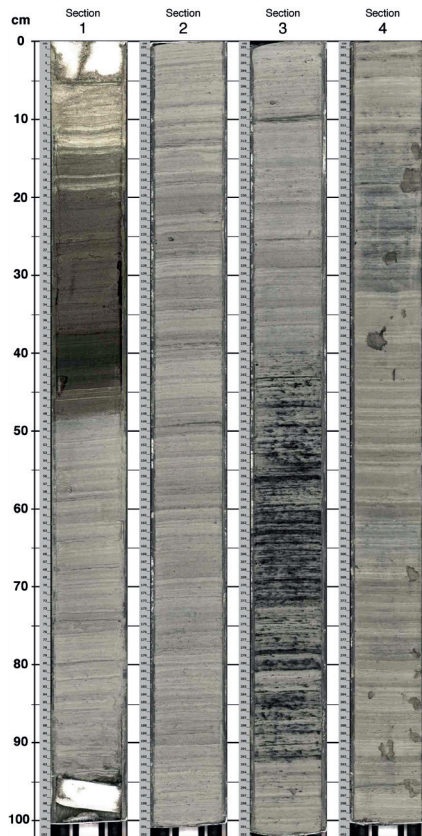


CORE DOCUMENTATION



Immediate imaging of cores after they are split/slabbed preserves an invaluable archival record of each core section prior to any oxidation effects or subsampling. Precise depth-registered images can be correlated with other datasets or used when describing core. The Geotek Core Imaging System (MSCL-CIS) is capable of acquired images from split or slabbed sediment/rock core, or whole round cores where multiple photographs at different angles can then be concatenated to produce a circumferential image.

BENCHTOP INSTRUMENT

The Core Imaging System (CIS) can be provided as a stand-alone instrument mounted on a suitable bench-top. Alternatively, the Geoscan V linescan camera can be installed onto the Geotek XRF systems (MSCL-XZ), or the Standard Multi-Sensor Core Logger (MSCL-S) and used as part of the non-destructive geophysical testing.

Geotek's benchtop ultra high definition Core Imaging System (MSCL-CIS)

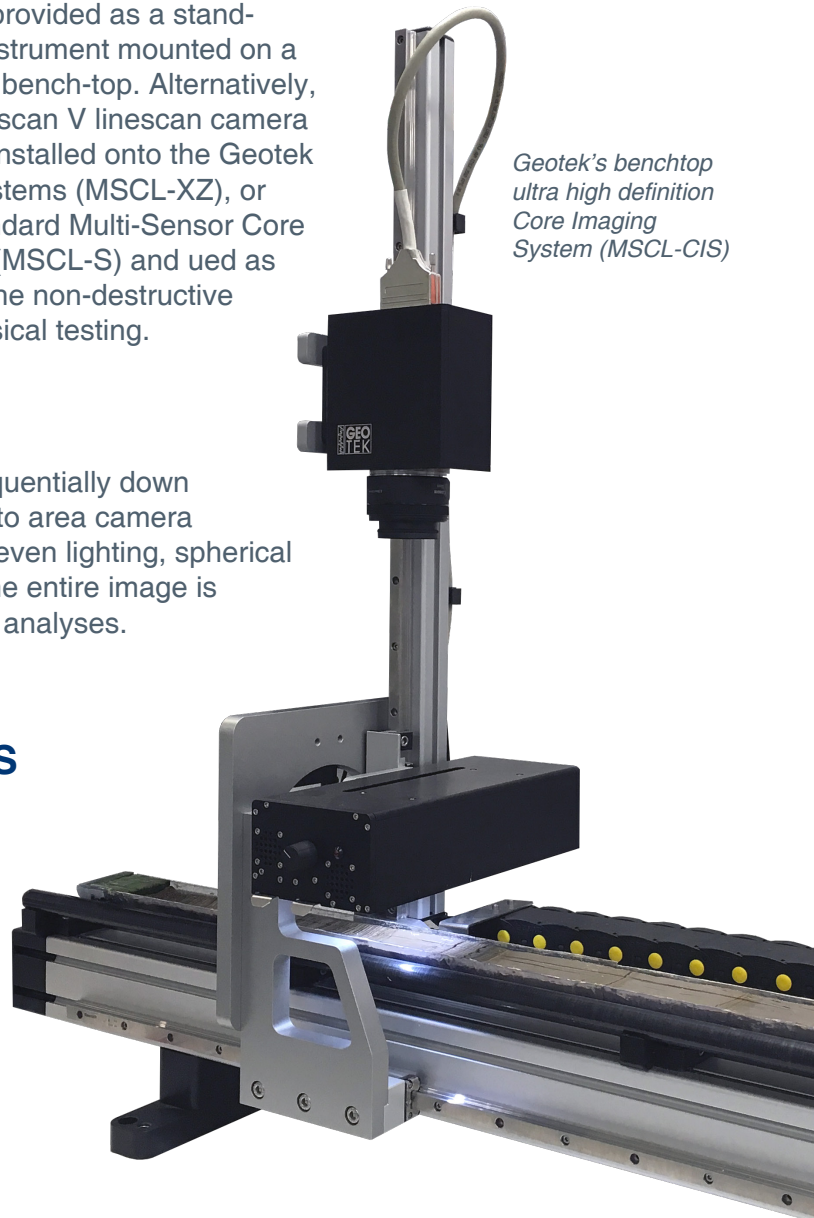
LINESCAN IMAGING

Single lines of image data are collected sequentially down the core. Linescan images are far superior to area camera images because they do not suffer from uneven lighting, spherical distortion, montage or "stitching" effects. The entire image is suitable for calibrated sub-millimetre image analyses.

SIMPLE & QUICK SET-UP TO PRODUCE DETAILED IMAGES

The Geoscan V is equipped with automatic focus and aperture routines integrated into Geotek's custom-designed user friendly software for straightforward, simple and quick set-up.

Specular reflectance caused from water/fluid-saturated cores is removed through cross-polarisation of the light source and the lens; improving clarity and image detail.



IF CORE'S WORTH TAKING, IT'S WORTH LOGGING

HIGH, HIGHER, HIGHEST RESOLUTION

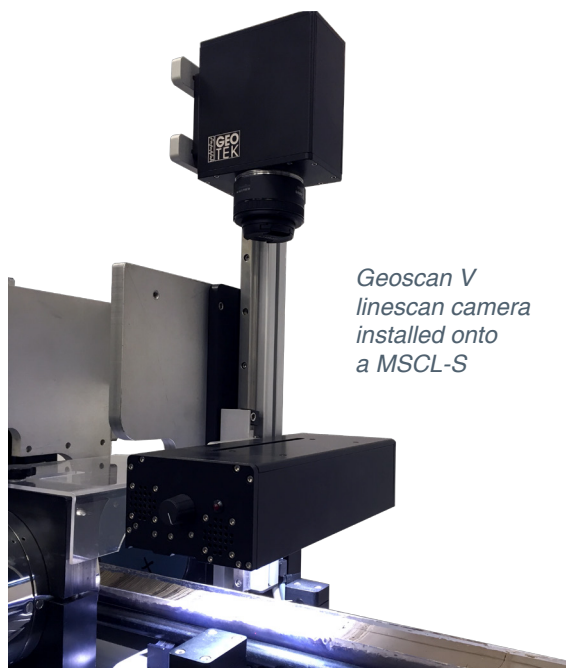
Images can be collected at 100, 200 or 400 lines per centimetre, corresponding to 100, 50 and 25 micron pixel sizes, respectively. Images are output as 48-bit RGB TIFF images but are quickly and easily converted to JPEG or other formats as required.

TRUE COLOUR SEPARATION

The Geotek GEOSCAN V linescan camera is composed one c.5,340 pixel CCD. Incoming light is passed through a set of red, green and blue filters to produce true independent colour separation. Averaged image data can be converted to these RGB values and saved in a separate file to facilitate quantitative comparisons between cores and other downcore measurements.

CALIBRATED MEASUREMENTS

The camera is factory-calibrated and a standard photographic 90% white, or 18% grey card is used for field calibration. Lighting and aperture



Geoscan V linescan camera installed onto a MSCL-S

settings are software controlled ensuring that images can be qualitatively or quantitatively compared to each other.

AUTOMATED RULER

Each Geotek core section image has a companion XML metadata file, containing important information pertaining to the core section and imaging conditions. A ruler is automatically generated next to the image, depicting either depth in core section or depth in core.

IMAGING SYSTEM SPECIFICATIONS

CAMERA

Geotek GEOSCAN V 5000 pixel CCD linescan camera, with standard Canon lens mount.

LIGHT SOURCE

Broad-spectrum LED illumination or ultraviolet LEDs for UV fluorescence imaging.

CORE ACCEPTED

Length: up to 155 cm; Diameter: up to 15 cm.

CAMERA MOTION

Fully automated motion. Linear precision: 0.002 mm.

IMAGES OUTPUT

25, 50, or 100 micron per pixel 48-bit RGB TIFF images, converted to 24-bit colour JPG on request.

DIMENSIONS

Standard system L x W x H (cm): 180 x 35 x 130; Weight: approx. 65 kg.

SPEED

Standard (50 micron) resolution is 3 minutes per metre. Scan time doubles to 6 minutes per metre for highest (25 micron) resolution.

CORE IS 0.5 M LONG

