reading bundle, aim to reduce the burden on and improve workflows in a radiology department.

Drive precision for your business needs

With SOMATOM Drive, you are prepared for future challenges – new diseases, new patients, and new workflows – in an approach to imaging that puts people first.

Driven by future technologies

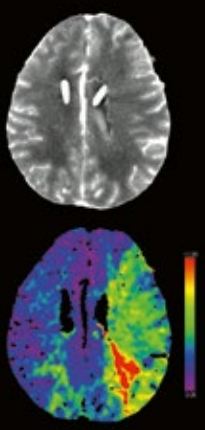
DistinCT Function:

- Puts quantitative CT at your fingertips
- Introduces a new level of diagnostic information to CT
- Enhanced qualitative and quantitative analysis being an everyday part of clinical routines

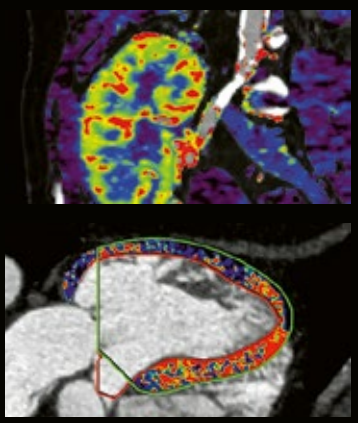
Quantitative CT at your fingertips

Dynamic perfusion studies

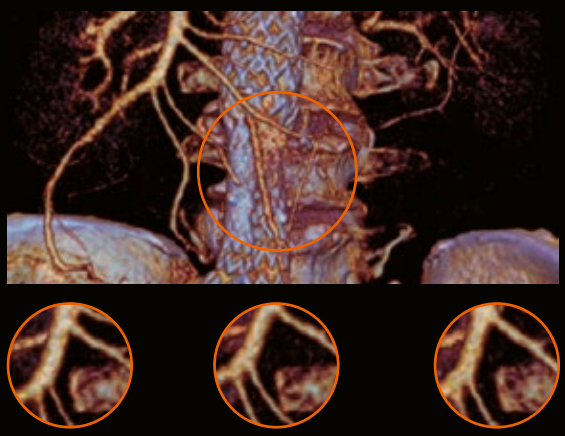
Neuro



Body



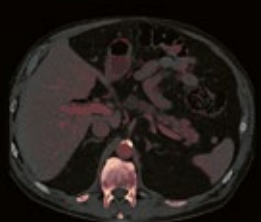
Dynamic vascular studies



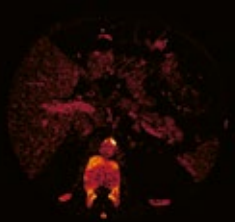
Dynamic studies[1]

Virtual noncontrast (VNC)

Fused (VNC + iodine map)



iodine map



Dual Energy[1]

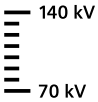
Technical specifications

Max. scan speed	458 mm/s
In-plane temp.-res	75 ms
Rotation coverage	131 mm/rot
kV settings	70-140 kV at 10 kV Steps
mA at 70 kV, 80 kV	650 mA, 750 mA
Spatial resolution	0.3 mm
Gantry opening	78 cm
Generator power	200 kW (2 x 100 kW)

Technical overview

Dual Source CT with Straton® MX Sigma X-ray tubes & Sigma generators
- Enable low-dose scanning while freezing motion at maximum speed
- Optimized for low-kV imaging even at a reduced scan time

Dual Source CT with Stellar^{Infinity} detectors with integrated iterative reconstruction
- Driven by a new level of integration of software and hardware
- Create excellent image quality with reduced dose



Unique 10 kV Steps
- Provide more patients with the most precise dose values for their situation
- Adapt to every patient from pediatric to adult and from slim to obese

Tin Filters
- Low-dose early detection
- 3D CT data at equivalent 2D X-ray dose levels
- Tin-filtered topogram

Turbo Flash mode (Superfast Scanning)
- Up to 458 mm/s
- Reduce the need for sedation
- Freeze motion artifacts

Dual Source Dual Energy
- Uncompromised Dual Energy with wide separation of energy spectra
- Enable advanced Dual Energy applications such as bone marrow imaging

Adaptive 4D Spiral
- Dynamic imaging up to 48 cm
- Low-kV neuro perfusion

FAST Integrated Workflow with FAST 3D Camera
- Precise isocentering and correct patient positioning
- Exact topogram and planning
- Powered by Artificial Intelligence (AI)

SOMATOM Drive is not commercially available in all countries. Due to regulatory reasons, its future availability cannot be guaranteed. Please contact your local Siemens Healthineers organization for further details.

On account of certain regional limitations of sales rights and service availability, we cannot guarantee that all products/services/feaures included in this brochure are available through the Siemens Healthineers sales organization worldwide. Availability and packaging may vary by country and are subject to change without prior notice.

The information in this document contains general descriptions of the technical options available and may not always apply in individual cases.

Siemens Healthineers reserves the right to modify the design and specifications contained herein without prior notice. Please contact your local Siemens Healthineers sales representative for the most current information.

In the interest of complying with legal requirements concerning the environmental compatibility of our products (protection of natural resources and waste conservation), we may recycle certain components where legally permissible. For recycled components we use the same extensive quality assurance measures as for factory-new components.

Any technical data contained in this document may vary within defined tolerances. Original images always lose a certain amount of detail when reproduced.

1 Courtesy of Medical University of Vienna, General Hospital AKH, Vienna, Austria.

2 Courtesy of Fakultni Nemocnice Plzen, Plzen, Czech Republic.

3 Courtesy of Erasmus MC, University Medical Center Rotterdam, Rotterdam, the Netherlands.

Courtesy of "Pediatrics" case and "Critical Care" case on page 3: Erasmus MC, University Medical Center Rotterdam, Rotterdam, the Netherlands.

Courtesy of "Urgent care" case and "Orthopedics" case image on page 3: Medical University of Vienna, General Hospital AKH, Vienna, Austria.

Courtesy of "Lung imaging" case on page 3: Fakultni Nemocnice Plzen, Plzen, Czech Republic.

Courtesy of "Cardiovascular imaging" case on page 3: Medscan Barangaroo, Sydney, Australia.

Requires the license syngo.via Cinematic VRT. Cinematic VRT is recommended for communication, education, and publication purposes and is not intended for diagnostic reading.

International version.
Not for distribution or use in the U.S.

Siemens Healthineers Headquarters
Siemens Healthcare GmbH
Henkestr. 127
91052 Erlangen, Germany
Phone: +49 9131 84-0
siemens-healthineers.com

Published by Siemens Healthcare GmbH · PDF only · 0920 ·