

# SNC Machine™

Automate Your QA







Your Most Valuable QA and Dosimetry Tools

# AUTOMATE YOUR QA

SNC Machine listens for and captures your QA files, processes and analyzes the files, and saves the results to the database. Simply login to SNC Machine and immediately view a dashboard of results. Accept results that pass, and drill down into the analysis details for results that fail. Trend any piece of data against any other piece of data. It is that simple, and that powerful.





# **TG-142 & VMAT Imaging and Mechanical QA**

All TG-142 recommended imaging and mechanical tests for monthly QA are included with SNC Machine. Simply deliver the test beam and SNC Machine does the rest. Accept or reject results on your terms and timeframe.

#### **Tests Include**

- Image Quality & Accuracy
  - CBCT
  - kV
  - MV
- MLC
  - Picket Fence
  - Log File Positioning
  - Leaf Speed
- Winston-Lutz Isocenter
  - Radiation
  - Machine
- Star shot
  - Gantry
  - Couch
  - Collimator
- Light / Radiation Field Congruence
- Beam
  - Field Size
  - Flatness
  - Symmetry

All VMAT tests recommended by Varian, but also applicable to Elekta, are included with SNC Machine. Simply deliver the test beam and SNC Machine does the rest. Accept or reject results on your terms and timeframe.

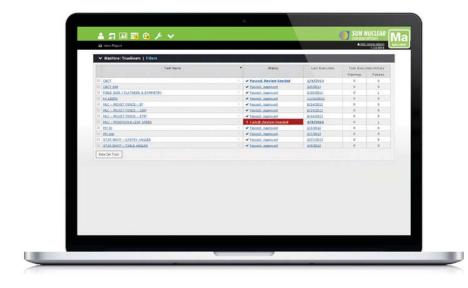
#### **Tests Include**

- · Dose Rate versus Gantry Speed
- Leaf Speed
- Arc Point Dose
- DMLC Point Dose



## **SNC Machine in Action**

19 different tests for TG-142 & VMAT QA

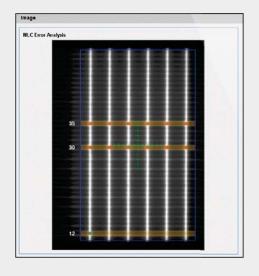


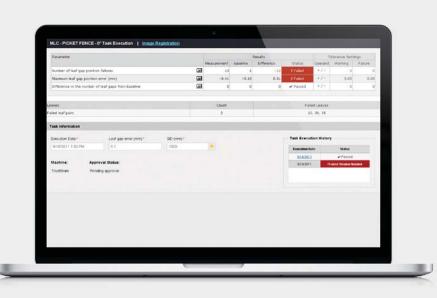
#### Dashboard

SNC Machine Dashboard presents all recently executed tests. Failed tests are highlighted red. Approve the tests from the dashboard or click the test to drill down and scrutinize the results.

#### **MLC Picket Fence**

In this MLC Picket Fence test, failed leaves are highlighted as are the pickets which failed.

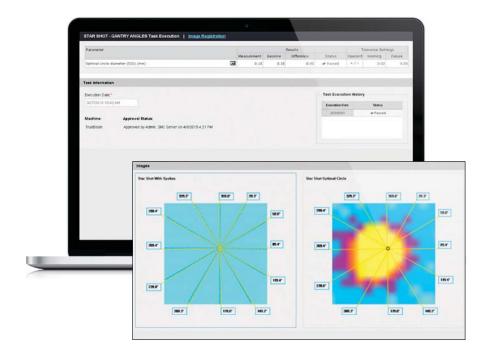






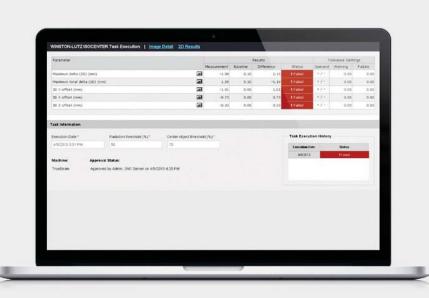


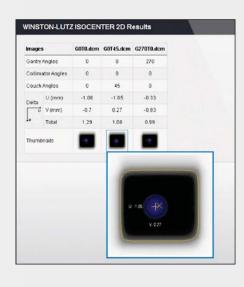
Results and images for a Star Shot Test with automatically calculated circle diameter and spoke angles.



#### Winston-Lutz

Results and images for a Winston-Lutz Isocenter Test. View the 2D results for each image as well as the combined 3D results of all images.





# **SNC Machine Trending**

Any test results, such as CBCT, can be trended and visualized against other test results



#### **CBCT**

Results and images for a CBCT Test. Rollover any thumb nail to see the parameters and the specific corresponding ROI's to ensure image registration was performed correctly.



#### **Trending**

Trend any test parameter, against other test parameters, for any number of machines. View trends within the context of pass / fail criteria with baselines and comments visible in the trend graph.



### More SNC Machine Highlights

- Included SNC Server streamlines installation and provides access to any networked computer
- Easy phantom baseline setup with automatic ROI registration
- Supports most common imaging and mechanical QA phantoms for TG-142
- · Works with Varian, Elekta, Aria, Mosaiq

# **Specifications**

#### **Tests**

TG-142 Imaging:	CBCT Image Quality & Accuracy, kV Image Quality & Accuracy, MV Image Quality & Accuracy
TG-142 Mechanical:	MLC Picket Fence, MLC Positioning & Leaf Speed, Winston-Lutz Radiation & Machine Isocenter, Gantry/Couch/Collimator Starshot, Light/Radiation Congruence
Beam:	Field Size, Beam Flatness, Beam Symmetry
VMAT:	Dose Rate versus Gantry Speed, Leaf Speed, Arc Point Dose, DMLC Point Dose

#### **Phantoms**

Sun Nuclear:	MV-QA, kV-QA, FS-QA, WL-QA
Standard Imaging:	PipsPro Phantoms
Phantom Laboratory:	CatPhan 503, 504, 600
Leeds:	TOR 18FG
Varian:	Las Vegas Phantom
Gammex:	464

# **Sun Nuclear Phantoms**



#### WL-QA

Dimensions:	60 x 60 x 60 mm
Sphere size:	8.0 mm
Sphere center accuracy:	20 mm

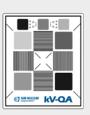


#### FS-OA

10 47		
Field sizes:	100 x 100 mm; 150 x 150 mm	
Markers (±0.1mm):	56 - Field size (7 per field edge) 1 - Orientation	

**Dimensions:** (L x W x D) 178 x 178 x 6 mm





#### MV-QA / kV-QA

· ·	0.1, 0.2, 0.5, 1.0 ± 0.025 mm 0.6, 1.2, 1.8, 2.4 ± 0.01 mm
	9 (4 spatial, 4 contrast, 1 center) 28 (4 spatial, 23 contrast, 1 center)
MV Dimensions: (L x W x D)	127 x 102 x 25 mm

**kV Dimensions:** (L x W x D) 127 x 127 x 16 mm





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