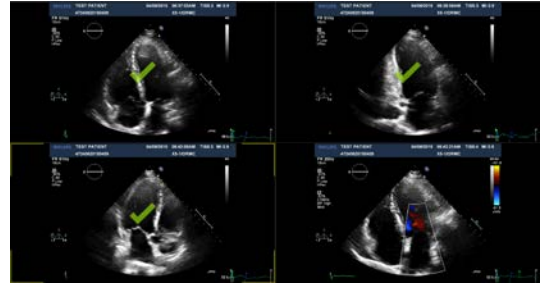




2D CARDIAC PERFORMANCE ANALYSIS – QUICK GUIDE

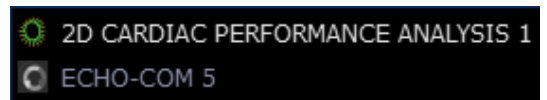
Image Preselection (optional)

- Open the study in IMAGE-COM*
- Select the images for your analysis
- (CTRL + left mouse click)
- Selected images are highlighted with a green checkmark
- Only the selected loops are going to be loaded in 2D CARDIAC PERFORMANCE ANALYSIS*



How to start the application

- Press the right mouse button and select 2D CARCIAC PERFORMANCE ANALYSIS



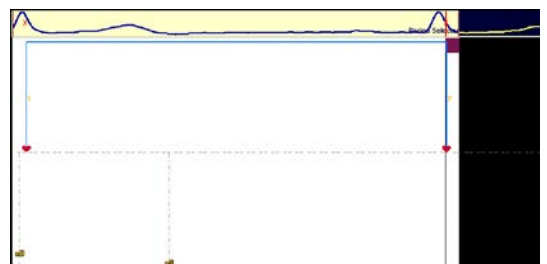
- Choose one option for the analysis
 - Apical
 - SAX
 - Atrium
 - RV
- Drag and drop the images to the corresponding views
- Press the button located in the lower right hand corner to proceed



- If multiple cardiac cycles have been acquired, proceed to the "Sequence/ M-Mode selection" icon and define one cardiac cycle within the period selector



- Use the red vertical reference markers in the period selector
- Drag and drop the red markers to select the desired cardiac cycle
- If the second heart cycle has been chosen check if the "ed" and "es" markers are within the selected cycle



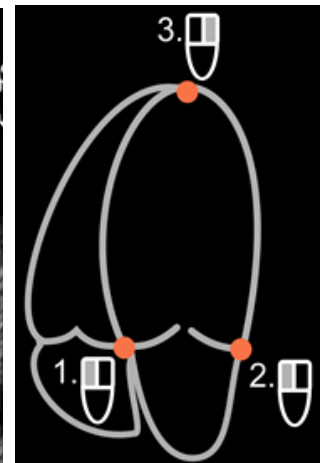
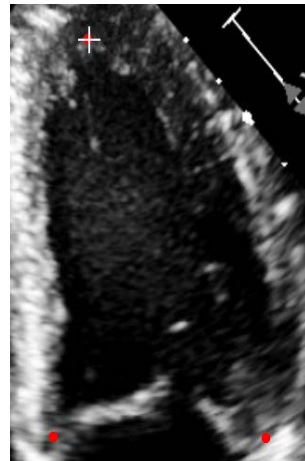
To accept the ECG click on the button located in the upper right hand corner



* Is part of TOMTEC-ARENA. TOMTEC-ARENA is a registered trademark of TOMTEC Imaging Systems GmbH in Germany and/or other countries.

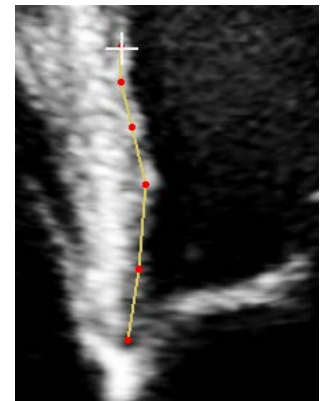
Reference points

- Place landmarks at the endocardium
 - Anterior annulus: left mouse click
 - Posterior annulus: left mouse click
 - Apex: right mouse click



Manual tracing

- If a manual tracing is required, disregard the diagram and simply perform a series of left clicks along the endocardium
- Last point has to be positioned with right mouse click

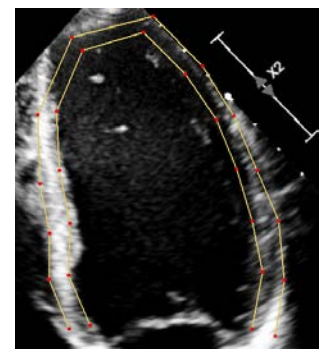


Start the analysis

- Start analysis with right mouse click or with the "Start Analysis" button



- Once the first complete contour becomes visible at the end systolic phase this will initiate the tracking and bring you to the proposed contour in the end diastolic phase
- To adjust the proposed contour drag and drop the red contour points



- To continue select one of the two buttons
- "Reject changes" or "Accept changes"

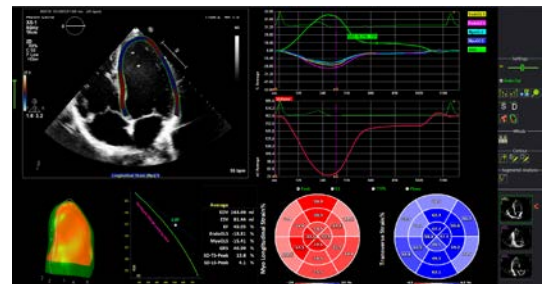


Contour Editing

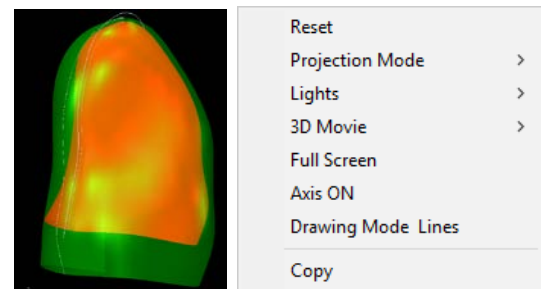
- To adjust the contour select
 - “Correct ES boarder” → new tracking will be initiated
 - “Correct ED boarder” → ES remains untouched
- Edit the contour by drag and drop the red points



- This will bring you to the main page analysis.
- A comprehensive array of data can be visualized here



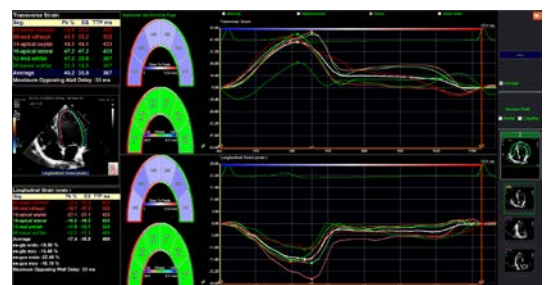
- With a right click on the model (which appears after all LAX views were analyzed) in the lower left hand corner, different options for the model are available



- Select the segmental analysis icon



- This will bring you to the segmental analysis page
- A comprehensive array of data can be visualized here
- At the top of the page different parameter can be selected:
 - Velocity
 - Displacement
 - Strain
 - Strain Rate



- The default analysis is the endocardium
- Select one of the other layers to visualize the myocardium or epicardium
- Slide with your mouse in the desired layer of the illustrated contour located at the right hand side
- Press the button in the upper right hand side corner to get back to the main analysis page



<p>Save and Exit</p> <ul style="list-style-type: none"> → Data can be saved and / or exported by using the following options 	
<p>Result Export</p> <ul style="list-style-type: none"> → Results from each analysis page have to be exported separately. This needs to be repeated for every view 	
<ul style="list-style-type: none"> → Press the "Exit" button 	
<ul style="list-style-type: none"> → To store a bookmark and / or store measurements check the desired boxes → Insert a bookmark note → To close the application press "Exit" 	
<p>Reopen an Analysis</p> <ul style="list-style-type: none"> → To reopen an analysis press the right mouse button on the bookmark and select 2D CARDIAC PERFORMANCE ANALYSIS → Choose your bookmark at the "Bookmark selection" in right upper hand corner 	
<ul style="list-style-type: none"> → Press the following button to access the analysis 	