

# **Excellence** in Digital Healthcare

TOMTEC-ARENA single-seat workstation

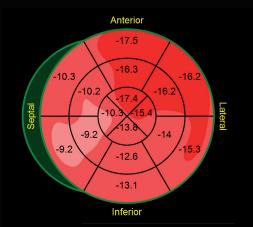


## A busy lab. Fast, confident answers.

More clinical information is available than ever before. The TOMTEC-ARENA single-seat workstation solution brings excellence in digital healthcare so that you can effectively harness clinical information from cardiovascular imaging.







AutoSTRAIN is part of the TOMTEC-ARENA portfolio of automated 2D and 3D strain imaging solutions to support clinicians in managing high-risk patients.

#### Efficient study review

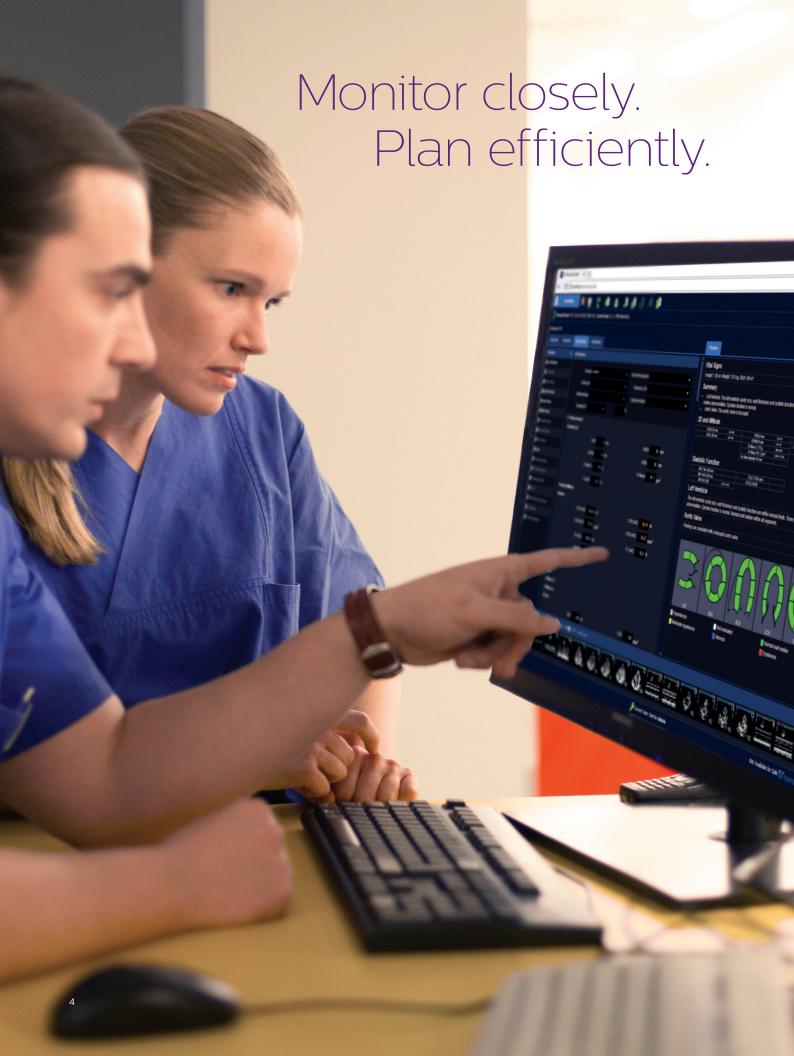
Quickly retrieve and navigate through studies, with the ability to efficiently interpret patient data while having access to all relevant clinical tools. TOMTEC-ARENA software allows clinicians to review images, including those from previous studies, to cross-examine clinically warranted findings. All measurements performed on the cart are imported and populated to worksheets or reports.

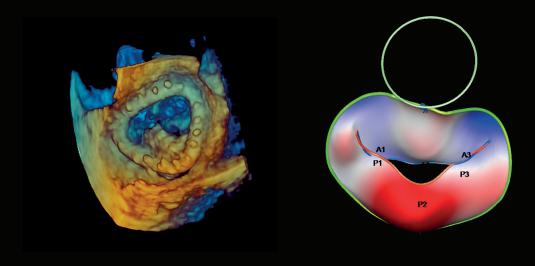
In addition, you can perform any echo or vascular lab measurements offline. The tools for clinical practice and advanced analysis are vendor-neutral and seamlessly integrated into your workflow.

#### Monitoring high-risk patients

Patients who are currently treated for conditions such as hypertension, coronary artery disease or diabetes, or who are undergoing chemotherapy, are at risk to develop heart failure.

The ability to closely monitor subclinical markers is essential to detection of subtle changes in cardiac function, allowing clinicians to better manage patients at risk of heart failure. It is essential to have accurate measurements that are not impacted by user variability. Automated strain imaging solutions provide highly reproducible data, which can be used as subclinical markers to monitor cardiac function before visual changes are observed.





TOMTEC-ARENA tools such as 4D CARDIO-VIEW and 4D MV-ASSESSMENT support management of structural heart disease.

#### Assess therapy outcomes

Close monitoring of heart failure patients based on precise data is essential. Monitoring specific data allows for better patient management.

Response to treatment and the prognosis are both directly related to the stage of the disease and the point at which treatment is initiated. Echocardiography is the procedure of choice in the assessment and workup for patients suffering from CHF or RV failure. The ability to closely monitor changes in cardiac volume allows clinicians to assess progression and alter treatment plans as required. TOMTEC-ARENA allows you to monitor changes in volume, based on automated solutions for 2D and 3D echocardiography.

### Support diagnostic confidence in structural heart disease

New transcatheter therapies (e.g., TAVR) and minimally invasive procedures for valve repair increase the need for advanced imaging prior to the intervention.

TOMTEC software solutions for the analysis of the mitral valve apparatus and also the aortic valve can give surgeons and interventional cardiologists a clear understanding of even the most complex anatomy. Accurate and current information increases diagnostic confidence to perform both transcatheter and surgical interventions.



Clinical capabilities through off-cart review, rendering and advanced quantification in 2D and 3D imaging modes

#### **ARFNA** Core

A single-seat solution to manage and archive patient and image data by connecting up to three ultrasound systems and including 2D image review and CARDIAC MEASUREMENTS as well as a 2D and 3D clinical application launcher.

The following applications and tools are part of TOMTEC-ARENA

#### **IMAGE-COM**

High performance viewing capabilities along with comprehensive feature set that allows for efficient review of still images and image sequences

#### **CARDIAC MEASUREMENTS**

Complete echocardiographic measurement package with labeled M-mode, Doppler and 2D measurements

#### **DICOM** receive

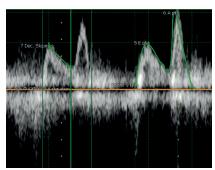
Receive and store DICOM data from up to three ultrasound systems

#### **TOMTEC DATACENTER standalone**

Comprehensive image management solution to connect multiple clients to a central database and archive



IMAGE-COM



CARDIAC MEASUREMENTS



Improve efficiency and support diagnostic quality from routine through advanced studies.

#### In addition to ARENA Core, the following four bundles can be purchased.

#### 2D Cardiac Routine

#### **ECHO-COM**

Solution to review and analyze exercise and pharmaceutical stress echo studies

- · Stress echo
- · Adult echo

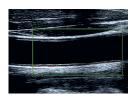
#### **REPORTING**

The TOMTEC-ARENA structured reporting solution generates professional reports in a quick and intuitive way: echo reporting (TTE, TEE, TEE pre- and post-op, and stress echo)

#### 2D Vascular Routine

#### **VASCULAR MEASUREMENTS**

Comprehensive vascular measurement package with labeled measurements for all major vessels



#### **AutoIMT**

Fast, intuitive and reliable solution to analyze Intima Media Thickness of the carotid artery

#### **VASCULAR REPORTING**

Add dedicated workspaces for: extracranial, transcranial, extremity venous, extremity arterial, visceral arterial, aortic iliac, graft duplex and dialysis access

#### 2D Cardiac Essentials



#### **AutoSTRAIN**

Quantification of global and regional function, including longitudinal strain, based on automatic contour detection and tracking



#### **AutoLV**

"Two-click" biplane left ventricular volume quantification with automated contour proposals for EF assessment



**AutoLA** 

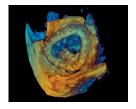
Biplane LA volume quantification just by selecting two clips

#### 3D Cardiac Advanced



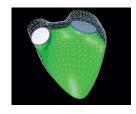
#### **3D OPTION IMAGE-COM**

3D ultrasound image viewer allows easy navigation and access to advanced quantification tools



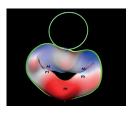
#### **4D CARDIO-VIEW**

This generic 3D software features distance, area, curve and angle measurements for TAVR planning and pathologies such as ASD, VSD size and location



**4D RV-FUNCTION** 

Quantification of right ventricular volumes, function and strain



**4D MV-ASSESSMENT** 

Comprehensive assessment and quantification of mitral valve anatomy and function based on an automated contour detection of MV annulus and leaflets



#### **MULTI-VENDOR 4D option**

Supports 3D/4D ultrasound data from any vendor for further analysis using the **3D Cardiac Advanced bundle** 

## Routine to advanced. Efficient workflow.

### Comprehensive image review and measurement

IMAGE-COM provides high-performance viewing capabilities for multimodality examinations along with a comprehensive feature set that allows for efficient review of still images and image sequences.

- Fast access for routine monitoring with various functions for study, including by screen tile, zoom, flip and rotate
- More efficient use of ultrasound systems by scanning on modality and measuring in IMAGE-COM
- Better traceability and transparency of measurements through a link between each measurement and its corresponding image

## Improve performance while enhancing diagnostic confidence

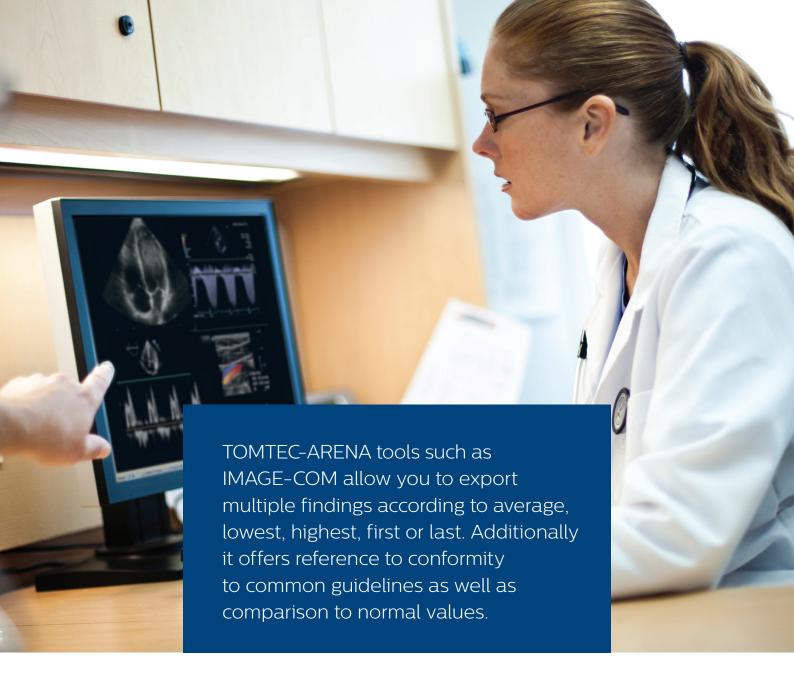
IMAGE-COM provides measurement capabilities for echocardiography and vascular examinations and for X-ray angiographic images, and has been developed to streamline workflow in the daily routine.

## Display 3D/4D cardiac ultrasound images side by side with 2D images

The 3D option enables IMAGE-COM to read and process proprietary 3D data formats of most vendors. With the proprietary TOMTEC navigation tool  $D\uparrow art$ , 3D views of any anatomical structures can be created with just two clicks.



The TOMTEC-ARENA
3D option for IMAGE-COM
allows you to analyze complex
morphologies in 3D through
the display of multiplanar
reconstructions in any
orientation combined
with the auto-sweep mode.



## Import from modality, re-measure, manage and export all findings

The IMAGE-COM measurement options offers a vast number of offline measurements. DICOM-structured reporting from ultrasound carts is automatically imported into a comprehensive worksheet for easy comparison, re-measuring and export. Easily transfer findings to report or EMR/HIS for availability for later data mining and further analysis.

## Accelerated reporting. Consistent, customized results.

#### Create structured, high-quality reports

TOMTEC-ARENA REPORTING is a comprehensive solution for structured reporting in adult echocardiography, pediatric and vascular ultrasound labs. Study and measurement data are automatically used to generate professional reports in a quick and intuitive way.

Worksheets created by conformance to guidelines increase overall quality of customized reporting documentation. Tailor reports to individual and specific needs with easy-to-use customization tools. Reporting workspaces are fully integrated with TOMTEC-ARENA to offer a clinical solution that accelerates report generation and interfaces to hospital information and EMR systems for efficient report distribution.



Generate high-quality content with reporting and normal ranges that conform to guidelines with automated quality assessment of measurements based on published standards.



Intuitive and customizable user interface and navigation for easy access to common findings, as well as specific cardiac and vascular structures. Streamline workflow with a web-based solution that fully automates the import of measurements from ultrasound devices and allows you to report and review results anytime, virtually anywhere.



## Continuous education. Up-to-date expertise.

## Stay up to date on software advancements and clinical trends

TOMTEC ACADEMY features detailed product trainings and other educational programs to increase your level of expertise and keep up to date with TOMTEC software.

#### Start with an info session

- · Complimentary for all customers
- Gain insight into our product portfolio

#### Sign up for a training session

- Live chat
- · Open discussion round
- · Case study demonstration
- Exclusively for current maintenance contract customers; customer ID required



## Register today for complimentary sessions at www.tomtec.de/academy

Manufactured by: TOMTEC Imaging Systems GmbH Edisonstrasse 6, 85716 Unterschleissheim Deutschland, Germany

+49 89 32175 500 · info@tomtec.de · www.tomtec.de

Distributed by: Koninklijke Philips N.V.

