

# The Problem

Today's CT Scanners are not designed to image rock cores.

The Solution: BHC-DICOM

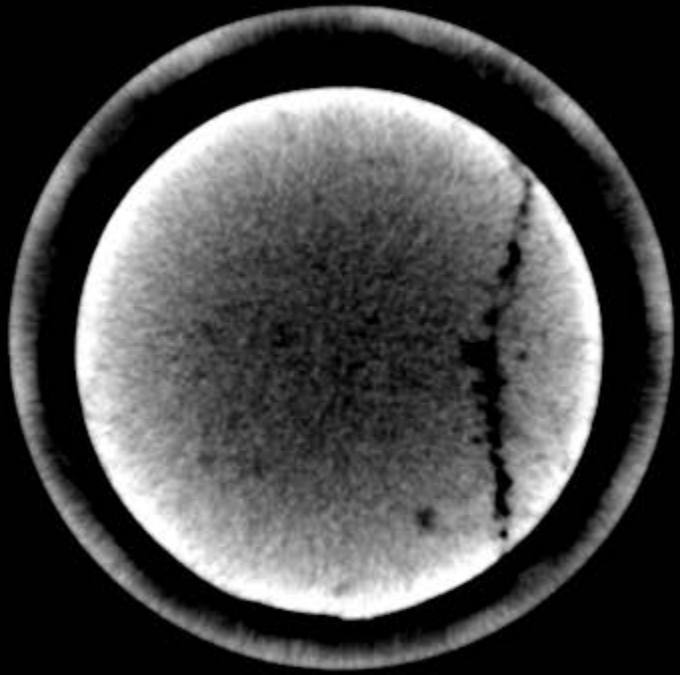
# BHC-DICOM

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graph TD; A((BHC-DICOM)) --> B[Beam Hardening Correction]; A --> C[Operates on DICOM images from CT scanner];
```

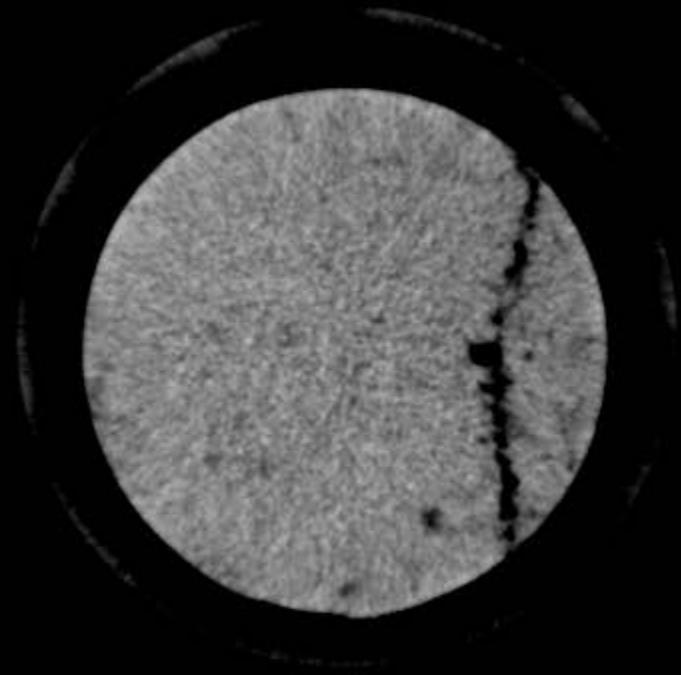
Beam Hardening  
Correction

Operates on  
DICOM images  
from CT scanner

## Limestone 3" Core – With Sleeve



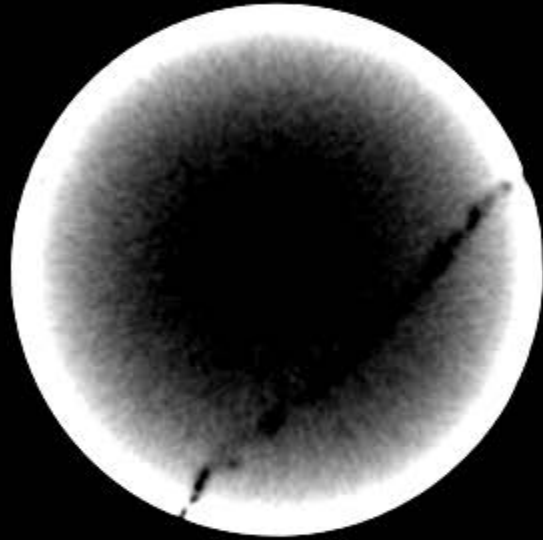
From Scanner



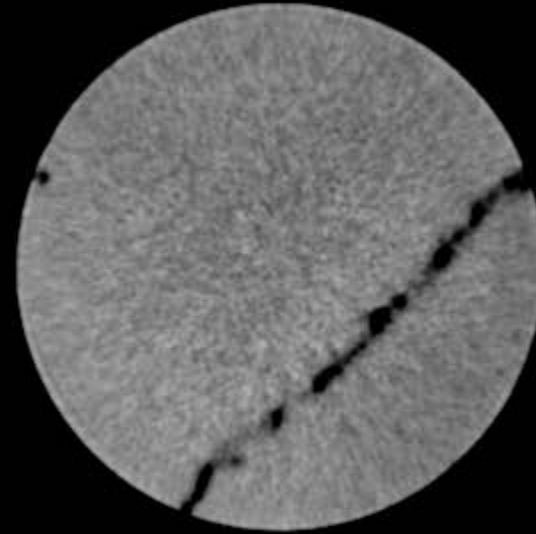
BHC-DICOM

BHC-DICOM automatically adapts to nearly any core configuration

## Limestone 3" Core – No Sleeve



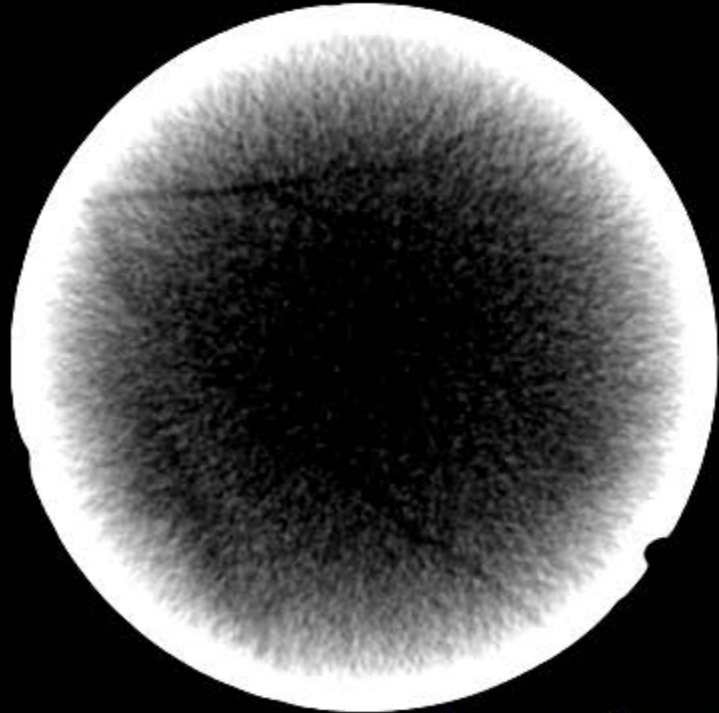
From Scanner



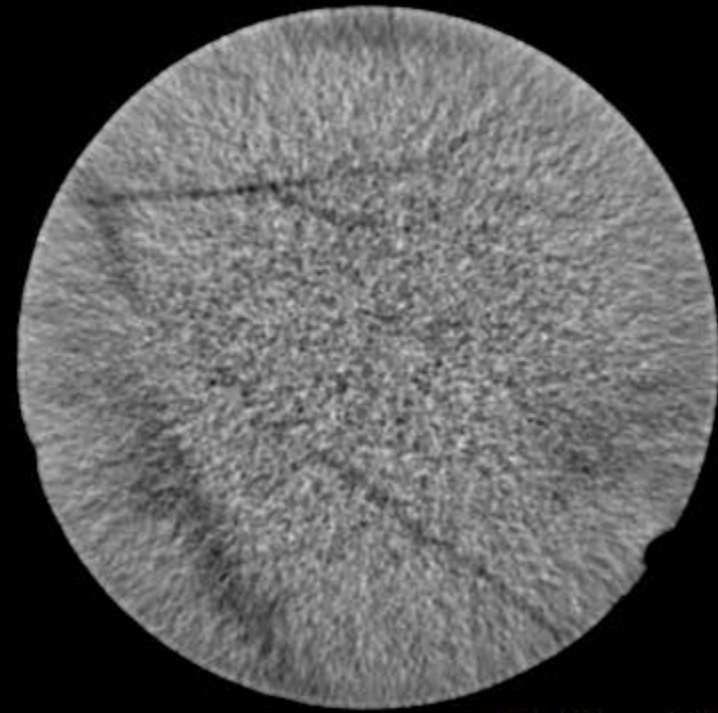
BHC-DICOM

Increased “dishing” without sleeve is  
no problem for BHC-DICOM

# Limestone 4" Core – No Sleeve



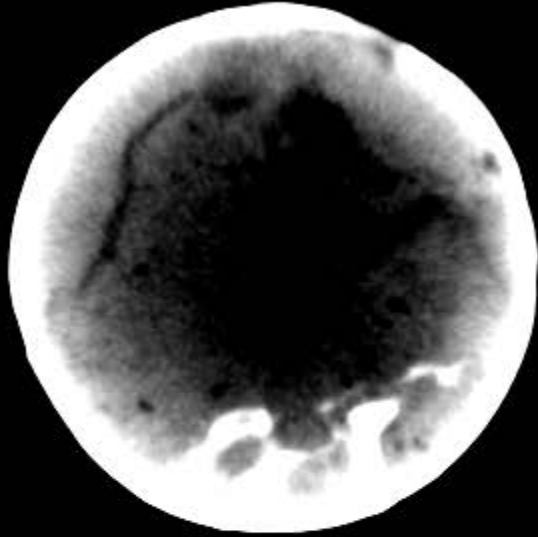
From Scanner



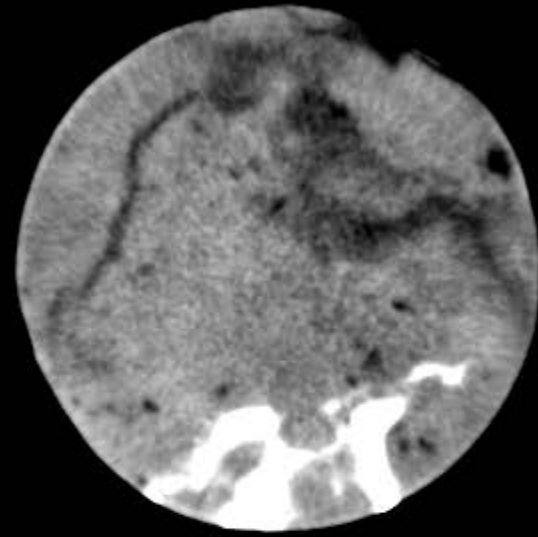
BHC-DICOM

Automatically adapts to the  
core diameter

## Shale 3" Core – No Sleeve



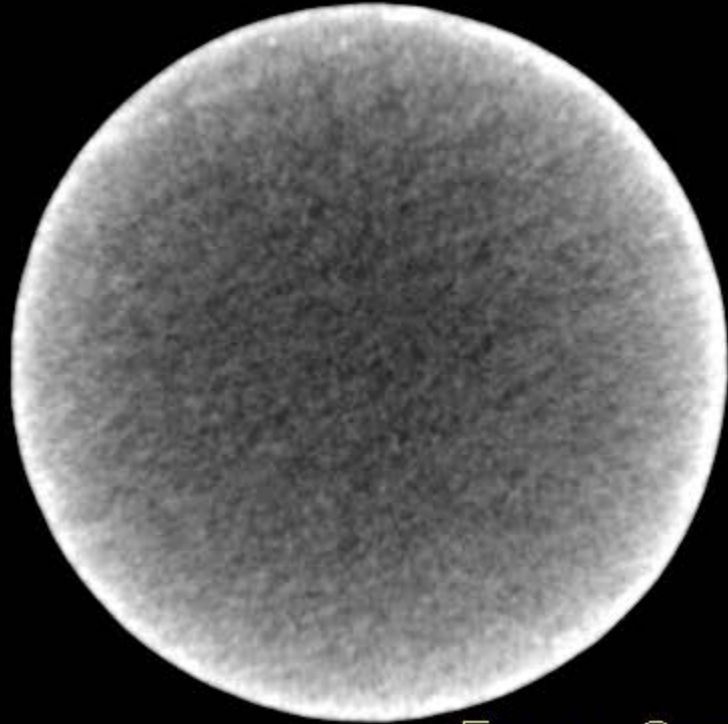
From Scanner



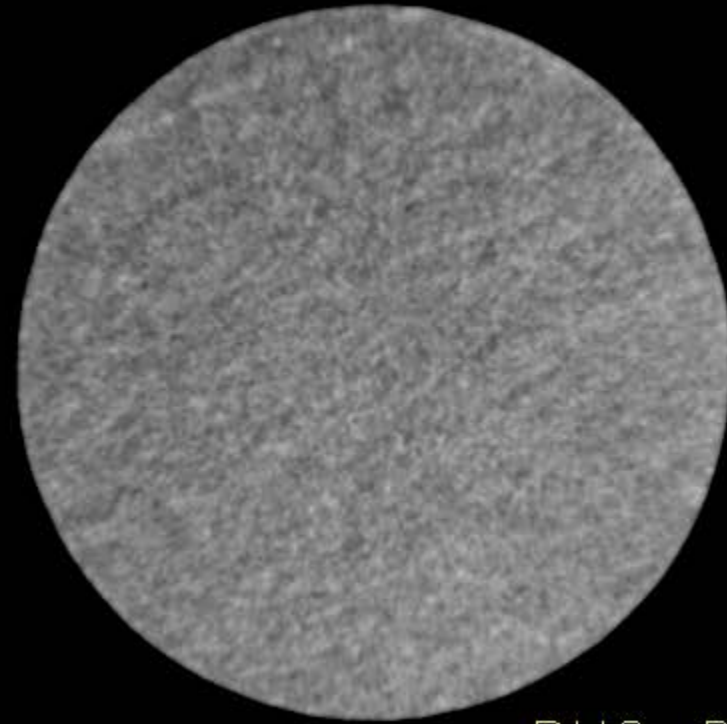
BHC-DICOM

Works with high density rock.....

# Berea Sandstone 4" Core – No Sleeve



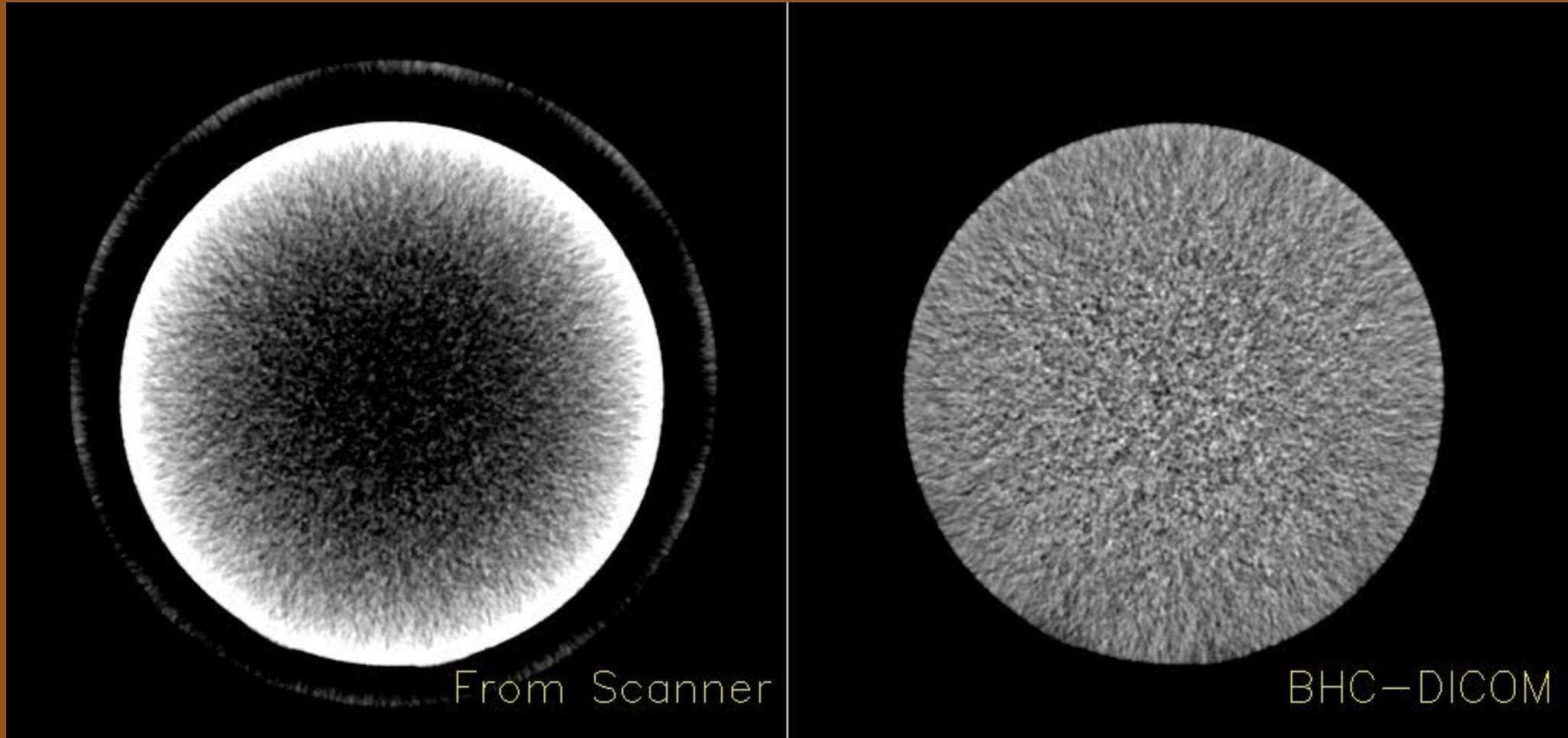
From Scanner



BHC-DICOM

.....or low density rock

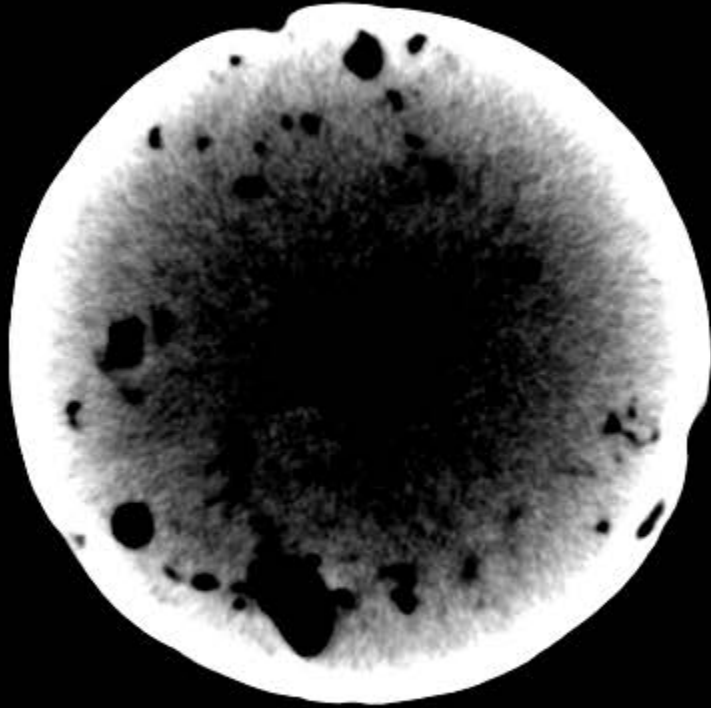
# Aluminum 4" Core – With Sleeve



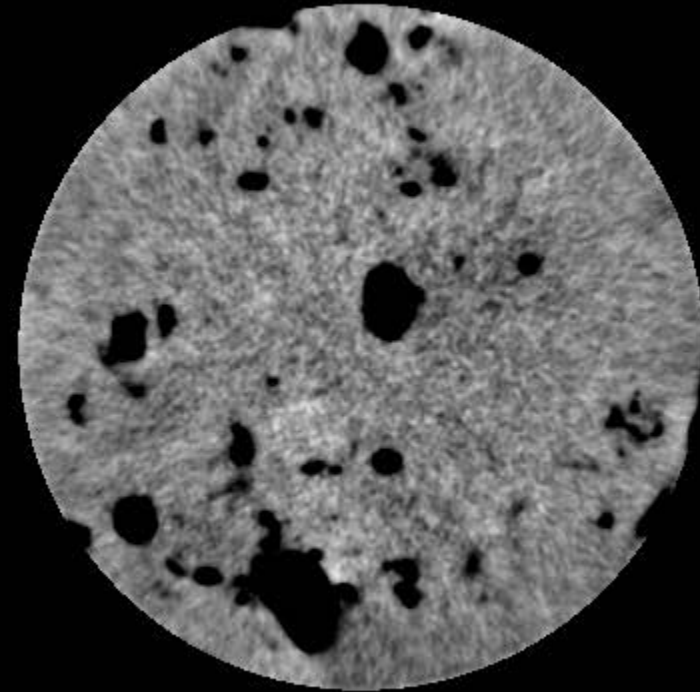
Adapts automatically to sleeve size



## 4" Core – No Sleeve



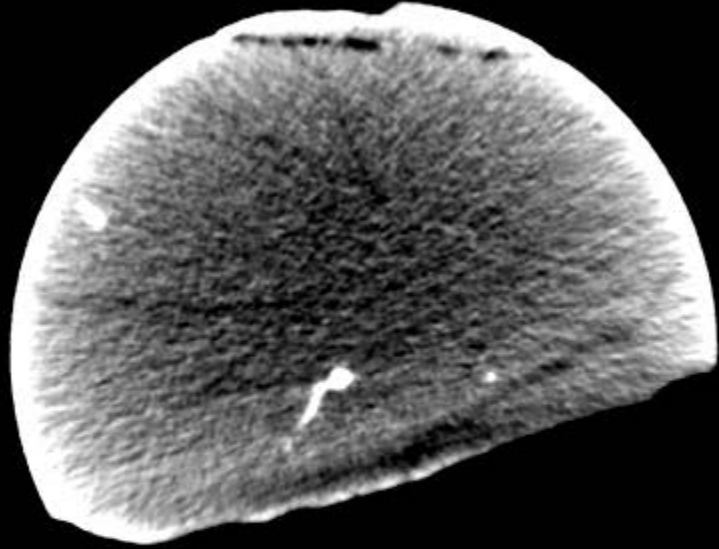
From Scanner



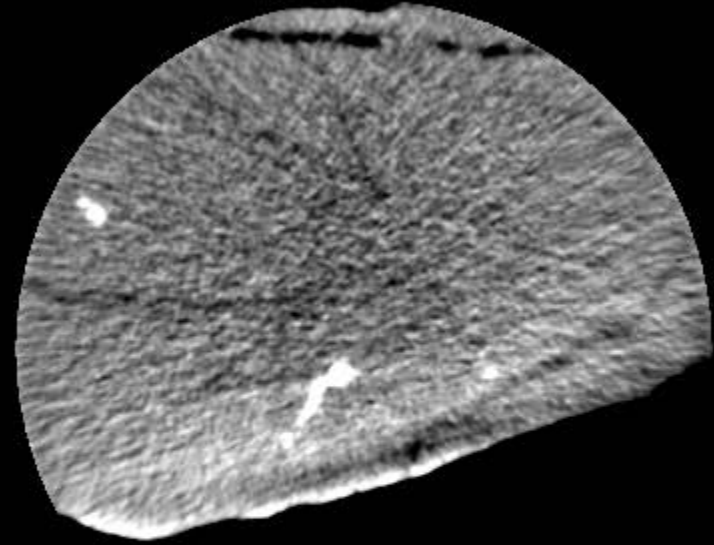
BHC-DICOM

Handles cores with large holes

## 4" Core – No Sleeve



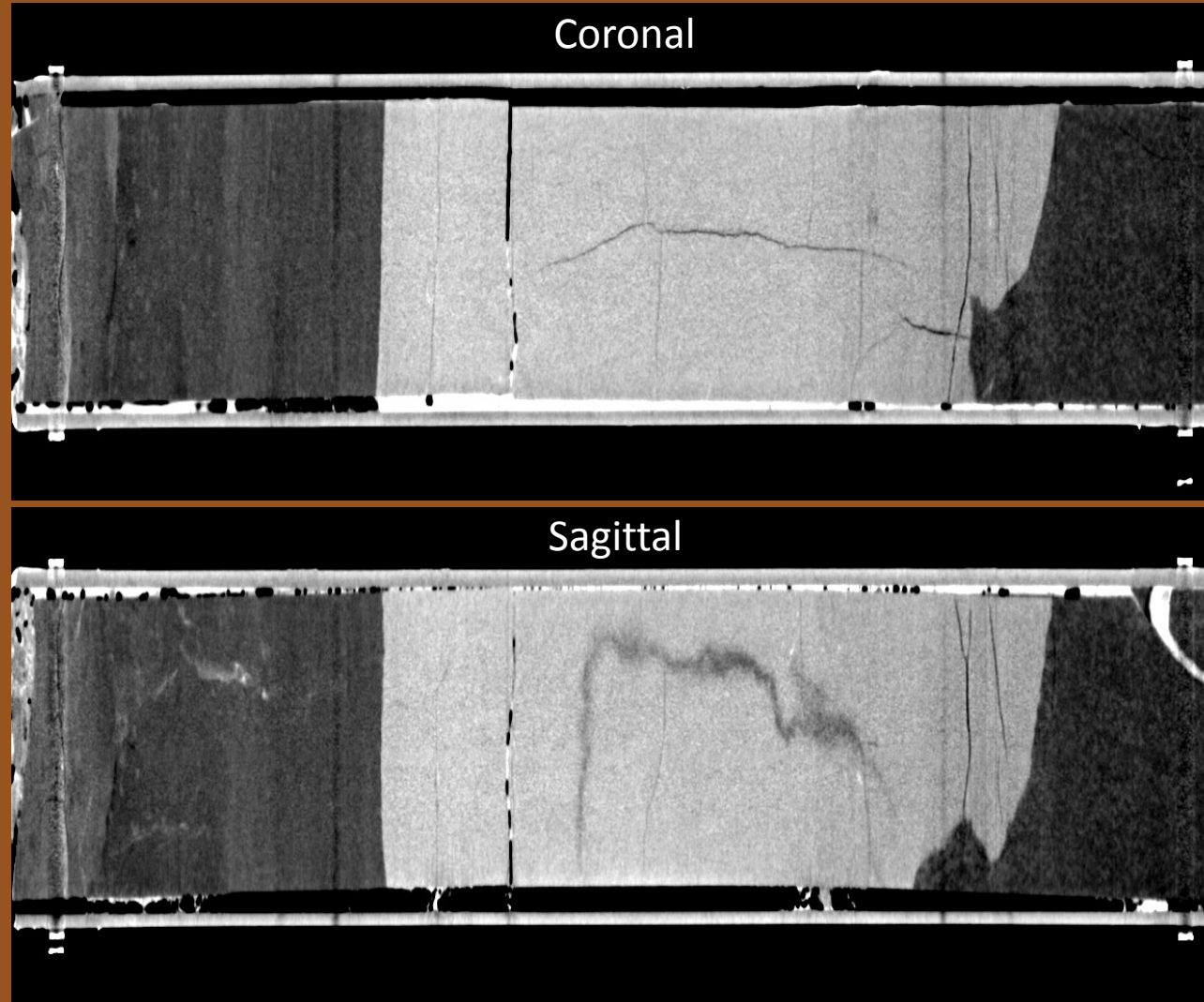
From Scanner



BHC-DICOM

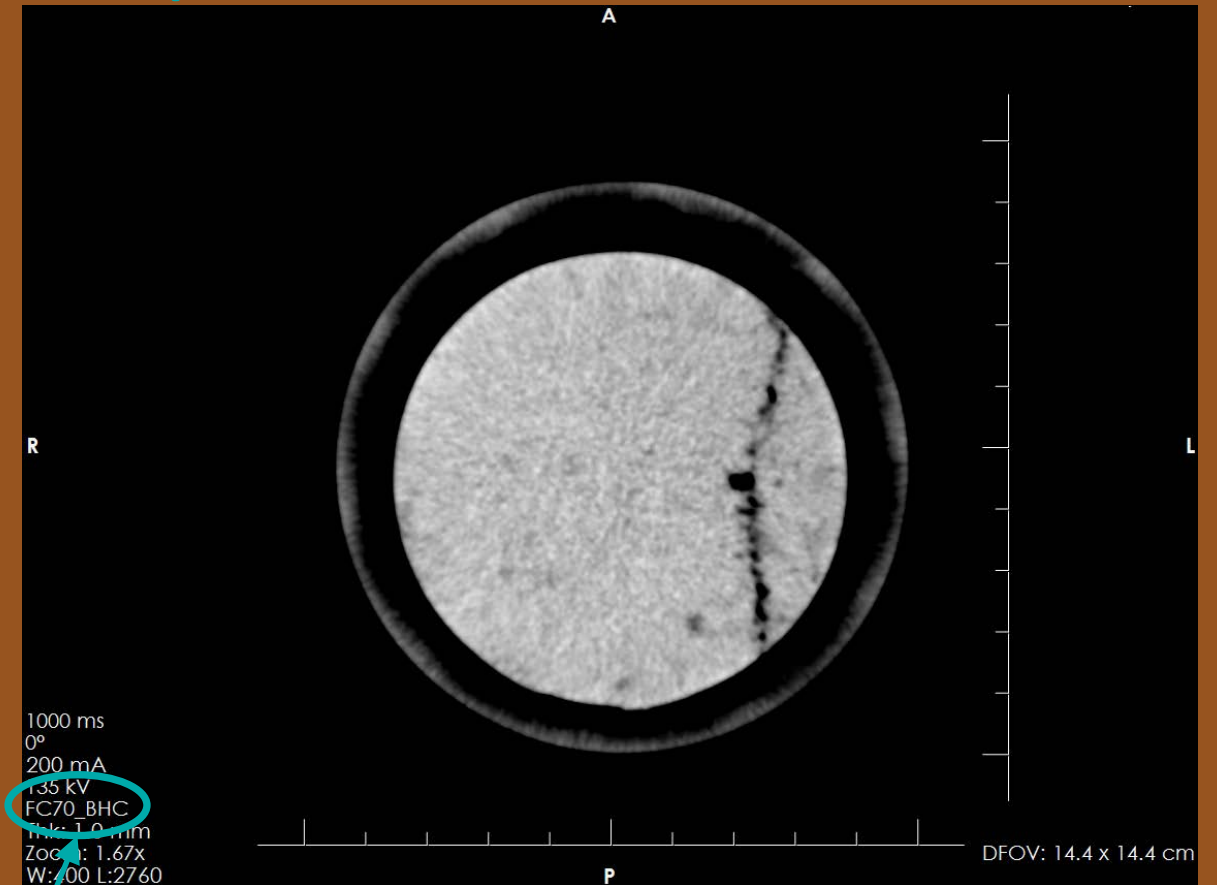
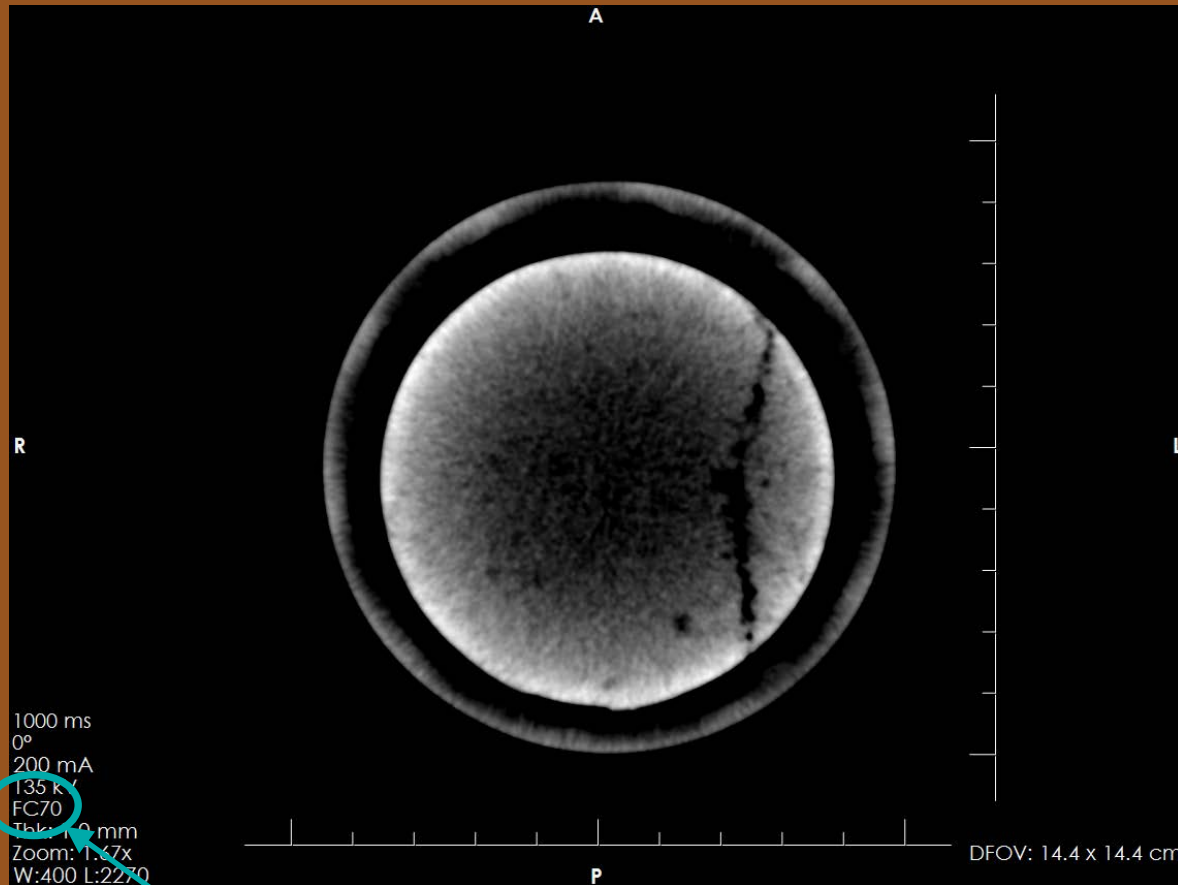
Handles non-cylindrical cores

## Varying Densities in Single Core



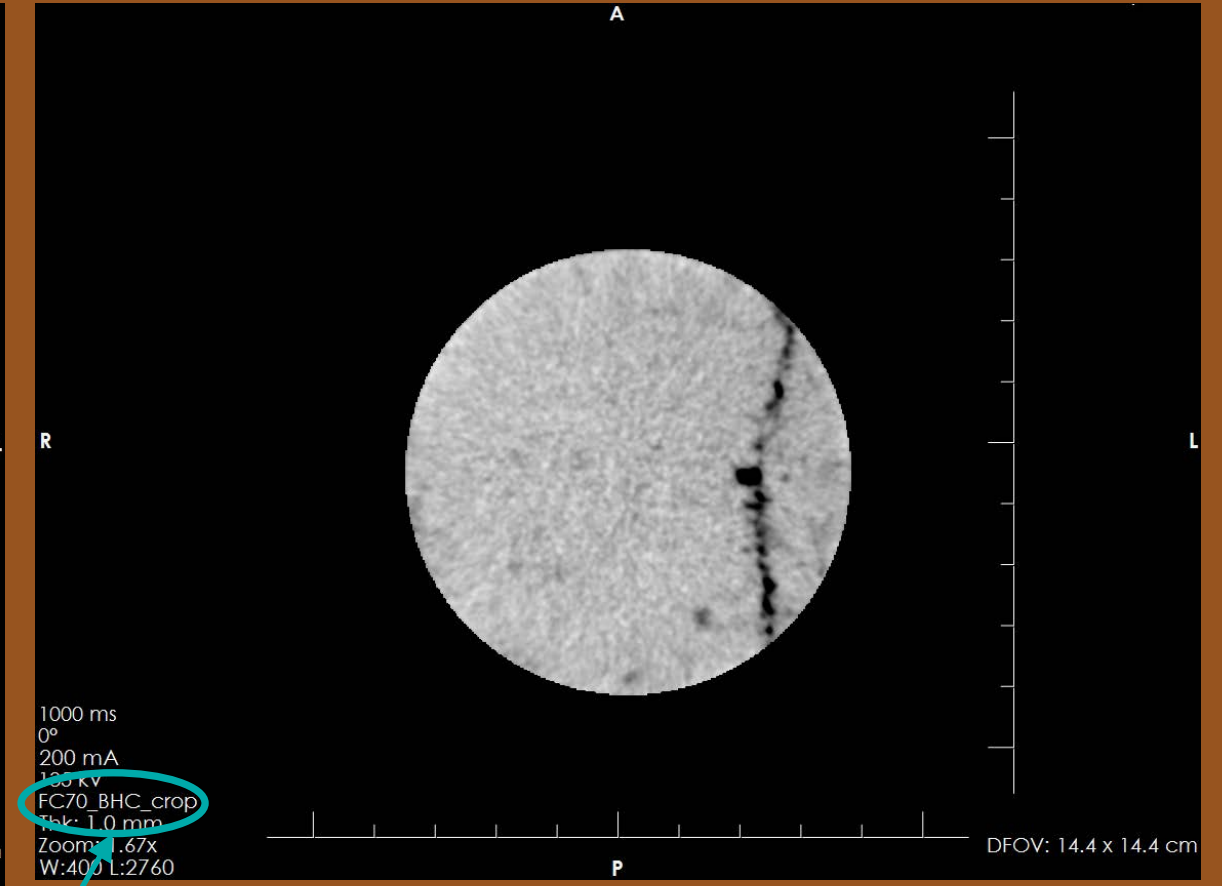
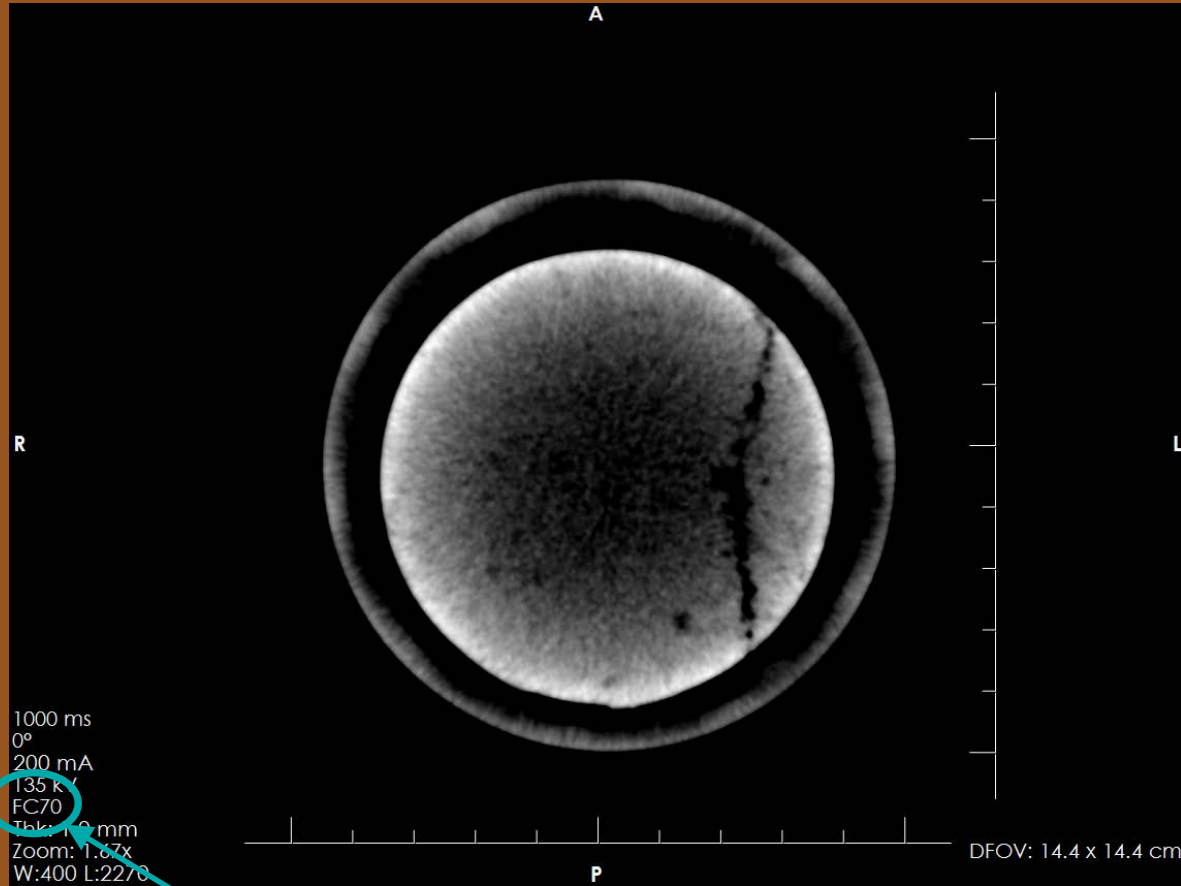
Adapts to changes in material and density within core as shown in these Sagittal and Coronal images of a volume

# DICOM Output



Corrected images are output to a new DICOM file. The DICOM header is modified to identify the corrected file.

# DICOM Output Cropped to Rock Circle



The DICOM header also identifies images that have been cropped to the rock circle

# Key Features and Characteristics

- Works with DICOM images from any CT scanner.
- Corrects for beam hardening without affecting other image structures.
- Fast automatic batch process that's easy to operate.
- No special CT scanner calibration required.
- Adapts to any core configuration automatically using robust 2-pass algorithm
- Includes optional creation of Sagittal and Coronal images of entire core

# Contact Information

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Technology and product  
development by:

**PLEXAR** Associates, Inc.