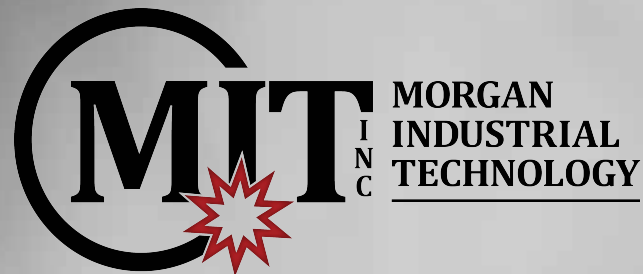


Your Eye Inside™

# Hawkeye® V3HD Video Borescope

*HD quality photos & video... Wi-Fi remote viewing, and more!*



Morgan Industrial Technology  
1702 W Boat St  
Ozark, MO 65721  
417.485.4575  
[www.morganitech.com](http://www.morganitech.com)

Gradient Lens Corporation®



V3HD



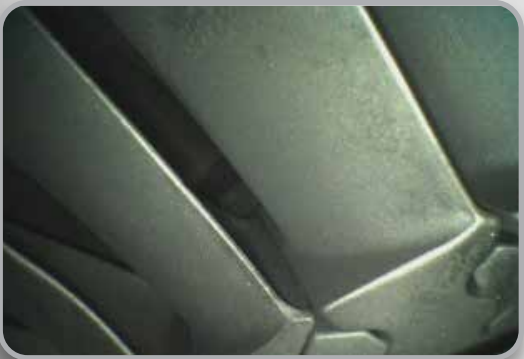




V3 HD



Aircraft Fuel Nozzle



Turbine Blade

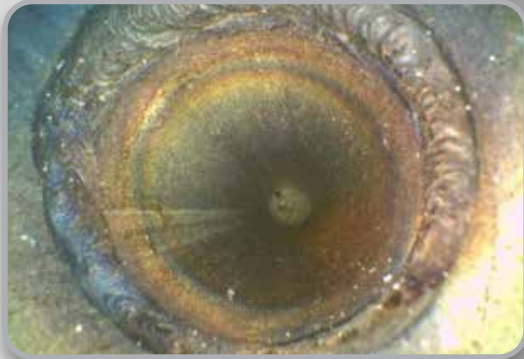


Casting



Gearbox

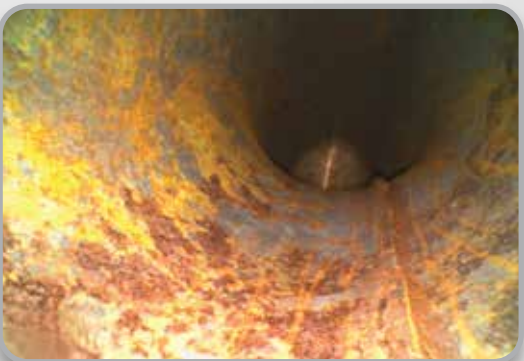
The **Hawkeye® V3 HD Video Borescope** features a new Micro HD video camera, custom image processor, and 5.5" HD touchscreen display. The 4 and 6mm Hawkeye V3's deliver simply the best image quality of any borescope on the market today, under \$15,000! Video footage, and still images, captured by the V3 appear crystal clear, with vibrant, lifelike colors.



Orbital Weld



Crosshole

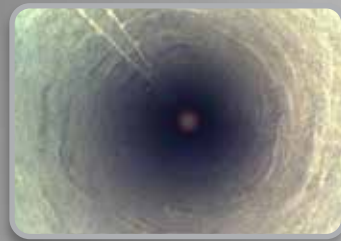


Pipe Inspection



WiFi to iPhone & iPad, Anti-Glare,  
Smartphone Features, & more...

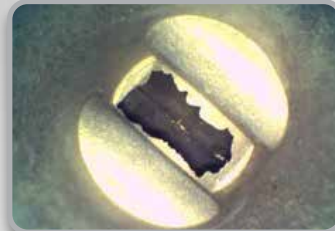
# V3 HD



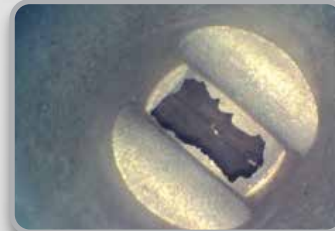
Weighting Off



Edge Weighting On



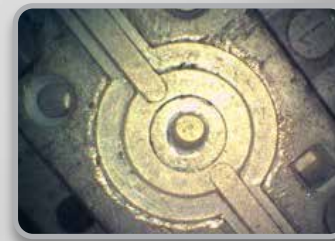
Anti-Glare Off



Anti-Glare On



Weighting Off



Center Weighting On



Select



Pinch-to-Zoom



Swipe to Scroll

**Smartphone  
Touchscreen  
Features**



**WiFi & HDMI  
Connections!**

*Hawkeye® V3 HDs can transmit live inspection images and video, via WiFi, to any iOS device including iPad and iPhone. Images and video can also be displayed on a desktop monitor via an HDMI connection.*

Joystick Controlled Servo-Driven Articulation,  
5.5" Touchscreen, Easy HD Video & Photo Capture

**Tube Rotation  
Feature**

**5.5" Touchscreen  
HD Display**  
Daylight Readable

**Intuitive User  
Interface**

**Joystick Controlled**  
4-Way Servo-Driven  
Articulation

**Durable Tungsten  
Sheathing**  
With 4-Layer Construction

**Center & Edge Exposure Weighting**

**Close-Focus Tip**  
(Optional)

**90° Prism Tip**  
(Optional)

**6-Hour Battery**

**4mm and 6.1mm  
Outer Diameter**

**Wi-Fi Connection**  
View on iPhone  
and iPad

**USB Memory  
+ HDMI Out**

**Headphone/  
Mic Jack**

**Adjustable Super-  
Bright Micro LED  
Illumination**

**Unique Anti-Glare  
Feature**

**HD Video Capture**

**HD Image Capture**



1. Ruggedized camera and optics
2. Custom-designed articulation collars for smooth function
3. Laser welded joints for strength
4. Durable multi-layer construction with Tungsten braid outer layer and stainless steel monocoil inner layer



## Intuitive Touchscreen Control



### Easy Operator Controls

User friendly controls on the handle include articulation home, center and edge weighting, image and video capture, anti glare, lighting control and menu access. Menu functions can be controlled with touchscreen or joystick.

### On-Screen Menu

With easy-to-use menu and file manager, users can select where to save images and videos. Settings include auto save, confirm save, and user defined folders. Notes can be added when viewing the stored image resulting in a Microsoft Word report file.



### On-Screen Articulation Tracker



### Intuitive User Interface

Intuitive graphics are navigated using either touchscreen or joystick. User settings options include defining on screen status indicators, text overlay, audio/mic, flipping and mirroring, time and date, WiFi and power save mode.

## Accessories

### Close-Focus Tip

The Close-Focus Tip allows users to view defects such as tiny racks, or, surface finish irregularities, up close with high magnification. The tip threads directly onto the Hawkeye V3 HD Video Borescope. Double threads are utilized to prevent the tips from falling off.



### 90° Prism Tip

The 90° DOV Prism Tip threads directly onto the Hawkeye V3 HD Video Borescope, allowing the user to view the walls of pipes and tubes and to more easily inspect certain turbine blades or engine valves in difficult engines. Double threads are utilized to prevent the tips from falling off.



### V3 Rigidizer

When you push a flexible scope through a hole into a large open cavity it is difficult to direct and orient the scope tip. The V3 Rigidizer tube allows the user to easily direct the scope to the object of the inspection. Available for 4mm, 0.188" (4.8mm), and 6.1mm, 0.313" (8mm) scopes. Length: 17".



### V3 Stand

When you are using the V3 HD in an inspection area where you can position the scope on a workbench or tabletop, the V3 Stand tripod is just the right accessory. The stand attaches to the back of the V3 using a 1/4" 20 thread screw.

### V3 Neck Strap

When you are using the V3 in the field and want to maintain complete portability, we suggest using the V3 neck/waist strap. The neck strap securely attaches to the V3 using a 1/4" 20 screw on the back of the unit.



Everything You'll Need all in a Sturdy, Lockable Carrying Case

V3 HD



**Standard Kits Include:**

- Hawkeye® V3 HD Video Borescope
- Rugged Hawkeye® Carrying Case
- Battery Charger
- 16GB USB Flash Drive

**Deluxe Kits Also Include:**

- 90° Prism Tip
- Close-Focus Tip
- V3 Stand
- V3 Rigidizer
- Neck Strap
- Spare Battery

**Hawkeye® V3 HD Standard Kits**

Diameter	Length	Articulation	Sheath	Model #
4mm	1.5m (4'11")	4-way	Tungsten	V3 040 1500 4
4mm	3.0m (9'10")	4-way	Tungsten	V3 040 3000 4
6.1mm	1.5m (4'11")	4-way	Tungsten	V3 060 1500 4
6.1mm	3.0m (9'10")	4-way	Tungsten	V3 060 3000 4

**Hawkeye® V3 HD Deluxe Kits**

Diameter	Length	Articulation	Sheath	Model #
4mm	1.5m (4'11")	4-way	Tungsten	V3D 040 1500 4
4mm	3.0m (9'10")	4-way	Tungsten	V3D 040 3000 4
6.1mm	1.5m (4'11")	4-way	Tungsten	V3D 060 1500 4
6.1mm	3.0m (9'10")	4-way	Tungsten	V3D 060 3000 4

**Hawkeye® V3 HD Accessories**

Item	Model #
4mm Close-Focus Tip	V3 TIP 4CF
4mm 90° Prism Tip	V3 PTIP 4 90
6.1mm Close-Focus Tip	V3 TIP 6CF
6.1mm 90°Prism Tip	V3 PTIP 6 90
V3 Rigidizer 4mm	V3 RT4
V3 Rigidizer 6.1mm	V3 RT6

Item	Model #
V3 Stand	V3 STAND
V3 Neck Strap	V3 STRAP
V3 Spare Battery	V3 BATT
V3 Charger	V3 CHARGER
V3 Case	V3 CASE



# Hawkeye® V3 HD Specifications

Model	V3 040 1500 4	V3 040 3000 4	V3 060 1500 4	V3 060 3000 4
Diameter	4mm	4mm	6.1mm	6.1mm
Length	1.5m (4'11")	3.0m (9'10")	1.5m (4'11")	3.0m (9'10")
Articulation	4-Way (+/- 160)	4-Way (+/- 160)	4-Way (+/- 160)	4-Way (+/- 160)
Direction of View	0°	0°	0°	0°
Field of View	70°	70°	70°	70°
Depth of Field	18mm to ∞	18mm to ∞	18mm to ∞	18mm to ∞
Outer Sheath	Tungsten	Tungsten	Tungsten	Tungsten
Inner Sheath	Stainless steel mono-coil with outer polymer layer			
Min. Bend Radius	32mm	32mm	45mm	45mm
Weight	5.4 lb.	5.4 lb.	5.4 lb.	5.4 lb.
Certified	CE	CE	CE	CE
Color Camera	1280 x 720 p Color CMOS sensor			
Illumination	Integrated white LED			
Display	5.5", HD, touchscreen, high brightness, daylight readable			
Interface	HDMI, USB 2.0 flash memory, USB micro b for computer interface, 3.5mm headphone/mic jack			
Recording Media	USB thumb drive			
Image Capture Format (resolution)	JPEG (1280 x 720p)			
Video Capture Format (resolution)	MPEG4 (1280 x 720p)			
Internal Memory	1GB (approximately 1,800 images or 18minutes of video)			
Display battery	6 hr. run time, 14.4V, 92Wh lithium ion			
Power	AC Input: 100 240 VAC, 50 60 Hz, 1.5 A Max, DC Output: 24V, 2.5 A			
90° Prism Tips	V3 PTIP 4 90	V3 PTIP 4 90	V3 PTIP 6 90	V3 PTIP 6 90
Direction of View	90°	90°	90°	90°
Field of View	70°	70°	70°	70°
Depth of Field	18mm to ∞			
Tip Outer Diameter	4mm	4mm	6mm	6mm
Close-Focus Tips	V3 TIP 4CF	VC TIP 4CF	V3 TIP 6CF	V3 TIP 6CF
Direction of View	0°	0°	0°	0°
Field of View	70°	70°	70°	70°
Depth of Field	6-35mm 6	6-35mm 6	6-35mm 6	6-35mm 6
Tip Outer Diameter	4mm	4mm	6mm	6mm

# Hawkeye® V3 HD Specifications

Environmental	
Sheath operating temperature in air:	-25°C to 80 80°C (-13 to +180 F), in water 10°C to 30°C (50-86 F)
Storage temperature, entire unit	-30°C to 60 60°C (-22 140 F)
Air pressure:	1 atmosphere
Humidity:	5-95% relative humidity
Fluid resistance of sheath	Resistance to water up to 5% salinity and most oils (except hydraulic fluid)
Water resistance of sheath	IP67, Waterproof to 9 ft. (4 psi/.275 bar)
Borescope handle and monitor	IP64, Splash resistant
Gradient Lens provides no guarantee without a specific material test.	
V3 HD Video Borescope Interface	
Quick access interface	Intuitive image and video capture function
Digital zoom	5x (Touchscreen operation)
Image rotation	Yes
Mirrored image	Yes
Time and date	Yes
Anti-Glare	Yes
Center and edge weighting	Yes
WiFi	Yes, via app iOs device only
External screen display	Yes, HDMI
Text annotation	Yes
Menu language selection	Yes
Memory device	USB Flash drive (16GB USB flash drive included, approximately 30,000 images, 4.5 hours video)
Image capture format	JPEG
Video capture format	MPEG4
Playback of captured images	Any program that supports JPEG
Playback of captured videos	Windows media player
Input/output connections	HDMI, USB 2.0 flash memory, USB Mini B for computer interface, 3.5mm headset/mic jack