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Title: RVP system product launch
Renishaw CMM products division
Product bulletin: PBC-01928

Product:	RVP	Date:	14/01/2015
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Classification

- ○ Competitor info
- ○ Pricing changes
- ○ Product hold
- ● Product launch
- ○ Product update

- ○ Recall
- ○ Quality issue
- ○ Literature
- ○ Obsolescence

Distribution

- ☑ Agents
- ☑ Subsidiaries
- ☑ Service centres
- ☑ Retrofitters

- ☑ Distributors
- ☑ End users
- ☑ OEMs

Summary:

Renishaw is pleased to announce the launch of the RVP non-contact vision probe system for use with REVO-2.

Further details:

The REVO vision probe (RVP) is a non-contact, vision based inspection system for use only with REVO-2 that provides fast and repeatable inspection of parts where tactile probing is not suitable. RVP further expands the multi-sensor capability of the REVO system by adding non-contact vision inspection to tactile, high-speed scanning and surface finish analysis. The combination of vision measurement and a 5-axis, infinitely positioning platform allows sensor orientation to part features at any angle.

The RVP system comprises a vision probe body, a number of vision modules, dedicated rack ports and a calibration artefact. The image capture and processing components of the system are held inside the vision probe body and include an industry standard, robust CMOS sensor for reliable image capture.

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Typical parts that are ideal for inspection with RVP include combustor casings, turbine blades, nozzle guide vanes, thin or delicate materials, parts with lots of 2D holes or features, or parts which are too large for traditional vision machines.

The RVP system has two vision modules (VM10 and VM11) that allow a variety of different sized shapes and features to be inspected. Both vision modules contain integral LED lighting to achieve a sharp contrast between holes and part material.

For automated rack changing, the vision probe and vision modules have dedicated (heated) rack ports that must be used. The RVP is only compatible with the VPCP (vision probe change port) and the vision modules are only compatible with the VMCP (vision module change port). The VPCP and VMCP attach to the standard MRS system in the same way as all other REVO probe rack ports.

MODUS 1.7 has new functionality to be able to fully customise RVP lighting and exposure settings to provide accurate and repeatable image capture. There is currently an additional RVP live feed and image viewer that can be installed to use with the RVP system.

The RVP system uses standard I++ DME protocol meaning that integration with third-party client software is also possible. Images are exported in .Tiff format for this purpose.

The RVP modules feature integrated front lighting but the system is also fully compatible with part features that are lit using back lighting. Back lighting or front lighting are both acceptable methods for creating a silhouette, but have different applications. If a feature goes through a part then backlighting should be used, while closed features require front lighting. Sharp, bright lighting helps to provide better feature acquisition, and exposure values can then be used to refine the silhouette of the feature.

Part numbers and pricing:

Each RVP component is saleable individually. There are also three kits to simplify the ordering process;

RVP combi kit	A-5378-9504
RVP probe	A-5378-0080
VPCP port	A-5378-0081
VM10 module	A-5378-0082
VM11 module	A-5378-0087
VMCP port x 2	A-5378-0083
VA10 artefact	A-5378-0085

RVP VM10 kit	A-5378-9505
RVP probe	A-5378-0080
VPCP port	A-5378-0081
VM10 module	A-5378-0082
VMCP port	A-5378-0083
VA10 artefact	A-5378-0085

RVP VM11 kit	A-5378-9506
RVP probe	A-5378-0080
VPCP port	A-5378-0081
VM11 module	A-5378-0087
VMCP port	A-5378-0083
VA10 artefact	A-5378-0085

For more information, please contact your nearest Renishaw representative.

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