



# VideoProbe accessories guide

# VideoProbe accessories guide

Waygate Technologies' VideoProbes give you the highest image quality and measurement capability on your visual inspection device so you can be confident your inspections are thorough and accurate. To compliment the most advanced line of VideoProbes in the industry, we offer a comprehensive selection of optical tips and accessories so you can get the most out of your video borescope. We understand that performing a video borescope inspection requires a skilled technician putting in long hours in sometimes challenging environments. Deploying the proper accessory for the job can ensure inspections are performed properly, ergonomically, and efficiently.

# Contents

<b>VideoProbe accessories guide</b> .....	<b>2</b>
<b>Tip optics</b> .....	<b>4</b>
3.9mm tips.....	5
4.0mm tips.....	6
6.1mm tips.....	7
6.2mm tips.....	10
8.4mm tips.....	11
Tip tools.....	13
<b>Guide tubes</b> .....	<b>14</b>
Mechanical guide tubes.....	15
Non-articulating guide tubes.....	16
Dekoron bendable guide tubes.....	17
Cooling sleeves.....	18
<b>Rigidizers</b> .....	<b>19</b>
Rigidizer kits.....	22
<b>Grippers</b> .....	<b>23</b>
<b>Hands-free mounting</b> .....	<b>24</b>
<b>Working tools</b> .....	<b>26</b>
Internal working tools.....	27
External working tools.....	30
Working tool pouch.....	32
Working tool kits.....	33
<b>Centering devices</b> .....	<b>37</b>
<b>Measurement verification blocks</b> .....	<b>38</b>
<b>Software and upgrades</b> .....	<b>39</b>
<b>Cross platform accessories</b> .....	<b>42</b>
<b>Batteries and power supplies</b> .....	<b>45</b>
<b>Shipping and storage</b> .....	<b>46</b>
<b>Training and operating manuals</b> .....	<b>48</b>

# Tip optics

There are several features and accessories that make Waygate Technologies VideoProbes versatile inspection devices, but none may be more critical than the wide selection of optical tip adapters. Each optical tip uses a unique lens system to modify the image which provides the ability to perform a diverse set of inspections. Standard optical tips provide different angles of viewing and different focus ranges, while 3D Stereo and 3D Phase Measurement tips provide the ability to perform defect measurements with a fully surfaced 3D point cloud!

## Optical tip selection:

Before performing an inspection, it is essential that the proper optical tip has been selected. There are certain variables within each application that will help you to determine which tip is best for the inspection. The three main variables that must be determined when selecting an optical tip are listed in Figure 1. Each tip features a unique direction of view (DOV), depth of field (DOF) and field of view (FOV).

Application variables	Optical tip specifications	
Does the application require a unique angle of viewing?	Direction of view	DOV
What is the approximate distance that the optical tip will be from the inspection target?	Depth of field	DOF
How wide of a viewing angle does the inspection require?	Field of view	FOV

Figure 1

## Depth of field:

Depth of field is the object distance range, which the image resolves as sharp. This is a range in which an object will appear in focus. When using a VideoProbe™, in order to appear in focus, the target object must be within the optical range. Anything lying outside the DOF will be out of focus and will appear blurry. Figure 2 illustrates Depth of Field and shows a range of focus that is very short.

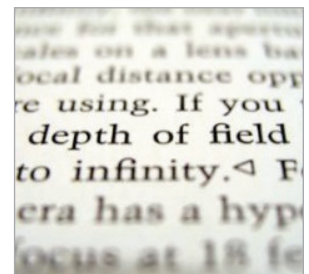


Figure 2

## Magnification:

Magnification is the amount larger an object appears through the lens system as compared to its actual size. Magnification is directly related to Field of View, the smaller the FOV the larger something will appear in it.







## Field of view:

Field of view is the angular extent of the observable target that can be seen at a given moment. A large field of view means you can see a large area. Conversely, a small field of view means you can only see a small area.

## 3.9mm tips

	Part number	Color	FOV	DOF (mm)	DOF (in)	DOV	
	PXT480FG	None	80 degrees	6-80	0.24-3.15	0 degrees	
	PXT490FN	Orange	90 degrees	3-40	0.12-1.57	0 degrees	
	PXT490SN	Red	90 degrees	2-16	0.08-0.63	90 degrees	
	PXTM45050FG	Black	50/50 degrees	5-45	0.20-1.77	0 degrees	
	PXTM45050SG	Blue	50/50 degrees	4-45	0.16-1.77	90 degrees	
	PXT480SG	Brown	80 degrees	4-80	0.16-3.15	90 degrees	
Kit part number	PXT4SET	PXT490FN	Orange	90 degrees	3-40	0.12-1.57	0 degrees
		PXT480SG	Brown	80 degrees	4-80	0.16-3.15	90 degrees
		PXT490SN	Red	90 degrees	2-16	0.08-0.63	90 degrees
Kit part number	PXTM4SET ST	PXTM45050FG	Black	50/50 degrees	5-45	0.20-1.77	0 degrees
		PXTM45050SG	Blue	50/50 degrees	4-45	0.16-1.77	90 degrees

## 4.0mm tips

	Part number	Color	FOV	DOF (mm)	DOF (in)	DOV	
	 T4080FF	None	80 degrees	35-inf.	1.38-inf.	0 degrees	
	 T40120SF	Blue	120 degrees	6-inf.	0.24-inf.	90 degrees	
	 T40115FN	Black	115 degrees	4-inf.	0.16-inf.	0 degrees	
	 T40115SN	Red	116 degrees	1-30	0.04-1.18"	90 degrees	
	 TM405555FG	Black	55/55 degrees	5-inf.	0.2-inf.	0 degrees	
	 TM405555SG	Blue	55/55 degrees	4-inf.	0.16-inf.	90 degrees	
Kit part number	MVIQAT4SET	T40115FN	Black	115 degrees	4-inf.	0.16-inf.	
		T40115SN	Red	115 degrees	1-30	0.04-1.18	
		T40120SF	Blue	120 degrees	6-inf.	0.24-inf.	
Kit part number	MVIQAT4SET ST	TM405555FG	Black	55/55 degrees	5-inf.	0.2-inf.	
		TM405555SG	Blue	55/55 degrees	4-inf.	0.16-inf.	

## 6.1mm tips





	Part number	Color	FOV	DOF (mm)	DOF (in)	DOV
	XLG3T6150FG	White	50 degrees	12-200	0.47-7.87	0 degrees
	XLG3T6180FN	Orange	80 degree	3-20	0.12-0.79	0 degrees
	XLG3T6190FF	Yellow	90 degrees	20-inf.	0.79-inf.	0 degrees
	T6165FF	Orange and blue	65 degrees	65-inf.	2.56-inf.	0 degrees
	XLG3T6150FF	None	50 degrees	50-inf.	2.36-inf.	0 degrees
	T6150FF-1	None (Sealed Window)	50 degrees	50-inf.	2.36-inf.	0 degrees
	T6150FF	None	50 degrees	50-inf.	2.36-inf.	0 degrees
	T6150HP	None	50 degrees	50-inf.	2.36-inf.	0 degrees
	XLG3T61120FG	Black	120 degrees	5-120	0.20-4.72	0 degrees
	T61120FF	Gray	120 degrees	20-inf.	0.79-inf.	0 degrees

## 6.1mm tips







	Part number	Color	FOV	DOF (mm)	DOF (in)	DOV
	XLG3T6150FB	Purple	50 degrees	12-80	0.47-3.15	45 degrees
	XLG3T6150SF	Brown	50 degrees	45-inf.	1.77-inf.	90 degrees
	XLG3T6150SG	Green	50 degrees	9-160	9.35-6.30	90 degrees
	XLG3T61120SG	Blue	120 degrees	4-100	0.16-3.94	90 degrees
	XLG3T6180SN	Red	80 degrees	1-20	0.04-0.79	90 degrees
	XLG3TM616060FG	Black	60/60 degrees	4-80	0.16-3.15	0 degrees
	XLG3TM615050SG	Blue	50/50 degrees	2-50	0.08-1.97	90 degrees
	XL4TM61105FG	Black	105 degrees	8-250	0.31-9.84	0 degrees
	XLG3TM6150FG	White	50 degrees	12-30	0.47-1.18	0 degrees



## 6.1mm tips

	Part number	Color	FOV	DOF (mm)	DOF (in)	DOV
	<b>XLG3TM6150SG</b>	Blue	50 degrees	7-24	0.28-.94	90 degrees
	<b>XL4TM61105SG</b>	Blue	105 degrees	7-250	0.27-9.84	90 degrees
	<b>XL4TM61105SF</b>	Green	105 degrees	15-inf.	0.59-inf.	0 degrees
	<b>XL4TM61105FN</b>	Orange	105 degrees	3-120	12-4.72	0 degrees
<b>Kit part number</b>	<b>XLG3T61120FG</b>	White	50 degrees	5-120	0.20-4.72	0 degrees
	<b>XLG3T6150FB</b>	Orange	80 degrees	12-80	0.47-3.15	0 degrees
	<b>XLG3T6150SF</b>	Yellow	90 degrees	45-inf.	1.77-inf.	90 degrees
	<b>XLG3T61120SG</b>	Black	120 degrees	4-100	0.16-3.94	90 degrees
	<b>XLG3T6180SN</b>	Purple	50 degrees	1-20	0.04-0.79	90 degrees

## 6.2mm tips

	Part number	Color	FOV	DOF (mm)	DOF (in)	DOV
	PXT62120FF	Yellow	120 degrees	25-inf.	0.98-inf.	0 degrees
	PXT62120SN	Blue	120 degrees	5-inf.	0.20-inf.	90 degrees
	PXT6240FF	None	40 degrees	100-inf.	3.94-inf.	0 degrees
	PXTM626060FG	Black	60 degrees	4-80	0.16-3.15	0 degrees
	PXT62120FN	Black	120 degrees	4-190	0.16-3.15	0 degrees
	PXTM626060SG	Blue	60 degrees	4-80	0.16-3.15	90 degrees

## 8.4mm tips

	Part number	Color	FOV	DOF (mm)	DOF (in)	DOV
	XLG3T8440FF	None	40 degrees	250-inf.	9.84-inf.	0 degrees
	XLG3T84120FN	Black	120 degrees	5-200	0.20-7.87	0 degrees
	XLG3T84120SN	Blue	120 degrees	4-200	0.16-7.87	90 degrees
	XLG3T8440FG	White	40 degrees	80-500	3.15-19.68	0 degrees
	XLG3T8440SF	Brown	40 degrees	250-inf.	9.84-inf.	90 degrees
	XLG3T8480FG	Yellow	80 degrees	25-500	0.98-19.68	0 degrees
	XLG3T8480SG	Green	80 degrees	25-500	0.98-19.68	90 degrees
	XLG3TM846060FG	Black	60/60 degrees	4-50	0.16-1.97	0 degrees
	XLG3TM846060SG	Blue	60/60 degrees	4-50	0.16-1.97	90 degrees
	T84120FF	Orange and blue	120 degrees	20-inf.	0.79-inf.	0 degrees

## 8.4mm tips

	Part Number	Color	FOV	DOF (mm)	DOF (in)	DOV
Kit part number	XLG3T8480FG	Yellow	80 degrees	25-500	0.98-19.68	0 degrees
	XLG3T84120FN	Black	120 degrees	5-200	0.20-7.87	0 degrees
	XLG3T8440SF	Brown	40 degrees	250-inf.	9.84-inf.	90 degrees
	XLG3T8480SG	Green	80 degrees	25-500	0.98-19.68	90 degrees
	XLG3T84120SN	Blue	120 degrees	4-200	0.16-7.87	90 degrees

# Tip tools

Optical tip tools are designed to make it easy to attach and remove 3.9mm or 4.0mm optical tips. Each 3.9mm and 4.0mm tip is sold standard with a dedicated tip tool which also serves to store and protect the tip.



Part number	Color	Description
PXT480FG-T	None	Used for installation and removal of head guard for 3.9mm VideoProbe
PXT480SG-T	Brown	Used for installation and removal of PXT480SG for 3.9mm VideoProbe
PXT490FN-T	Orange	Used for installation and removal of PXT490FN for 3.9mm VideoProbe
PXT490SN-T	Red	Used for installation and removal of PXT490SN for 3.9mm VideoProbe
PXTM45050FG-T	Black	Used for installation and removal of PXTM45050FG for 3.9mm VideoProbe
PXTM45050SG-T	Blue	Used for installation and removal of PXTM45050SG for 3.9mm VideoProbe
T4080FF-T	None	Used for installation and removal of 4.0mm head guard
T40115FN-T	Black	Used for installation and removal of T40115FN, 4.0mm forward viewing optical tip
T40115SN-T	Red	Used for installation and removal of T40115SN, 4.0mm side viewing optical tip

# Guide tubes

Guide tubes make it easier to navigate challenging inspection paths such as complex bends or gaps while providing an added layer of protection for the insertion tube. Once a particular diameter and length is selected, guide tubes are compatible with all Waygate Technologies VideoProbes as a cross platform accessory.

# Mechanical guide tubes

Mechanical guide tubes offer the ability to articulate the guide either 2-way or 4-ways allowing the user to navigate the most challenging inspection paths. Each mechanical guide tube comes with a durable polyurethane impregnated outer tungsten braid and steel internal monocoil for added crush resistance.



Part number	Length
MECHGTUBE-8536	13.7mm (0.539") x 8 ft (96")
MECHGTUBE-8537	13.7mm (0.539") x 19 ft (228")
MECHGTUBE-8538	10.7mm (0.421") x 2m (78.74")
MECHGTUBE-8539	10.7mm (0.421") x 3m (118.11")
MECHGTUBE-8559	13.7mm (0.539") x 2.75m (108.27")
MECHGTUBE-8560	13.7mm (0.539") x 2.0m (78.74")
MECHGTUBE-8649	10.7mm (0.421") x 3.0m (118.11"), R&P
MECHGTUBE-8662	10.7mm (0.421") x .8m (31.5)
MECHGTUBE-8686	10.7mm (0.421") x 2.4m (94.49")
MECHGTUBE-8742	10.7mm (0.421") x 3.35m (131.89")
MECHGTUBE-8802	9.4mm (0.370") x 2.8m (110.24")
MECHGTUBE-8832	6mm (0.236") x 12m (472.44"), W/WC

# Non-articulating guide tubes

Non-articulating guide tubes are strong and flexible. Made from the same materials as Waygate Technologies' VideoProbe insertion tubes.



Part number	Length	Diameter
GTN-415	1.5m (59.06")	6.1mm (0.24")
GTN-415-8976	1.5m (59.06")	6.1mm (0.24")
GTN-415-55D-8977	1.5m (59.06")	6.1mm (0.24")
GTN-420	2.0m (78.74")	6.1mm (0.24")
GTN-425	2.5m (98.43")	6.1mm (0.24")
GTN-430	3.0m (118.11")	6.1mm (0.24")
GTN4-8933	10.6m (417.32")	4mm (0.157")
GTN-515	1.5m (59.06")	8.4mm (.33")
GTN-520	2.0m (78.74")	8.4mm (.33")
GTN-525	2.5m (98.43")	8.4mm (.33")
GTN-530	3.0m (118.11")	8.4mm (.33")
GTN-615	1.5m (59.06")	10mm (.394)
GTN-620	2.0m (78.74")	10mm (.394)
GTN-625	2.5m (98.43")	10mm (.394)
GTN-630	3.0m (118.11")	10mm (.394)
GTN-645	4.5m (177.17")	10mm (.394)
GTN-660	6.0m (236.22")	10mm (.394)
GTN-675	7.5m (295.28")	10mm (.394)
GTN6-8934	6m (236.22")	6.1mm (0.24")
GTN-815	1.5m (59.06")	12.7mm (.5")
GTN-820	2.0m (78.74")	12.7mm (.5")
GTN-825	2.5m (98.43")	12.7mm (.5")
GTN-830	3.0m (118.11")	12.7mm (.5")
GTN-845	4.5m (177.17")	12.7mm (.5")
GTN-860	6.0m (236.22")	12.7mm (.5")
GTN-875	7.5m (295.28")	12.7mm (.5")
GTN-6100-8923	10m (393.7")	6.1mm (0.24")
GTN-61120-8924	12m (472.441")	6.1mm (0.24")



# Dekoron bendable guide tubes

Provide both rigidity and flexibility to your VideoProbe insertion tube with a bendable Dekoron Guide Tube. Manually bend the guide tube in nearly any configuration and it will hold its position to allow for more control, precision, and protection for the insertion tube when delivering it into the application.



Part number	Description
<b>GTD-400S</b>	Dekoron Guide tube attached to 3.9mm tube gripper Includes: GTD-600 Dekoron bendable tubing Supports 3.9mm & 4.0mm VideoProbes Guide tube length: 3.0m (9.75 ft.) XA131: 3.9mm tube gripper
<b>GTD-600</b>	Dekoron bendable tubing Sold per foot Outer diameter 9.5mm (.375") Supports 3.9mm (0.1534") & 5.0mm (0.197") VideoProbes.
<b>GTD-600S</b>	Dekoron Guide tube attached to 6.1mm (0.24") tube gripper Includes: GTD-800 Dekoron bendable tubing Outer diameter ~12.7mm (~.512") Supports 6.1mm (0.24"), 6.2mm (0.244") & 8.4mm (0.301") Ø VideoProbes XA118 6.1mm (0.24") tube gripper
<b>GTD-800</b>	Dekoron bendable tubing Sold per foot Outer diameter 12.7mm (.500") Supports 6.1, 6.2 & 8.4mm Ø VideoProbes
<b>GTD-800S</b>	Dekoron Guide tube attached to 6.1mm tube gripper Includes: GTD-800 Dekoron bendable tubing Outer diameter ~12.7mm (~.512") Supports 6.1mm (0.24"), 6.2mm (0.244") & 8.4mm (0.301") Ø VideoProbes XA125 6.1mm tube gripper
<b>856A1310G01</b>	Custom guide tube kit with a blue molded plastic (not Dekoron) custom guide tube and a steel straightening rod for CFM56 HPT inspections
<b>856A1351P01</b>	Red molded plastic (not Dekoron) custom guide tube for CFM56 HPT inspections

# Cooling sleeves

A tungsten braided insertion tube sleeve that allows for use of a VideoProbe in temperatures up to 300 °F (149 °C). The sleeve connects to a shop air supply requiring 80-120 psi to provide active cooling down the sleeve surrounding the VideoProbe insertion tube and camera head. Each cooling sleeve comes standard with the air valve assembly, air regular assembly, and an air hose to connect to air supply. All components are shipped in a rugged shipping and storage case with dedicated foam cutouts.



Part number	Length	Diameter
XLCOOLTUBE-8506	3m (118.11")	6.1mm (0.24")
XLCOOLTUBE-8668	2m (78.74")	10.7mm (0.421")
XLCOOLTUBE-8789	4.5m (177.17")	12.7mm (0.5")
XLCOOLTUBE-8792	2m (78.74")	12.7mm (0.5")
XLCOOLTUBE-8506	3m (118.11")	6.1mm (0.24")
XLCOOLTUBE-8668	2m (78.74")	10.7mm (0.421")
XLCOOLTUBE-8789	4.5m (177.17")	12.7mm (0.5")



# Rigidizers



A stainless steel rigid guide tube that turns a flexible VideoProbe into a rigid scope providing control and protection for the insertion tube. When used with tube grippers and access port couplers a rigidizer allows for hands free probe positioning. Once a particular diameter and length is selected, rigidizers are compatible with all Waygate Technologies VideoProbes as a cross platform accessory.

Part number	Length	Diameter
GTR-401	152.4mm (6")	4.6mm (.180")
GTR-403	304.08mm (12")	4.6mm (.180")
GTR-405	425.45mm (16.75")	4.6mm (.180")
GTR-411	4.0mm (0.158")	4.67mm (.184")
GTR-411S	4.0mm (0.158")	4.67mm (.184")
GTR-413	4.0mm (0.158")	4.67mm(0.184")
GTR-415	4.0mm (0.158")	4.67mm(0.184")
GTR-416	4.0mm (0.158")	4.67mm(0.184")
GTR-501	152.4mm (6")	5.97mm (.235)
GTR-503	304.8mm (12")	5.97mm (.235)
GTR-505	425.45mm (16.75")	5.21mm (.205")
GTR-506	609.6mm (24")	5.21mm (.205")
GTR-512	1219.2mm (48")	5.21mm (.205")
GTR-601	152.4mm (6")	7.92mm (.312")
GTR-603	304.8mm (12")	7.92mm (.312")
GTR-605	425.45mm (16.75")	7.92mm (.312")
GTR-606	609.6mm (24")	7.92mm (.312")
GTR-612	1219.2mm (48")	7.92mm (.312")
GTR-701	152.4mm (6")	8.74mm (.344")
GTR-703	304.8mm (12")	8.74mm (.344")
GTR-705	425.45mm (16.75")	8.74mm (.344")

## Rigidizers

Part number	Length	Diameter
GTR-706	609.6mm (24")	8.74mm (.344")
GTR-712	1219.2mm (48")	8.74mm (.344")
GTR-801	152.4mm (6")	10.1mm (.394")
GTR-803	304.8mm (12")	10.1mm (.394")
GTR-805	425.45mm (16.75")	10.1mm (.394")
GTR-806	609.6mm (24")	10.1mm (.394")
GTR-812	1219.2mm (48")	10.1mm (.394")

# Rigidizers

Part number	Length	Diameter	Gripper
GTR-401S	152.4mm (6")	4.6mm (.180")	XAI31
GTR-403S	304.8mm (12")	4.6mm (.180")	XAI31
GTR-405S	425.45mm (16.75")	4.6mm (.180")	XAI10
GTR-411S	4.0mm (0.158")	4.67mm (.184")	XAI31
GTR-413S	4.0mm (0.158")	4.67mm (.184")	XAI32
GTR-415S	4.0mm (0.158")	4.67mm (.184")	XAI33
GTR-416S	4.0mm (0.158")	4.67mm (.184")	XAI34
GTR-501S	152.4mm (6")	5.97mm (.235)	XAI30
GTR-503S	304.8mm (12")	5.97mm (.235)	XAI30
GTR-505S	425.45mm (16.75")	5.21mm (.205")	XAI30
GTR-506S	609.6mm (24")	5.21mm (.205")	XAI30
GTR-512S	1219.2mm (48")	5.21mm (.205")	XAI30
GTR-601S	152.4mm (6")	7.92mm (.312")	XAI18
GTR-603S	304.8mm (12")	7.92mm (.312")	XAI18
GTR-605S	425.45mm (16.75")	7.92mm (.312")	XAI18
GTR-606S	609.6mm (24")	7.92mm (.312")	XAI18
GTR-612S	1219.2mm (48")	7.92mm (.312")	XAI18
GTR-701S	152.4mm (6")	8.74mm (.344")	XAI25
GTR-703S	304.8mm (12")	8.74mm (.344")	XAI25
GTR-705S	425.45mm (16.75")	8.74mm (.344")	XAI25
GTR-706S	609.6mm (24")	8.74mm (.344")	XAI25
GTR-712S	1219.2mm (48")	8.74mm (.344")	XAI25
GTR-801S	152.4mm (6")	10.1mm (.394")	XAI25
GTR-803S	304.8mm (12")	10.1mm (.394")	XAI25
GTR-805S	425.45mm (16.75")	10.1mm (.394")	XAI25
GTR-806S	609.6mm (24")	10.1mm (.394")	XAI25
GTR-812S	1219.2mm (48")	10.1mm (.394")	XAI25

## Rigidizer kits

Kit part number	Length	Diameter	Gripper
GTR-4KIT	152.4mm (6") 304.8mm (12") 457.2mm (18")	4mm (101.6")	XA130
GTR-5KIT	152.4mm (6") 304.8mm (12") 457.2mm (18")	5mm (127")	XA118
GTR-6KIT	152.4mm (6") 304.8mm (12") 457.2mm (18")	6mm (152.4")	XA125
GTR-7KIT	152.4mm (6") 304.8mm (12") 457.2mm (18")	7mm (177.8")	XA125
GTR-8KIT	152.4mm (6") 304.8mm (12") 457.2mm (18")	8mm (203.2")	XA125

# Grippers








Tube grippers use a compression fitting which when twisted locks the gripper in place and allows easy manipulation of the insertion tube providing precision control while reducing hand fatigue. Grippers are threaded for use with rigidizers, non-articulating guide tubes and access port couplers. Gripper are cross platform accessories and are compatible with all Waygate Technologies VideoProbes.



Part number	Diameter
XA131	3.9mm
XA130	5.0mm
XA118	6.1mm
XA125	8.4mm
XA124	10.0mm

# Hands-free mounting

A wide range of accessories specifically designed to allow use of Waygate Technologies video borescopes hands-free for improved efficiency and ergonomics. Whether it's a c-clamp or hook to mount the borescope handset to an engine, or a shoulder strap to take the weight off of the user's hands, there is an option for any application or environment.

	Part number	Description
	SA-C	Service parts for magic-arm assemblies. Clamp portion of magic arm kit (XA119S) includes gold quarter-twenty stud.
	MVIQAHOOK	Mentor Visual iQ handset mounting hook for hands free operation. Attaches to the Mentor iQ handset using the standard mount kit bracket (MVIQBHOLDER). Can also be used with the XL family of products using XLGOABRO handset holder. Allows the handset to rotate 360 degrees continuously. Requires MViQ handset holder bracket (part number: MVIQBHOLDER) – *sold separately*.
	XA BALL	Swivel ball mount with 1/4 x 20 adapter.
	XA203	Brass male fitting for XA BALL.
	XLGOABRO	XL Go handset holder with 1/4 x 20 female mount.
	XLGOALANYARD	Neck or shoulder strap with attached handset holder (XLGOABRO) for use with the XL family of products.
	XLGOAMAGARKIT	Full-size Magic Arm mounting kit for XL family of products. Includes: XLGOABRO handset holder SA-A Variable friction Magic Arm SA-C Super Clamp.



## Hands-free mounting

	Part number	Description
	<b>XLGOAMOUNTKIT</b>	Mini magic arm hands free mount kit for use with the XL family of products. Kit containing SA-C, XA BALL, XA203 and XLGOABRO.
	<b>MVIQALANYARD</b>	Shoulder strap with attached handset holder (MVIQBHOLDER) for a Mentor Visual iQ system.
	<b>XLGOABELTCLIP</b>	Durable belt clip with attached handset holder (XLGOABRO) for an XL family of products
	<b>MVIQAMOUNTKIT</b>	Small hands free mount kit with swivel for Mentor Visual iQ VideoProbes that supports the equipment during inspection operations
	<b>MVIQAMAGICARM</b>	Full size hands free mount kit with moveable arm for Mentor Visual iQ VideoProbes that supports the equipment during inspection operations
	<b>MVIQBHOLDER</b>	Spare handset holder, used to hold handset when attached to hands free devices

# Working tools

## Retrieval tools

Loose parts and foreign objects stuck inside piping or other confined spaces can cause serious damage to manufacturing, process and power generation systems. Waygate Technologies offers a complete line of external and internal retrieval tools to remove foreign objects from hard-to-reach areas—without requiring disassembly. Our specialized tools provide significant cost-savings by minimizing downtime and eliminating the need for additional equipment.






# Internal working tools

Our 6.2mm  $\varnothing$  VideoProbe insertion tube contains an internal working channel which allows for the insertion of special retrieval tools. Internal tools can also be used with non-working channel probes externally when combined with an external attachment kit (WT-1.4MMEXT KIT).



## 1.4mm internal working tools

	Part number	Diameter	Length
	WT-141426A	1.4mm (0.055")	Alligator Tool 26m (102.4") working length
	WT-141426HC	1.4mm (0.055")	Hook comparator cable 2.6m (102.4") working length Note: Requires either WT-H or WT-C50
	WT-141426P	1.4mm (0.055")	Three-pronged gripper 2.6m (102.4") working length
	WT-141432S	1.4mm (0.055")	Snare tool 2.6m (102.4") working length
	WT-141432A	1.4mm (0.055")	Alligator tool 3.2m (126.1") working length
	WT-141432HC	1.4mm (0.055")	3.2m (126.1") working length
	WT-141432P	1.4mm (0.055")	Three-pronged gripper tool 3.2m (126.1") working length
	WT-141475A	1.4mm (0.055")	Alligator tool 7.5m (2.95.3") working length
	WT-143032S	1.4mm (0.055")	Snare tool 3.2m (126.1") working length
	WT-143026A	3.0mm (0.118")	Alligator tool 2.6m (102.4") working length
	WT-143032A	3.0mm (0.118")	Alligator tool 3.2m (126.1") working length
	WT-143526B	3.5mm (0.138")	Brush tool 2.6m (102.4") working length

## 1.4mm internal working tools

	Part number	Diameter	Length
	WT-143532B	3.5mm (0.138")	Brush tool 3.2m (126.1") working length
	WT-144026M	4.0mm (0.158")	Magnet tool 2.6m (102.4") working length
	WT-141435S	1.4mm (0.055")	Snare basket tool 3.5m (137.8") working length
	WT-144032M	4.0mm (0.158")	Magnet tool 3.2m (126.1") working length
	WT141435P	1.4mm (0.055")	Three pronged gripper tool 4.4m (173.2") working length
	WT-148026M	8.0mm (.0315")	Magnet tool 2.6m (102.4") working length
	WT-148032M	8.0mm (.0315")	Magnet tool 3.2m (126.1") working length
	WT-141435A	1.4mm (0.055")	Alligator tool 3.5m (137.8") working length
	WT-143035B	1.4mm (0.055")	Brush tool 3.5m (137.8") working length
	WT-144035M	1.4mm (0.055")	Magnet tool 4m (157.5") working length
	WT-143035A	3.0mm (0.118")	Alligator tool 3.5m (137.8") working length
	WT-148035M	3.0mm (0.118")	Magnet tool 3.5m (137.8") working length
	WT-141435HC	1.4mm (0.055")	Hook Comparitor Cable, 3.5m length













## Internal working tools

	Part number	Diameter	Length
	WT-C50	1.27mm (0.05")	Quantity 5
	WT-H	1.4mm (0.055")	Quantity 5
	WT-1.4MMEXT KIT	External attachment kit to allow use of 1.4mm (0.055") working tools with any diameter VideoProbe	Uses the internal tube developed for the 7.3mm (0.287") VideoProbe Working tool slides through the attached tube allowing free movement and articulation





# External working tools

Quickly and easily clip external working tools onto small-diameter probes to achieve unrivaled retrieval capabilities with just one piece of equipment. Our complete line of external retrieval tools are compatible with Waygate Technologies 6.1mm ø or 8.4mm ø VideoProbes.

## 3.0mm external working tools

	Part number	Diameter	Length
	WT-304020B	4.0mm (0.157")	Wire basket tool 2.4m (94.5") working length
	WT-304020P	4.0mm (0.157")	Three-pronged gripper 2.4m (94.5") working length
	WT-304020S	4.0mm (0.157")	Snare tool 2.4m (94.5") working length
	WT-304030B	4.0mm (0.157")	Wire basket tool 3.3m (129.9") working length
	WT-304030P	4.0mm (0.157")	Three-pronged gripper 3.3m (129.9") working length
	WT-304030S	4.0mm (0.157")	Snare tool 3.3m (129.9") working length
	WT-304075B	4.0mm (0.157")	Wire basket tool 7.8m (307.1") working length
	WT-304075P	4.0mm (0.157")	Three-pronged tool 7.8m (307.1") working length
	WT-306075S	4.0mm (0.157")	Snare tool 7.8m (307.1") working length
	WT-306020F	6.0mm (0.236")	Fork and tine tool 2.4m (94.5") working length
	WT-306030F	6.0mm (0.236")	Fork and tine tool 3.3m (129.9) working length
	WT-306075F	6.0mm (0.236")	Fork and tine tool 7.8m (307.1") working length

## 3.0mm external working tools

	Part number	Diameter	Length
	WT-308020A	8.0mm (0.314961")	Alligator tool 2.4m (94.5") working length
	WT-308020M	8.0mm (0.314961")	Magnet tool 2.4m (94.5") working length
	WT-308030A	8.0mm (0.314961")	Alligator tool 3.3m (129.9") working length
	WT-308030M	8.0mm (0.314961")	Magnet tool 3.3 m (129.9") working length
	WT-308020C22	8.0mm (0.314961")	Wire cutting tool 2.4m (94.5") working length cuts up to 22 gage wire

### Working tool pouch

Part number	Diameter	Length
WT-POUCH26	7mm (0.275591")	2.6m (102.4")
WT-POUCH32	7mm (0.275591")	3.2m (126")
WT-TOOLPOUCH35	7mm (0.275591")	3.2m (126")
WT-POUCH620	6mm (0.23622")	2.4m (102.4")
WT-POUCH630	6mm (0.23622")	3m (118.1")
WT-POUCH675	6mm (0.23622")	7.5m (295.3")
WT-POUCH820	8mm (0.314961")	2.0m (78.7")
WT-POUCH830	8mm (0.314961")	3.0m (118.11")
WT-POUCH875	8mm (0.314961")	7.5m (295.3")



# Working tool kits

Kit part number	Kit contents	Description
WT-620KIT	Includes one each of the following:	<b>*All tools listed below are 2.4m (102.4") working length and come in a labeled pouch*</b>
	WT-308020A	8.0mm (0.315") alligator tool
	WT-306020F	6.0mm (0.236") fork and tine tool
	WT-308020M	8.0mm (0.315") magnet tool
	WT-304020P	4.0mm (0.157") three-pronged gripper tool
	WT-304020S	4.0mm (0.157") snare tool
	WT-304020B	4.0mm (0.157") four wire basket tool
	WT-POUCH620	pouch to hold 2.4m (102.4") working tools (quantity 6)
	WTH6	working tool holder, 6mm (0.236") probe
WT-630KIT	Includes one each of the following:	<b>*All tools listed below have a working length of 3.3 meters (129.9") and come in a labeled pouch</b>
	WT-308030A	8.0mm (0.315") alligator tool
	WT-304030S	4.0mm (0.157") snare tool
	WT-304030P	4.0mm (0.157") three-pronged gripper
	WT-304030B	4.0mm (0.157") four wire basket tool
	WT-308030M	8.0mm (0.315") magnet tool
	WT-306030F	6.0mm (0.236") fork and tine tool
	WTH6 (quantity 6)	Working tool holder
WT-POUCH630	Pouch to hold 3.3 (129.9") meter working tools for 6mm (0.236") x 3.0 meter (118.11") probes	
WT-632KIT	Includes one each of the following:	<b>*All tools listed below have a working length of 3.3 (129.9") meters and come in a labeled pouch</b>
	WT-C50	Assy comparator vial .050
	WT-141432A	1.4mm (0.0551") alligator tool 3.2m
	WT-141432S	1.4mm (0.0551") snare tool 3.2m
	WT-141432P	1.4mm (0.0551") gripper tool 3.2m
	WT-143532B	3.5mm (0.138") brush tool 3.2m
	WT-144032M	4.0mm (0.157") magnet tool 3.2m
	WT-148032M	8.0mm (0.315") magnet tool 3.2m
	WT-143032A	3.0mm (0.118") alligator tool 3.2m
	WT-141432HC	Hook comparator cable 3.2m
WT-H	Assy, hook vial	

## Working tool kits

Kit part number	Kit contents	Description
WT-675KIT	Includes one each of the following:	<b><i>*All tools are 7.8 meters in length and come in a labeled pouch:</i></b>
	WT-308075A	8.0mm alligator tool
	WT-304075S	8.0mm snare tool
	WT-304075P	4.0mm three-pronged gripper tool
	WT-304075B	4.0mm four wire basket tool
	WT-308075M	8.0mm magnet tool
	WT-306075F	6.0mm fork and tine tool
	WTH6 (quantity 6)	Working tool holder
	WT-POUCH675	Pouch to hold 7.8 meter working tools
WT-726KIT	Includes one each of the following:	<b><i>*All Tools are 2.6 meters (102.4") in length and come in a labeled storage pouch:</i></b>
	WT-141426A	1.4mm (0.0551") alligator tool
	WT-141426S	1.4mm snare tool
	WT-141426P	1.4mm (0.0551") three-pronged gripper
	WT-143526B	3.5mm (0.138") brush tool
	WT-144026M	4.0mm (0.157") magnet tool
	WT-148026M	8.0mm (0.315") magnet tool
	WT-143026A	3.0mm (0.111") alligator tool
	WT-141426HC	Hook comparitor cable
	WT-H	1.4mm (0.0551") hook piece
WT-C50	1.4mm (0.0551") comparitor piece	

# Working tool kits

Kit part number	Kit contents	Description
WT-820KIT	Includes one each of the following:	<b><i>*All tools are 2.4 meters (94.49") in length and come in a labeled storage pouch</i></b>
	WT-308020A	8.0mm (0.315") alligator tool 2.4m (94.49") working length
	WT-304020S	4.0mm (0.157") snare tool 2.4m working length
	WT-304020P	4.0mm (0.157") three-pronged gripper tool 2.4m working length
	WT-POUCH820	Pouch to hold 2.4 meter (94.49") working tools for 8mm x 2.0 meter (78.74") probes
	WT-308020M	8.0mm (0.315") magnet tool 2.4m (94.49") working length
	WT-306020F	6.0mm (0.236") fork and tine tool 2.4m (94.49") working length
	WT-304020B (quantity 6)	4.0mm (0.157") four wire basket tool 2.4m (94.49") working length
	WTH8	Working tool holder, 8mm (0.315") probe
WT-830KIT	Includes one each of the following:	<b><i>*All tools are 3.3 meters (129.921") in length and come in a labeled storage pouch</i></b>
	WT-308030A	8.0mm (0.315") alligator tool 3.3m (129.921") working length
	WT-304030S	4.0mm (157.48") snare tool 3.3m (129.921") working length
	WT-304030P	4.0mm (157.48") three-pronged gripper tool 3.3m (129.921") working length
	WT-304030B	4.0mm (157.48") four wire basket tool 3.3m working length
	WT-308030M	8.0mm magnet tool 3.3m (129.921") working length
	WT-306030F	6.0mm (0.236") fork and tine tool 3.3m (129.921") working length
	WTH8 (quantity 6)	Working tool holder, 8mm (0.315") probe
	WT-POUCH830	Pouch to hold 3.3 meter (129.921") working tools for 8mm (0.315") x 3.0 meter (129.921") probes
WT-875KIT	Includes one each of the following:	<b><i>*All tools are 7.8 meters (307.09") in length and come in a labeled storage pouch:</i></b>
	WT-308075A	8.0mm (0.315") alligator tool
	WT-304075S	4.0mm (0.157") snare tool
	WT-304075P	4.0mm (0.157") three-pronged gripper
	WT-308075M	8.0mm (0.315") magnet tool
	WT-306075F	6.0mm (0.236") fork and tine tool
	WT-304075B (quantity 6)	4.0mm (0.157") four wire basket tool
	WTH8	Working tool holder, 8mm (0.315") probe
	WT-POUCH875	Pouch to hold 7.8 meter (307.09") working tools

### Working tool kits

Kit part number	Kit contents	Description
WT-F100KIT	Includes one each of the following:	<i>*In individual pouches:</i>
	WT-141426A	1.4mm (0.055") alligator tool 2.6m (102.36") working length
	WT-141426S	1.4mm (0.055") snare tool 2.6m (102.36") working length
	WT-141426P	1.4mm (0.055") three-pronged gripper tool 2.6m (102.36") working length
	WT-C50 (quantity 5)	Comparator piece, 1.4mm (0.055")
	WT-143026A	3.0mm (0.118") alligator tool 2.6m (102.36") working length
	WT-141426HC	Hook comparator cable 2.6m (102.36") working length
WTH6	WT-H (quantity 5)	Hook piece, 1.4mm (0.055") Length equals ~ 32mm - 36mm (1.250"-1.420")

# Centering devices

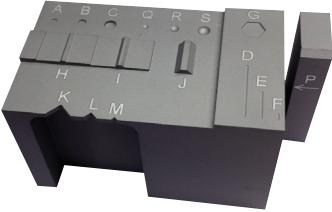
Perform more efficient pipe inspections with these essential devices that hold the insertion tube centered inside the pipe allowing wide angle forward view inspection of the pipe surface or 90 degree viewing of orbital welds. Centering devices are cross platform accessories and are compatible with all Waygate Technologies VideoProbes.

	Part number	Diameter	Video Probe
	CD6-060	.06mm (0.002")	6.0mm (0.236") VideoProbe
	CD6-150	1.5mm (0.059")	6.0mm (0.236") VideoProbe
	CD8-150	1.5mm (0.059")	8.0mm (0.315") VideoProbe
	CD8-300	3.0mm (0.118")	8.0mm (0.315") VideoProbe
	CD10-62-8849	62mm (2.44")	10mm (0.394") VideoProbe

# Measurement verification blocks

Verify that the system measures accurately with the Waygate technologies-supplied NIST traceable verification block before and after performing measurements.

Compatibility will be determined by tip diameter. Once a diameter is selected the verification blocks are cross platform.

	Part number	Diameter
	<b>3D-MEASBLOCK</b>	3D measurement training block For use with 3D Phase Measurement, 3D stereo, traditional stereo, or comparison measurement.



Part number	Diameter
UG-VER2400B	3.9mm (0.154")
UG-VER2500B	5.0mm (0.196")
UG-VER2600C	6.0mm (0.236")
UG-VER2620B	6.2mm (0.244")
UG-XLG3TM84VER	8.4mm (0.331")
VER2400B	3.9mm (0.154")
VER2400C	3.9mm (0.154")
VER2500B	5.0mm (0.197")
VER2600D	6.1mm (0.240")
VER2600E	6.1mm (0.240")
VER2620B	6.2mm (0.244")
VER2300UV-9258	UV verification block for 3.9mm UV probes
VER2400UV-9196	UV verification block for 4.0mm UV probes
VER2600UV-9197	UV verification block for 6.1mm UV probes
VER2620UV-9198	UV verification block for 6.2mm UV probes
VER8400UV-9199	UV verification block for 8.4mm UV probes
XLG3TM84VER	8.4mm (0.331")

# Software and upgrades

Waygate Technologies VideoProbes are scalable to allow users the opportunity to upgrade system capabilities over time to meet growing inspection needs. Whether the user would like to add 3D Phase Measurement software to their Mentor Visual iQ or Menu Directed Inspection (MDI) automated reporting software to their XL Detect+ VideoProbe, these upgrade packages make field installation simple.

Part number	Description
<b>INSPMGR-CD</b>	Inspection Manager software for viewing and re-measurement of 3D phase measurement, StereoProbe measurement, ShadowProbe measurement, and comparison measurement images Inspection Manager also provides a menu directed inspection (MDI) viewer for easy image viewing
<b>MVIQ-3DST</b>	Provides 3D stereo measurement SW including point cloud visualization Available on Inspect and Touch versions of the Mentor Visual iQ platform
<b>UG-MVIQ-3DST</b>	Includes 3D point cloud visualization Available for fielded units, requires factory install Available on Inspect and Touch versions of the Mentor Visual iQ platform Must come in on RMA (returned materials authorization)
<b>MVIQ-MDI</b>	MDI (menu directed inspection) helps guide an inspector through the inspection process and intelligently auto-generates a report MDI Builder software for the PC also included
<b>UG-MVIQ-MDI</b>	MVIQ Menu Directed Inspection
<b>MVIQ-POD</b>	Mentor Visual iQ probability of detection enhancement Includes high-dynamic range (HDR), adaptive noise reduction (ANR), distortion correction, and image presets factory install *Available on Inspect and Touch versions of the Mentor Visual iQ platform
<b>UG-MVIQ-POD</b>	Mentor Visual iQ probability of detection enhancement Includes high-dynamic range (HDR), adaptive noise reduction (ANR), distortion correction, and image presets Field upgrade Available on Inspect and Touch versions of the Mentor Visual iQ platform
<b>MVIQ-ST</b>	Mentor Visual iQ stereo measurement enhancement Factory install *Available on Inspect and Touch versions of the Mentor Visual iQ platform
<b>UG-MVIQ-ST</b>	Mentor Visual iQ stereo measurement enhancement Available for fielded units, requires factory install Available on Inspect and Touch versions of the Mentor Visual iQ platform Must come in on RMA (returned materials authorization)
<b>MVIQ-3DPM</b>	Provides 3D phase measurement SW including point cloud visualization Available on Inspect and Touch versions of the Mentor Visual iQ platform
<b>UG-MVIQ-3DPM</b>	Includes 3D point cloud visualization Available for fielded units, *requires factory install *Available on Inspect and Touch versions of the Mentor Visual iQ platform Must come in on RMA (returned materials authorization)
<b>MVIQ-NOIM</b>	Mentor Visual iQ internal memory disable – factory install Disables the ability to store data to the internal drive.
<b>UG-MVIQ-NOIM</b>	Mentor Visual iQ internal memory disable – field upgrade Disables the ability to store data to the internal drive
<b>MVIQ-NOUSB</b>	Mentor Visual iQ USB memory disable – factory install Disables the ability to store data to the USB drives
<b>UG-MVIQ-NOUSB</b>	Mentor Visual iQ USB memory disable – factory install Disables the ability to store data to the USB drives

## Software and upgrades

Part number	Description
<b>UG-XLLV-MDI-11</b>	MDI 1.1 helps guide an inspector through the inspection process and intelligently auto-generates a report MDI (menu directed inspection) Builder software for the PC also included
<b>MVIQ-MDI</b>	MDI (menu directed inspection) helps guide an inspector through the inspection process and intelligently auto-generates a report MDI Builder software for the PC also included
<b>UG-MVIQ-MDI</b>	Custom high definition Mentor Visual iQ QuickChange Interchangeable VideoProbe with high intensity LED light engine and advanced image processing for improved image brightness Includes quartz fibers for increased radiation tolerance 6.1mm diameter x 4.5 meter length Includes: probe soft storage case, tip storage case and headguard optical characteristics: 50 degree field of view (FOV), 50mm-inf. (2.36"-inf.) Depth of Field (FOV) Minimum articulation: 160 degrees all-way maximum operating temperature: 100 °C (212 °F)
<b>MVIQ-PPM</b>	Mentor Visual iQ Software for projected plane measurement Requires 3D phase measurement (MVIQ-3DPM) or 3D stereo measurement (MVIQ-3DST) capable handset.
<b>UG-MVIQ-PPM</b>	Mentor Visual iQ Software for projected plane measurement Requires 3D phase measurement (MVIQ-3DPM) or 3D stereo measurement (MVIQ-3DST) capable handset Requires handset serial number upon order entry
<b>UG-MVIQ-ADP</b>	Mentor Visual iQ Software for area depth profile measurement Requires 3D phase measurement (MVIQ-3DPM) or 3D stereo measurement (MVIQ-3DST) capable handset Requires handset serial number upon order entry
<b>UG-XLVUD-ST</b>	XL Vu DStereo measurement enhancement Available for fielded units, requires factory install Must come in on RMA (returned materials authorization) for stereo measurement tip calibration Comes standard with a licensed copy of Inspection Manager version 1.5 remeasurement software Inspection Manager software for viewing and re-measurement of 3D phase measurement, StereoProbe measurement, ShadowProbe measurement, and comparison measurement images Inspection Manager also provides a menu directed inspection (MDI) viewer for easy image viewing
<b>UG-XLVU-MDI-20</b>	MDI 2.0 helps guide an inspector through the inspection process and intelligently auto-generates a report MDI (menu directed inspection) Builder software for the PC also included
<b>XLFL-ST</b>	XL Flex Stereo Measurement enhancement – factory install Comes standard with a licensed copy of Inspection Manager version 1.5 remeasurement software Inspection Manager software for viewing and re-measurement of 3D Phase Measurement, stereoprobe measurement, shadowprobe measurement, and comparison measurement images Inspection manager also provides a Menu Directed Inspection (MDI) viewer for easy image viewing
<b>UG-XLFL-ST</b>	XL flex stereo measurement enhancement Available for fielded units, requires factory install Must come in on RMA for stereo measurement tip calibration
<b>XLFL-MDI-20</b>	Menu Directed Inspection version 2.0 guides an inspector through the inspection process and intelligently auto-generates a report MDI Builder software for the PC also included











## Software and upgrades

Part number	Description
<b>UG-XLFL-MDI-20</b>	Menu Directed Inspection version 2.0 guides an inspector through the inspection process and intelligently auto-generates a report MDI Builder software for the PC also included Comes with a software upgrade thumbdrive Requires handset serial number upon order
<b>XLDE-MDI-11</b>	MDI 1.1 helps guide an inspector through the inspection process and intelligently auto-generates a report MDI Builder software for the PC also included
<b>UG-XLDE-MDI-11</b>	MDI 1.1 guides an inspector through the inspection process and intelligently auto-generates a report MDI Builder software for the PC also included Comes with a software upgrade thumbdrive Requires handset serial number upon order
<b>MVIQ-OVERLAY</b>	Overlay feature for comparing a know image to a live inspection image
<b>UG-MVIQ-OVERLAY</b>	Field upgrade for overlay feature for comparing a know image to a live inspection image
<b>UG-MVIQ-IMINSP</b>	Mentor Visual iQ internal memory enablement for inspect model - field upgrade Enables 16 GB internal memory for MVIQ Inspect model Requires device serial number upon order
<b>MVIQ-TOUCHSCRN</b>	Adds optically bonded, multipoint capacitive dragontrial touchscreen feature to the Inspect model
<b>MVIQ-32GB</b>	32GB internal memory feature addition
<b>MVIQ-DARKBOOST</b>	Mentor Visual iQ software enhancement – factory install. Dark Boost is a live video processing function that digitally brightens darker areas in scenes with bright foreground surfaces or glare without overexposing or degrading the contrast of more uniform scenes.
<b>UG-MVIQ-DARKBOOST</b>	Mentor Visual iQ software enhancement – field upgrade. Dark Boost is a live video processing function that digitally brightens darker areas in scenes with bright foreground surfaces or glare without overexposing or degrading the contrast of more uniform scenes. Requires handset serial number upon order entry.
<b>MVIQ-TIPCLEARNC</b>	Mentor Visual iQ software enhancement – factory install. Blade Tip Clearance is a measurement type that is available with Real3D Stereo and or Real3D Phase measurement technologies. BTC automatically identifies the minimum, maximum and average clearance measurements for tip to shroud (blade tip clearance) inspections.
<b>UG-MVIQ-TIPCLEARNC</b>	Mentor Visual iQ software enhancement – field upgrade. Blade Tip Clearance is a measurement type that is available with Real3D Stereo and or Real3D Phase measurement technologies. BTC automatically identifies the minimum, maximum and average clearance measurements for tip to shroud (blade tip clearance) inspections. Requires handset serial number upon order entry.

# Cross platform accessories





Waygate technologies offers a wide range of purpose built accessories to compliment and add versatility to each VideoProbe. Cross Platform Accessories range from an access port coupler to a micro fiber optical tip cleaning kit to ensure clean tips and optimal image quality.

	Part number	Description
	<b>XLGOA8GBTD</b>	USB 2.0 thumb drive, 8 GB, external memory device Not compatible with the XLG3
	<b>XLGOAAUTOC</b>	12V DC auto adapter for XL Go operation and battery charging
	<b>XLGOADOORKIT</b>	Replacement door kit Includes: 815589 - right (USB) door, 815590 - left (mic-speaker) door
	<b>XLGOAHEADSET</b>	Headset for recording and listening to audio – 2.5mm jack
	<b>XLGOAVISOR</b>	Sun shield for XL Go when inspecting in sunlight.
	<b>XLGOC8GBHD</b>	8 GB external hard drive for use with the XL Go and XLGo+ VideoProbe.
	<b>MVIQADP-VGA</b>	Display port to VGA cable
	<b>XA-VGA30</b>	VGA cable for use with external monitor Length: 30 ft. (9.1m), Connects to Mentor Visual iQ with use of MVIQADP-VGA *sold separately*

## Cross platform accessories







	Part number	Description
	<b>XA-CLEANKIT</b>	Lens cleaning kit for VideoProbe tip optics includes: 5 packages of alcohol wipes and 1 package of cotton swabs Contents are packaged inside a small case with cleaning instruction label on the inside lid.
	<b>114M2569</b>	XA-CLEANKIT replacement pack: lens cleaning kit for VideoProbe tip optics Includes: 5 packages of alcohol wipes and 1 package of cotton swabs.
	<b>XA-KEYBOARD</b>	Mini keyboard for use with the following Waygate Technologies products. Comes standard with USB connector and adapter for PS2 connection. <ul style="list-style-type: none"> <li>• Mentor Visual IQ</li> <li>• XL Flex &amp; XL Flex+</li> <li>• XL Detect &amp; XL Detect+</li> <li>• XL Vu VideoProbe</li> <li>• XL Lv VideoProbe</li> <li>• Ca-Zoom PTZ</li> </ul>
	<b>MVIQATD-2</b>	Thumb drive containing the following: All translated languages of User's Manual and Quick Start Guides Inspection Manager 2.0 software for viewing and re-measurement of 3D phase measurement, 3D stereo measurement, StereoProbe measurement, and comparison measurement images.
	<b>MVIQAUSB A-B</b>	USB 3.0 A to B cable
	<b>MVIQAUSB-ETHNET</b>	USB to ethernet adapter cable

## Cross platform accessories

	Part number	Description
	<b>XLG3AREMOTE</b>	Mentor Visual iQ and XL G3 remote control Connects to the MViQ handset with a 2 meter USB cable Duplicates all functions of the Mentor Visual iQ handset
	<b>MVIQAPOLE</b>	Spare handset pole
	<b>MVIQABSA</b>	Borescope adapter for the MViQ VideoProbe system. The MVIQABSA is a full VGA camera and light source for rigid borescopes and fiberscopes that provides the ability to utilize most UI functionality of the MViQ system The MVIQABSA includes borescope adapter, storage case and set-up guide Note: A borescope coupler is also required Please order separately one of the following part numbers: <ol style="list-style-type: none"> <li><b>Part number: CCF28</b> Description: variable focus c-mount camera coupler, 28mm focal length (best for rigid borescopes &gt; 4mm diameter)</li> <li><b>Part number: CCF35</b> Description: variable focus c-mount camera coupler, 35mm focal length (best for fiberscopes and 2.7mm dia. mini-rigid)</li> <li><b>Part number: CCF45</b> Description: variable focus c-mount camera coupler, 45mm focal length (best for mini-rigid borescopes and mini-semi-flexible fiberscopes &lt;2mm)</li> </ol>
	<b>MVIAQPC100S</b>	Access port adapter kit. Includes nylon pouch made to fit into bottom of Mentor Visual iQ Workstation case. Kit includes the follow access port adapters: A100016S150 -CP 1-16UNF1.5", A112512S150 -CP 1 1/8-12UNF1.5", A37524C150 -CP 3/8-24UNF3A1.5", A43820C150 -CP 7/16-20UNF3A1.5", A50020S150 -1.500X 1/2-20 X 1/2-13 ADAPTER, A50020S275 -CP 1/2-20UNF-2.75", A56318C150 -CP 9/16-18UNF3A1.5", A56318S150 -CP 9/16-18UNF1.5", A62518S150 -CP 5/8-18UNF1.5", A62518S300 -CP 5/8-18UNF3.0", A75016S150 - CP 3/4-16UNF1.5", A87514S150 -CP 7/8-14UNF1.5", XA125 -GRIPPER, 8MM.

# Batteries and power supplies

Boost portability with a variety of light weight lithium ion batteries for your video borescope.





	Part number	Run Time
	<b>XLGOABATTA</b>	2 hr run time Compatible the following products; XL Flex, XL Flex+, XL Detect, XL Detect+, XL Vu, XL Vu+, XL Lv, XL Go, XL Go+
	<b>XLGOABATTB</b>	4 hr run time Compatible the following products; XL Flex, XL Flex+, XL Detect, XL Detect+, XL Vu, XL Vu+, XL Lv, XL Go, XL Go+
	<b>MVIQABATT</b>	2 hr run time
	<b>XLVUPWRBRK</b>	AC power supply for corded version of XL Vu VideoProbe system
	<b>XLGOACHGR</b>	Battery charger for XLGOABATTA and XLGOABATTB, also provides AC power to operate XL Go Compatible the following products; XL Flex, XL Flex+, XL Detect, XL Detect+, XL Vu, XL Vu+, XL Lv, XL Go, XL Go+
	<b>MVIQBCHARGER</b>	Spare battery charger/AC power supply for Mentor Visual iQ
	<b>MVIQAPWRSTRAP</b>	Nylon strain relief strap for Mentor Visual iQ AC power cord Includes instructions for attachment to power cord.
	<b>MVIQABATT-NOCELLS</b>	Empty battery shell for use with Mentor Visual iQ VideoProbes Contains no lithium-ion cells Acts as a pass-through for the A/C power supply.

# Shipping and storage

Shipping and storage offerings ranging from a durable case with wheels for your borescope system to a protective optical tip case with dedicated foam cutouts..

	Part number	Description
	<p><b>MVIQACASE-WS</b></p>	<p>Spare work station shipping/storage case for use with Mentor Visual iQ VideoProbes</p>
	<p><b>MVIQAPRBCASE</b></p>	<p>Mentor Visual iQ QuickChange VideoProbe soft storage case fits lengths 2m-10m</p>
	<p><b>MVIQAACCPOUCH</b></p>	<p>Accessory storage pouch, fits in work station shipping storage case</p>
	<p><b>XLDETECTCASE</b></p>	<p>Storage for one XL Detect &amp; XL Detect+ system, tip case, AC transformer, 2 or 4 hour spare battery, XL Detect handset holder, magic clamp, swivel ball, gripper, 12" rigidizer and owner's manual Comes standard with all XL Detect and XL Detect+ systems This case is compatible with all XL Detect and XL Detect+ VideoProbes.</p>
	<p><b>MVIQATIPCASE-40</b></p>	<p>4.0mm spare interchangeable optical tip storage case This case is compatible with all XL 4.0mm diameter optical tip adapters.</p>
	<p><b>XLVUBCASE</b></p>	<p>Shipping and storage case for XL Vu Sturdy hard case to protect against shock, moisture and dust Safely provides storage for one XL Vu system, tip case, AC transformer, 2 or 4 hour spare battery, XL Vu handset holder, magic clamp, swivel ball, gripper, 12" rigidizer and owner's manual This case is compatible with all XL Vu VideoProbes.</p>
	<p><b>XLLVBCASE</b></p>	<p>Shipping and storage case for XL Lv Sturdy hard case to protect against shock, moisture and dust Safely provides storage for one XL Lv system, tip case, 2 or 4 hour spare battery, XL Lv handset holder, magic clamp, swivel ball, gripper, 12" rigidizer and owner's manual This case is compatible with all XL Lv VideoProbes.</p>

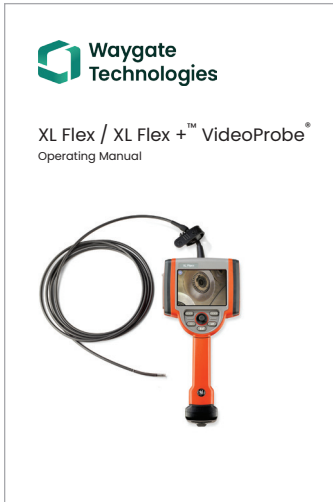
## Shipping and storage

	Part number	Description
	<b>MVIQACASE-CO</b>	Spare carry-on shipping/storage case for use with Mentor Visual iQ VideoProbes
	<b>MVIQATIPCASE-61</b>	6.1mm spare interchangeable tip optics storage case This case is compatible with all 6.1mm diameter optical tip adapters.
	<b>XLFCASE-CO</b>	Carry on case with wheels Comes standard with all XL Flex and Flex+ systems Optional upgrade for XL Detect and XL Detect+
	<b>MVIQACASE-CD</b>	MViQ dual probe case kit

# Training and operating manuals

Live classroom training with a Waygate Technologies RVI expert covering topics ranging from 3D Phase Measurement to care and operation at the customer site or a Waygate Technologies facility.

VideoProbe operating manuals and QuickStart guides are offered in several different languages.



Part number	Description	Language
MVIQAQSG	Quick Start Guide, hard copy	English
MVIQAQSG-DE	Quick Start Guide, hard copy	German
MVIQAQSG-FR	Quick Start Guide, hard copy	French
MVIQAQSG-CH	Quick Start Guide, hard copy	Chinese
MVIQAQSG-JP	Quick Start Guide, hard copy	Japanese
MVIQAQSG-ES	Quick Start Guide, hard copy	Spanish
MVIQAQSG-KO	Quick Start Guide, hard copy	Korean
MVIQAQSG-PB	Quick Start Guide, hard copy	Portuguese
MVIQAQSG-PL	Quick Start Guide, hard copy	Polish
MVIQAQSG-RU	Quick Start Guide, hard copy	Russian
MVIQAQSG-SW	Quick Start Guide, hard copy	Swedish
MVIQAQSG-FN	Quick Start Guide, hard copy	Finnish
MVIQAQSG-HG	Quick Start Guide, hard copy	Hungarian



## Training and operating manuals

Part number	Description
WT-1.4MMEXTMAN	1.4mm (0.055") Retrieval Kit Instruction Manual.

Part number	Description	Language
MVIQAMANUAL	User's Manual, hard copy	English
MVIQAMANUAL-DE	User's Manual, hard copy	German
MVIQAMANUAL-FR	User's Manual, hard copy	French
MVIQAMANUAL-CH	User's Manual, hard copy	Chinese
MVIQAMANUAL-JP	User's Manual, hard copy	Japanese
MVIQAMANUAL-ES	User's Manual, hard copy	Spanish
MVIQAMANUAL-KO	User's Manual, hard copy	Korean
MVIQAMANUAL-PB	User's Manual, hard copy	Portuguese
MVIQAMANUAL-PL	User's Manual, hard copy	Polish
MVIQAMANUAL-RU	User's Manual, hard copy	Russian
MVIQAMANUAL-FN	User's Manual, hard copy	Finnish
MVIQAMANUAL-HG	User's Manual, hard copy	Hungarian

Part number	Description
MVIQATD-2	Thumb Drive Containing the following: All translated languages of user's manual and Quick Start Guides Inspection Manager 2.0 software for viewing and re-measurement of 3D Phase measurement, 3D stereo measurement, StereoProbe measurement, and comparison measurement images.
XLGOCMAN	Print version of XL Go+ owner's manual (8.5 x 5.5") – English
XLGOCMANCD	CD ROM version of XL Go+ owner's manual including 11 languages; includes QuickTime and VLC Player
XLGOCQUICKSTART	Laminated 8.5 x 5.5" XL Go+ Quick Start Guide – English
XLVUAMAN	Print version of XL Vu owner's manual (8.5 x 5.5").
XLVUAMANCD	CD ROM version of XL Vu owner's manual; includes QuickTime.

For more information contact  
[sales@intechnde.com](mailto:sales@intechnde.com)  
or visit  
[www.intechnde.com](http://www.intechnde.com)



Inspection Solutions

**British Columbia**

140 - 8851 Beckwith Road  
Richmond, B.C.  
V6X 1V4

Tel: 604 276 8006  
Fax: 604 276 8725  
Toll Free: 1 800 677 8884

**Alberta**

6211 Roper Road  
Edmonton, Alberta  
T6B 3G6

Tel: 780 448 9575  
Fax: 780 466 1280  
Toll Free: 1 888 576 7756

**Ontario**

#48 1200 Speers Road  
Oakville, Ontario  
L6L 2X4

Tel: 289 430 0286  
Fax: 780 466 1280