



red dot winner 2020
innovative product



red dot winner 2020
product design

FREDERICK CROWTHER AND SON LTD

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ROTO CLEAR

For a Clear View from New Perspectives



Advantages

- ✓ Provides a permanent clear view of the production processes
- ✓ Developed for extremely harsh conditions in machine tools
- ✓ Can be retrofitted to almost any machine tool
- ✓ Simple installation
- ...plus many more

Vision Systems
for Demanding Applications

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How it works

The Rotoclear C2 camera system, winner of the Red Dot Awards 2020 for 'Product Design' and 'Innovative Product', was developed for use in extremely hostile conditions on machine tool applications. It is resistant to impact from cutting chips and provides a clear view through cooling lubricants and oils, thanks to the *rotating window on the lens design.

The main principle

The Rotoclear C2 can be mounted in the working space or directly on the spindle head. It is optimally equipped for the rapid movements and accelerations that occur on a machine tool. Regardless of whether machining takes place on the blind side of the workpiece, or standard traditional viewing methods are unable to provide an uninterrupted view of the process, the Rotoclear C2 ensures that the machining process is always in clear focus.

Installation

The Rotoclear C2 can be retrofitted to almost any machine tool. The control unit is mounted on a top-hat bracket in the machine's control cabinet, with the camera head located in the machining area. Camera head and control unit unit are connected via a data cable. This cable can be up to 20 metres long. It is resistant to mineral oils and cutting lubricants and suitable for use in drag-chains.

Data cable length options available on request.

Features



Camera solution for extremely harsh conditions in machine tools

4K
ULTRA HD

Stream in 4K, Full HD and HD



Suitable for spindle and working space monitoring



Connection with two camera heads up to 20 m away



Permanently clear view thanks to rotating window and LED lighting



HDMI, Ethernet, Wi-Fi, RTSP-Stream



Integrated online update



Supports multiple languages



Record informative videos onto USB storage devices or directly to the network.



Control unit - the 4K all-in-one solution

- ✓ The unit is equipped with an HDMI port to allow an image to be quickly and easily transmitted
- ✓ The controls are simple to operate with touch gestures or via a mouse
- ✓ The camera live streams directly into your device in a platform-independent manner
- ✓ Support for the RTSP protocol allows easy integration into your existing monitoring system/machine control system

Camera head options

The camera head is compliant to IP67 protection class. This means it is well protected against cooling lubricants, oils, and other media.

The camera head is fully encapsulated, protecting it from damage in even the most demanding of operating environments.

Choose from the following options:

1. **Focus F1 (close range / spindle)**
Lens with a focus range of 200-500 mm
2. **Focus F2 (far range)**
Lens with a focus range of 500-3000 mm
3. **Focus F1+F2 (near and far range)**
Two lenses with a focus range of 200-500 mm or 500-3000 mm

*Patent Pending

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www.cromar.co.uk

sales@cromar.co.uk

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www.rotoclear.com

Product Videos: vimeo.com/rotoclear

Frederick Crowther & Son Ltd

Locksley Works,
Armytage Road Industrial Estate,
Armytage Road, Brighouse,
West Yorkshire, HD6 1QF
Tel: +44 (0) 1484 400200

Cromar Metal Products Ltd

Unit 2 & 3 Guards Road
Industrial Estate,
Guards Road,
Coldstream, TD12 4EE
Tel: +44 (0) 1890 883139