



# D40 Core Verification Video System

- Peerless clarity – High-rad, precision imaging to verify serial numbers on fuel assemblies and identify fuel assembly misalignment
- Proven technology – Based on Diakont's D40 rad-tolerant camera systems
- High-contrast lighting – Integrated high-intensity lights are positioned laterally to maximize image quality
- Simplified operation – easy, pole-mounted deployment
- Versatile functionality – Pan, tilt, and zoom functionality

## Rugged, High-Precision Technology for Core Mapping

Diakont's D40 Core Verification Video System provides the ideal solution to facilitate fuel assembly examinations and serial number mapping during refueling outages. Based on our industry-leading D40 radiation-tolerant camera technology, this tool allows for much closer proximity to the fuel, thereby reducing the impact of thermal distortions and particulates in the water, and resulting in significantly clearer video of serial numbers. The D40 Core Verification Video System also contains a rugged pan and tilt module and integrated lighting that allows for viewing fuel assemblies without the need to reposition the refueling bridge.

## Designed for Ease of Operation

The D40 Core Verification Video System is pole-mounted and deploys from the refueling bridge. The rigidity of the pole provides increased stability for maintaining proper positioning above the fuel assemblies.

The system controls can be configured in a rugged, shock mount console or mounted in the existing refueling bridge rack. Each of the system functions can be controlled manually, while the camera iris and focus also support automatic modes.



## Optional Integrated Console

The D40 Core Verification Video System is available with an optional integrated console. This console houses the system controls within a shock resistant rackmount case on wheels, and includes a tiltable LCD monitor with integrated speakers, a microphone, and a DVR system to support recording (both video and audio) and viewing functions with local playback. Video recordings can be played on the monitor and can also be backed up to USB or DVD storage.

### USA

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## Specifications

Environmental protection	IP68
Cumulative dose	2*10 <sup>8</sup> rads
Maximum dose rate	10 <sup>6</sup> rads/hr
Operational temp	+10°C to +65°C
Image sensor	Diakont Chalnicon 2/3"
Image	Black & white
Resolution	+600 H-TVL
Sensitivity	16 lux
Signal/noise ratio	46 db
Zoom	2x (analog)
View angle	56°
Iris	F2.8 – F16
Focus	2" – ∞
Housing material	Stainless steel
Rotation speed	10° per second
Scan range	360° rotational 180° tilt

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