



3D Optical Scanning Presentation



By David Daake

ILLINOIS WATER ENVIRONMENT ASSOCIATION



Agenda

1. Introduction
2. Pipe Inspection History
3. 3D Optical Scanning Conception
4. Deliverable review
5. Q&A session

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How pipe inspection started

June 19, 1957

Introduction of first sewer TV-System



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How pipe inspection is done Today!



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How pipe inspection started

3D Optical Scanner (2003)

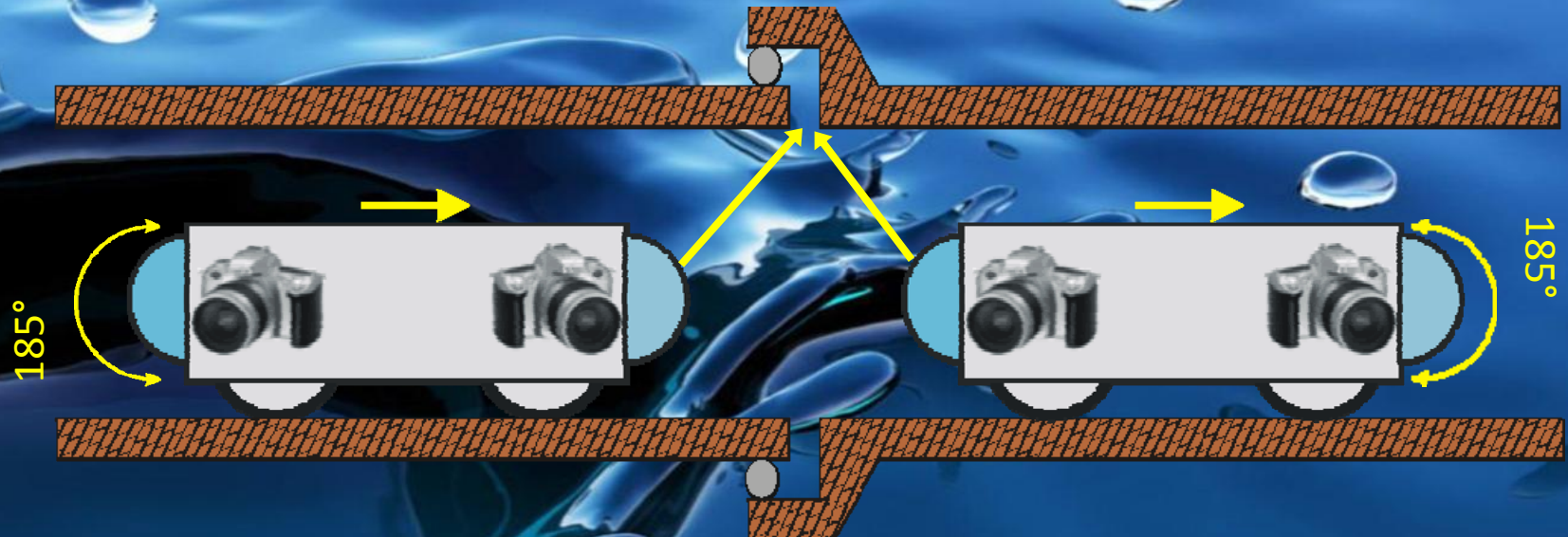


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3D Optical Scanning

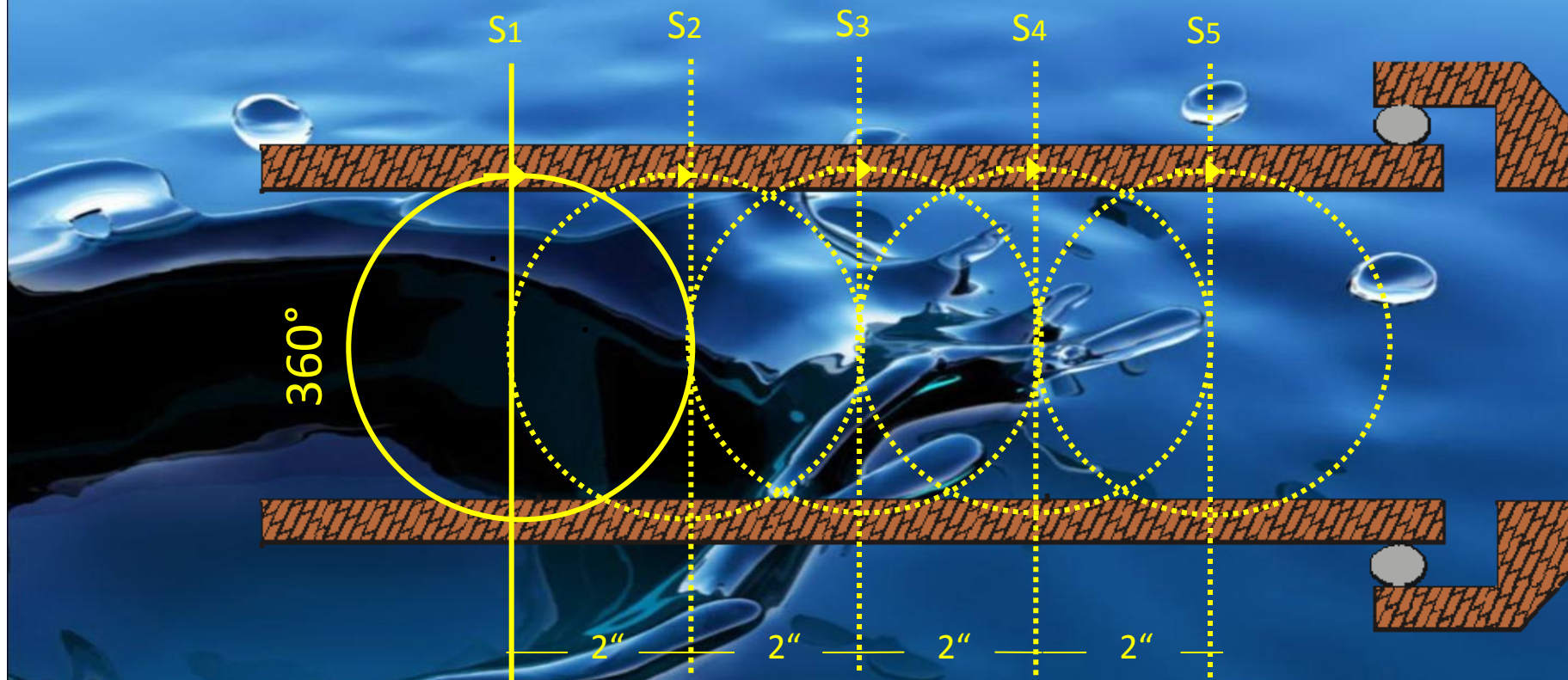
How 3D scanning works



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PANORAMO Concept



Full spherical picture with all optical information at position S1, S2, S3, S4, S5 in total pipe.

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Scanning can be done Vertically and Horizontally



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Scanning a Manhole



X	Boiling Water	Stages
X	Cap	Pre-Test

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3D Optoscanner for Manhole Inspection



- All-round manhole scanning
- Freely pan and tilt direction of view
- Unfolded view of the inner manhole walls
- Digital data acquisition and storage
- Data analysis in the office or in the vehicle
- For manhole from 16" diameter upwards

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Data Collection Speeds Of 14 Inches Per Second



Open Manhole Lid – 1 minute
Position PANORAMO SI – 1 minute
Inspect 20' Deep Manhole – 1.5 minutes
Close Manhole Lid – 1 minute

TOTAL INSPECTION TIME
4 Minutes 30 Seconds

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Engineered For The Purpose



- 3000 Line Resolution
- Detailed Measurements
- Gyro Stabilized Image
- Xeon Strobe Illumination
- Simple To Operate

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3D Optoscanner for Manhole Inspection



Available As Add-On Or Stand-Alone System



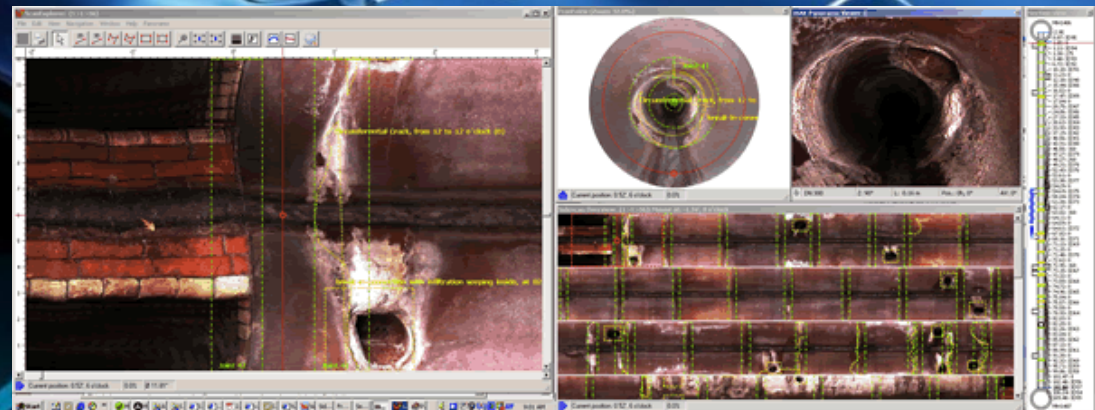
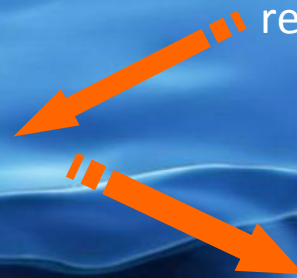
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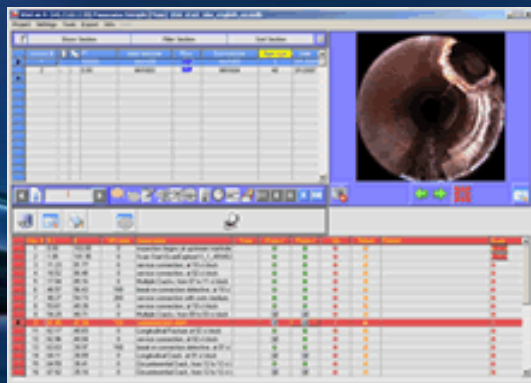
How the coding is done in the office

workstation

removable hard drive



GIS and Information Management Softwares





800-656-IBAK

Pipeline and Manhole Inspection Systems

Questions???



By David Daake