

High Speed Digital Video Inspection for Conveyor Belts

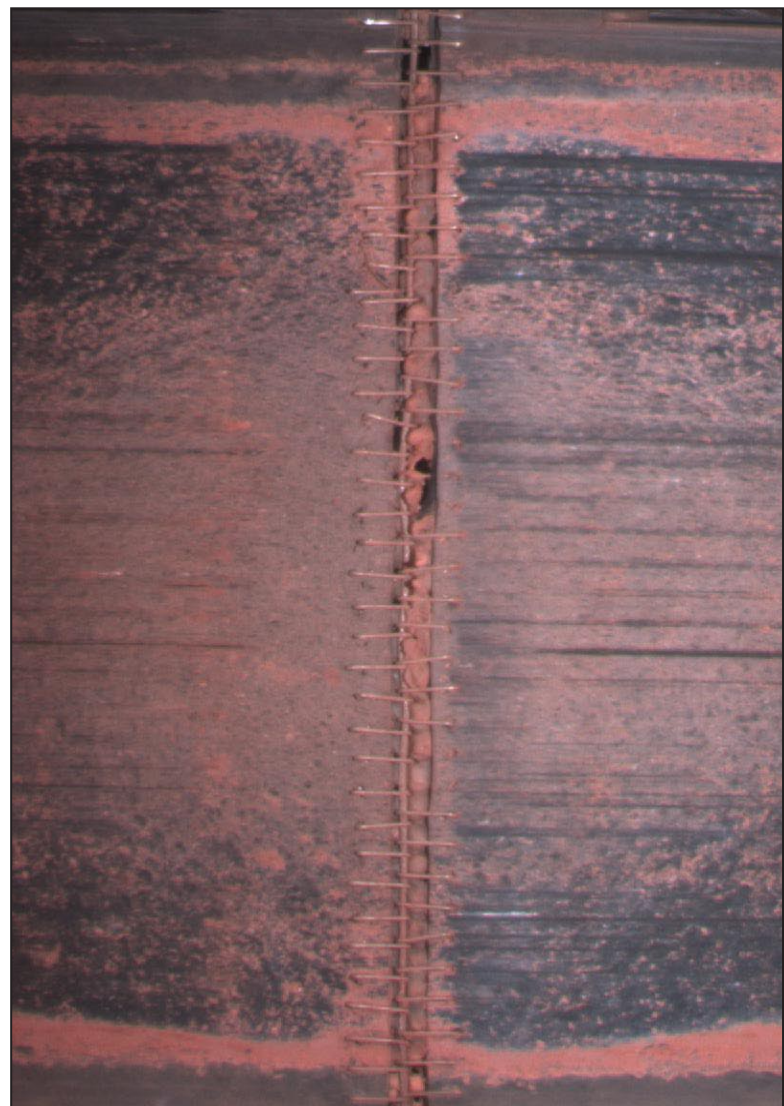


What does it Do?

This system collects high quality (1.4 MPixels) digital still images of conveyor belts running at full operating speed.



High Quality Image recorded at around 25 km/h



How Does it Works?

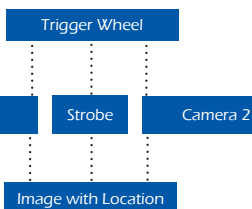
Mechanically triggered digital video cameras (two can be used concurrently) ensure 100% still image coverage of the belt's surface independent of belt speed.

The mechanical trigger wheel, which runs on the belt, allows for an accurate distance survey of splices/features and enables defects in the belt to be located physically.

Images are collected and stored in a high specification, robust PC generally powered from the on site vehicle.

pndt offers a Global Service

pndt technicians will set up the specialised video equipment on site and record the videostream. Images can be supplied as a streaming video (all software provided) or defect identification and analysis can be done by pndt.



High Speed Digital Video Inspection for Conveyor Belts



Technical Data

Set-Up Requirements

Minimum 2m access perpendicular to the belt surface.

Frame can be independent of conveyor infrastructure if required

Appropriate Applications

Any conveyor, speed up to 20m/s (15km/hr) based on a 1m belt width

The Recording Unit

Rugged, industrial PC based unit

Battery backup, RAID configured hard drives ensure data security

500GB minimum capacity (5hrs continuous recording of 1.4 MPixel images at 10 frames/second)

Powered from 12VDC (50 Amp peak) or 240VAC if available

The Cameras

Capable of 18.7 FPS at 1388 x 1038 pixel full colour resolution (based on a 1m belt width).

Higher image frame rate (and hence faster belt speed) for smaller image and for monochrome

Speed is limited by strobe lighting

The Strobe

High quality industrial illumination

30 FPS, High Power

Fast Burst Speed

The Frame

The camera/s and strobe/s can be mounted independent of any belt infrastructure or a custom system fixed mounting system developed to suit

Digital Imaging

Using digital images has huge advantages over traditional analogue video because of the quality of the image created. The images produced are non-interlaced so are of superior quality. Defect recognition and sizing software can be provided.

pndt Head Office

141-143 Cambridge Street

West Leederville

Western Australia 6007

Telephone: +61 8 9382 3844

Facsimile: +61 8 9382 4458

Cameron.waters@pndt.com.au

Andy.garswood@pndt.com.au

www.pndt.com.au