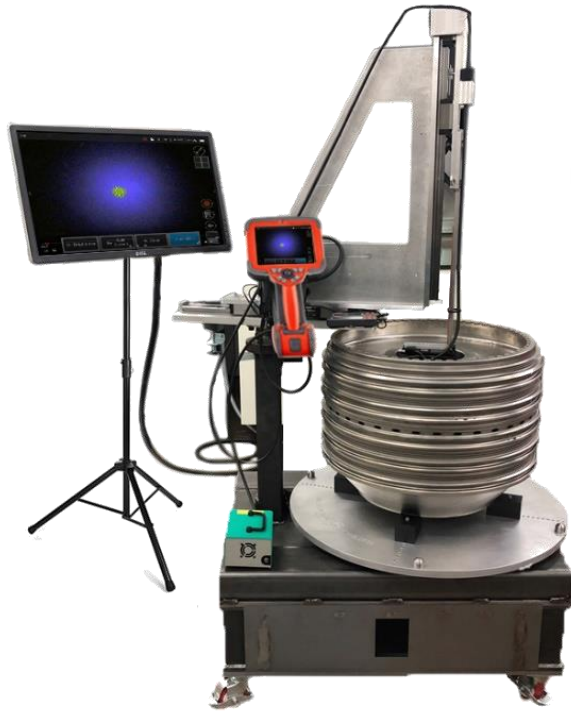


# Canyon Run Engineering Technologies Deep Well Spool Inspection System

Accepted by GE Aviation

Meets P3TF44, P3TF47 & SPM 70-32-02 Requirements



iQ VideoProbe™



Stereo UV Measurement



8.4mm VideoProbe & UV / white light source

## Deep Well Spool Inspection Solution with Waygate Technologies' Mentor iQ UV VideoProbe™ Kit

### Kit Contents

#### Deep Well Inspection System

Canyon Run Engineering Technologies (CRET) has developed an inspection system which accepts the Mentor iQ (iQ) Ø8.4mm UV VideoProbe to provide an inspection of aviation turbine spool assemblies. System can be configured for specific spool dimensions.

#### Mentor iQ UV VideoProbe

Waygate Technologies Ø8.4mm Mentor iQ UV / white light video borescope kit. The iQ VideoProbe supports Stereo measurement technologies allowing linear defect measurements under UV illumination using a fully surfaced XYZ point cloud.

### Kit Applicability & Approvals

The combined system of the Waygate Technologies Ø8.4mm Mentor iQ UV VideoProbe and the CRET turn table assembly have been tested and accepted by GE Aviation to meet the requirements of GE Aviation SPM 70-32-02, P3TF44 & P3TF47 specifications.

## Canyon Run Turntable Assembly Technical Description

FEATURES*	DESCRIPTION / DETAILS
System dimensions (W x H x D)	30.25" x 72" x 53"
Max Turn Table Capacity	450 lbs.
Turn Table Diameter	32.25"; Interchangeable tooling/locating features for varying part diameters
Turn Table Rotational path	360° (infinite) for complete part inspection
Turn Table Measurement type	Angular identification marks on turn table to aid in indication location
Z axis slide arm traverse range	16.25"; Addn'l tooling & system configs available for deeper spool inspection
Z axis measurement type	Dedicated digital readout display
Y axis slide arm traverse range	8.00"; Additional tooling and system configurations are also available
Y axis measurement type	Dedicated digital readout display
Manual transportation	Built in handle and locking caster wheels for manual maneuvering
Machine assisted transportation	Forklift Tubes
Secondary display	Mounted: 28", 4K 3840 X 2160 Resolution (UHD), 60Hz (DP)
Turn Table access	Locking pivot of axes slide arms for vertical part loading
Accessories	Custom end of arm tooling, spool risers, spacers, interchangeable fixturing & locators for varying part sizes
Storage	Lower tooling storage drawer on most configurations

\*Most features are customizable upon request

## Mentor iQ VideoProbe™ Technical Description

FEATURES	DESCRIPTION / DETAILS
Display	6.5" XGA LCD, daylight readable with touchscreen
8.4mm QuickChange™ Probe	Probe Lengths vary by application – Contact Canyon Run Engineering Technologies
Wireless Capability	Wi-Fi & Bluetooth radios included
Included accessories	Wheeled shipping case, two 2-hr batteries, battery charger, power cord, optical tip cases, user manual on USB thumb drive, magic arm handset mount, standard & measurement optical tips (See list below)
Illumination	External UV/White LED-based light source (ELS-50LEDUV light source included)
Measurement	Traditional Stereo & 3D-Stereo measurement
Battery	2-hr Li ion battery pack, charge while attached or detached from handset
I/O Ports	(2) USB 3.0 "A", (1) USB 3.0 client micro 'B', DisplayPort digital video output
Image Formats	Still Image: Bitmap (.BMP) & JPEG (JPG), Video: MPEG4 AVC/H.264
Included Accessories	Magic arm handset mount, additional battery, optical tips (See list below)
UV Specification Compliance	When using ELS-50LEDUV light source and appropriate OTAs to obtain required optical resolution, UV energy and minimal white light energy on the target indication - meets ASTM E1417M-13, GE Aviation SPM 70-32-02, P3TF44 & P3TF47
Agency Compliance	Group 1 Class A; EN61326-1, IEC CB Scheme, UL/EN/CSA-C22.2 61010-1, IEC 62133, UN/DOT T1-T8, EU RoHS 2, EU RED Directive, ISTA 2G

## Mentor iQ 8.4mm Optical Tip Adapters (OTA) White Light & UV Performance (typical)

Diam.	Part Number	Characteristics FV = Forward SV = Side ST = Stereo	FOV°	White Light Range (in) <2FC	G1/E5 Res. Range (in)		UV Range (in)	
					Minimum	Maximum	1000uW	1200uW
8.4mm	XLG3T8440FF	FV, Far DOF, HG	40°	>0.5 in	N/A	N/A	0 - 3.7	0 - 3.4
8.4mm	XLG3T8480FG	FV, Far DOF, Yellow	80°	>0.5 in	0.2	2.5	0 - 2.4	0 - 2.2
8.4mm	XLG3T8440FG	FV, Far DOF, White	40°	>0.5 in	N/A	N/A	0 - 3.6	0 - 3.2
8.4mm	XLG3T84120FN	FV, Near DOF, Black	120°	>0.5 in	0.1	2.0	0 - 1.7	0 - 1.6
8.4mm	XLG3T8440SF	SV, Far DOF, Brown	40°	>0.5 in	N/A	N/A	0 - 1.9	0 - 1.7
8.4mm	XLG3T84120SN	SV, Near DOF, Blue	120°	>0.6 in	0.1	2.0	0 - 0.7	0 - 0.6
8.4mm	XLG3T8480SG	SV, Far DOF, Green	80°	>0.5 in	0.1	2.5	0 - 1.7	0 - 1.4
8.4mm	XLG3TM846060FG	FV, ST, Near DOF, Black	60°/60°	>0.5 in	0.1	2.2	0 - 1.9	0 - 1.7
8.4mm	XLG3TM846060SG	SV, ST, Near DOF, Blue	60°/60°	>0.5 in	0.1	2.5	0 - 1.9	0 - 1.7

## Ordering Information

### Canyon Run Engineering Technologies

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### Waygate Technologies

For technical support regarding the Mentor iQ UV VideoProbe, contact your local Waygate Technologies sales representative for a demonstration or learn more at T: +1 844 991 0494 (USA) [www.waygate-tech.com](http://www.waygate-tech.com)