



# Experience the performance

## Philips Pinnacle<sup>3</sup> 9.8

Improve your workflow with faster dose computation speeds and new features.

### Key advantages

- **Reduced planning time**  
Increased dose computation speed
- **Increased treatment options**  
Supports high-dose treatments
- **SPICE enhancements**  
Adds more structures to atlases

# PHILIPS

# Increased efficiency through faster calculations



The role of dose computation speed in the treatment planning process is now more important than ever. As sophisticated techniques like VMAT grow in popularity, it has become evident that these advanced applications can require significant calculation power. Pinnacle<sup>3</sup> 9.8 combines a new suite of speed enhancements, features, and stability improvements to improve your workflow and make the most of your latest system upgrades.

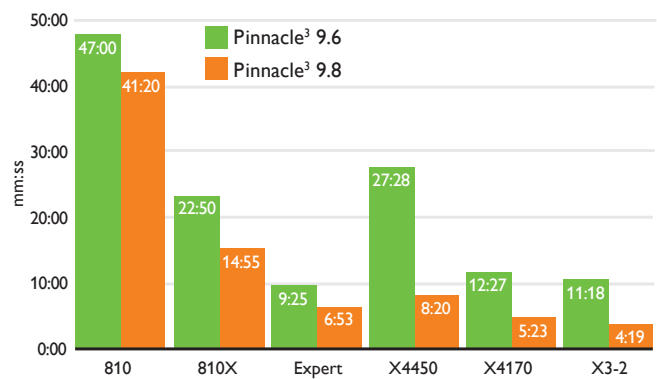
## Reduced planning time

Pinnacle<sup>3</sup> 9.8 achieves dramatically improved dose computation speeds – in some cases by more than 300%. The Collapsed Cone Convolution Superposition (CCCS) kernel has been re-factored to increase processor multi-threading. This results in faster dose calculation to maximize existing system hardware and future upgrades to Professional, Expert and SmartEnterprise systems. Pinnacle<sup>3</sup> 9.8 increases speed independently of machine model or beam type, without changes to dose engine algorithms or accuracy, and without disruptions to your clinic or planning workflow.

## High performance value

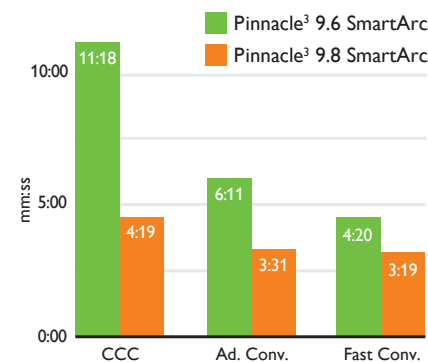
- Speed improvements for **all beam types** (Static, Step & Shoot, etc.)
- Dose engines maintain the same algorithms and accuracy (CCC, Adaptive Convolve, Fast Convolve)
- Optimization time is reduced through improved convolution dose calculation speeds

## Time savings for SmartArc



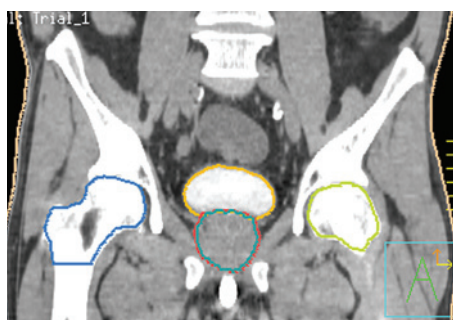
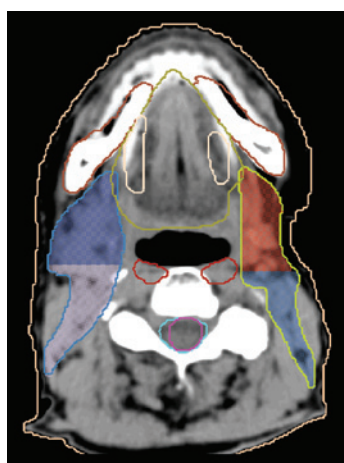
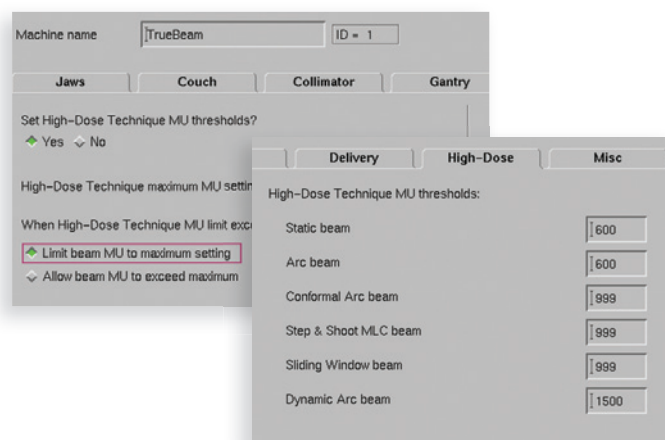
**Thyroid case** SmartArc with 90 control points (1 arc)  
Dose engine: collapsed cone convolution superposition  
Dose grid resolution: 2 mm; Dose grid size: 95x89x123

## Dose engine speed comparison



### Increased treatment options

Pinnacle<sup>3</sup> 9.8 adds extended support and functionality for High-Dose Mode with a new “High-Dose” tab in Pinnacle<sup>3</sup> physics. Dose (MU) limits can now be set to correspond with TrueBeam systems, correct DICOM tags are automatically generated in RT-Plan export, and new warnings are added when High-Dose is enabled.



### Auto-segmentation with SPICE improvements

SPICE has been enhanced with new applications, additions, and bug fixes. New structures including contrast bladder have been added, and the nodal chain in the head and neck atlas has now been split into two groups to offer more flexibility.

### DICOM enhancements

New DICOM advancements provide the ability to resolve common support issues quickly. Upgrades include an integrated DICOM Analyzer to detect and resolve image issues and delete files from within LaunchPad, high-dose technique DICOM support, and a new alias feature to allow multiple DICOM destinations with the same AE title.

### Pinnacle<sup>3</sup> 9.8 hardware compatibility

Platform	Compatible
810, 810X	✓
Blade 8000	✓
Professional	✓
Expert	✓
SmartEnterprise	✓
V250, SB2500, and other SPARC-based servers and clients	All SPARC-based workstations must be removed from the Pinnacle <sup>3</sup> network

Get the latest status of your Pinnacle<sup>3</sup> 9.8 update: [Pinnacle\\_Updates@philips.com](mailto:Pinnacle_Updates@philips.com)

Contact your Philips Healthcare representative for more information on Pinnacle<sup>3</sup> 9.8 or visit [www.philips.com/pinnacle](http://www.philips.com/pinnacle) today.

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