



Rig Building



Mechanics



Electricians



Repair



Consulting



Quality



Projects



Engineering

Bentec Color Camera System (CCS)

Designed to improve drilling rig monitoring

The Bentec Color Camera System allows complete visual monitoring of the whole drilling rig from the driller's cabin. Rotatable cameras installed in the derrick transmit pictures to monitors in the drillers cabin. The driller can monitor the whole of the drilling rig without leaving his workplace. It enables the driller to maintain visual contact with even poorly accessible areas of the drilling rig.

There is a choice between two systems, the standard and the advanced system. The standard system is a compact system with the possibility to connect up to three cameras with pan tilt units. They can be directed to focus any part of the drilling rig. The advanced system is PC controlled and offers the possibility of up to 16 cameras and 4 monitors (non EX or EX) to join.

The cameras are operated by control elements on the monitors in the driller's cabin. In addition to horizon-

tal and vertical camera angles, there are also zoom and focus controls to view any object at the enlargement required.

The CCS is designed for use in harsh drilling rig environments. The cameras as well as the monitors are certified for use in EX-zones. The monitors from the standard system are housed in IP65 over-pressure housings. To negate any risk to the drilling rig, the power supply is automatically switched off if the pressure drops. The monitor from the advanced system is EX"q" so you don't need an over-pressure housing. The EX-protected camera housing is also heatable to prevent condensation.

As all Bentec products and systems the Color Camera is designed according to the strict regulations of the German Mining Authorities.

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TECHNICAL DATA

Standard System (max. 3 cameras)		Advanced System (up to 16 cameras)	
Camera Type 1 Housing: Zoom: Weight: Temperature: Dimensions (wxhxd):	(Zoom Camera) Ex"de" 22x AF Zoom Lens 5 kg -20 °C to +50 °C 120 x 120 x 400 mm	Camera Type 1 Housing: Zoom: Preset: Weight: Temperature: Dimensions (wxhxd):	(Serial Zoom Camera) Ex"de" 22x AF Zoom Lens 4 Positions 5 kg -20 °C to +50 °C 120 x 120 x 400 mm
		Camera Type 2 Housing: View Angle: Weight: Temperature: Dimensions (wxhxd):	(Mini Ex Camera) Ex"d" stainless steel 95°, 81°, 70°, 52°, 44°, 33° 0,44 kg -40 °C to +75 °C d = 55 mm
		Camera Type 3 Housing: Zoom: View Angle horizontal: Preset: Weight: Temperature: Dimensions (hxd):	(Ex Dome Camera) Ex"d" stainless steel 18x AF Zoom Lens 360° 4 Positions 10 kg -20 °C to +55 °C 261 x 209 mm
Pan Tilt Unit Housing: Tilt angle: Weight: Dimensions (wxhxd):	Ex"d" +/- 176°, adjustable 18 kg 165 x 286 x 228 mm	Pan Tilt Unit Housing: Tilt angle: Weight: Dimensions (wxhxd):	only for Camera Type 1 Ex"d" +/- 176°, adjustable 18 kg 165 x 286 x 228 mm
Monitor Housing: Type of monitor: Views: Weight: Dimensions (wxhd):	Ex"p" 12" TFT color panel only full screen 10 kg 450 x 350 x 280 mm	Monitor Housing: Type of monitor: Views: Weight: Dimensions (wxhd):	Ex"q" 19" TFT color panel full, split, quad, multi 50 kg 600 x 500 x 120 mm

TRAINING

Training can be done either in our facilities in Bad Bentheim or at site on the unit.

SERVICE

Professional service like system test, customer acceptance, installation, commissioning, customer training and after sales is available. Our customer care service is on standby at any time via our service hotline

+49 5922 72 354 (during business hours) and
+49 5922 72 111 (outside business hours).

ADVANTAGES

- Complete overview of all the activities on the drilling rig
- Simple operation for each camera angle and picture enlargement
- Certified for use in EX-zones
- Easy retrofitting

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