

# NDT PRODUCTS CATALOG



**RADIOGRAPHY**



**MAGNETIC PARTICLE**



**LIQUID PENETRANT**



**BLACKLIGHTS (UV-A)**



**ULTRASONIC**



**VISUAL**



**LEAK DETECTION**



**HARDNESS TESTING**

## INDUSTRIAL RADIOGRAPHY INSPECTION EQUIPMENT

Item Number	Equipment Description
R0900a	Carestream - Industrex Laptop View Station
R1000a	Carestream - HPX-DR 3543 PE Non-Glass, Large Format Detector with Transport Case
R1010a	Carestream - HPX-PRO Portable CR Reader with Transport Case
R1020a	Carestream - HPX-1 CR Reader with Transport Case
R1025a	QSA Global - OpenVision DX Corrosion Under Insulation (CUI) RTR System
R1030a	Microtek - NDT-2000 Film Digitizing System with Laptop Work Station and Transport Case
R1040a	COMET - EVO 300D (Directional) PXS with Transport Cases
R1045a	COMET - EVO 300P (Panoramic) PXS with Transport Cases
R1050a	COMET - EVO 4-Legged Tube Stand
R1055a	COMET - EVO Light Weight Tube Stand
R1058b	GOLDEN - Model XR200 150kV Pulsed X-Ray Generator with Travel Case
R1059b	GOLDEN - Model XRS3 270kV Pulsed X-Ray Generator with Travel Case
R1060b	GOLDEN - Model XRS4 370kV Pulsed X-Ray Generator with Travel Case



## MAGNETIC PARTICLE & BLACKLIGHT INSPECTION EQUIPMENT

Item Number	Equipment Description
R1100a	Magnaflux - Y2 AC Yoke with Detachable Cord and Transport Case
R1110a	Parker Research - B200 AC Yoke
R1120a	Parker Research - DA400 AC/DC Yoke
R1700a	Spectro-UV - Clarity 365 UV-A Inspection Flashlight
R1705a	LABINO - UVG3 2.0 Series Floodlight UV-A Inspeccion Flashlight Kit
R1710a	LABINO - Apollo 3.0 Series Light Meter



## ULTRASONIC THICKNESS, FLAW, PHASED ARRAY AND BLOCKS

Item Number	Equipment Description
R1200a	Olympus - 38DL Plus Ultrasonic Thickness Gauge Kit
R1210a	Danatronics - ECHO 9DLW Ultrasonic Thickness Gauge Kit
R1221a	Sonatest - WAVE Ultrasonic Flaw Detector
R1230a	Sonatest - WAVE Accessory Kit (Transducers, Wedges, Cable & DSC Block)
R1222a	Sonatest - Veo3 Phased Array 32:128 with TOFD & Live TFM
R1240a	4 Step Calibration Block (1018 Steel)
R1241a	4 Step Calibration Block (304 Stainless Steel)
R1242a	5 Step Calibration Block (1018 Steel)
R1243a	5 Step Calibration Block (304 Stainless Steel)
R1244a	5 Step Calibration Block (4340 Steel)
R1245a	5 Step Calibration Block (316 Stainless Steel)



## VISUAL INSPECTION EQUIPMENT

Item Number	Equipment Description
R1300a	Wohler - VIS 700 Plus HD Inspection Camera
R1320a	Wohler - Camera Trolley Kit w/ Stabilizing Sleeve for Light Ring
R2000a	Mitcorp - X1000 6mm x 7m (All Way Articulating) Complete Portable Videoscope Kit
R2005a	VSNDT - 6mm x 7m (All Way Articulating) Complete Portable Videoscope Kit
R2010b	ViewTech - VJ-3 UV-A (All Way Articulating) Complete Portable Videoscope Kit



## PMI HAND HELD XRF ANALYZERS/ LIBS CARBON ANALYZERS

Item Number	Equipment Description
R1400a	ThermoFisher - Niton XL2 980 Plus
R1405a	ThermoFisher - Niton XL5 Plus
R1410a	ThermoFisher - Niton Apollo LIBS
R1415a	SciAps - X50 XRF Alloy Analyzer Kit
R1420a	SciAps - Z902C+ LIBS Analyzer Kit



## MISCELLANEOUS TESTING EQUIPMENT

Item Number	Equipment Description
R1500a	Fischer - FMP30 Feritscope
R1610a	Screening Eagle - Equotip 550 Hardness Testing Kit
R1800a	30" Flat & 18" Corner Vacuum Box System
R1900a	FLIR - E6-XT Infrared Camera including WiFi Inspection Kit



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## **DISTRIBUTION CENTERS**

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## **QUALITY**

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"As a business, Quality Equipment Distributors (QED) is committed to excellence by providing superior customer service and support through the sale of QUALITY products to the Non-Destructive Testing industry. This commitment is rooted in the ongoing effort to involve our employees and partner with our suppliers; to continually improve our processes to meet the needs and requirements of our customers."

***Certificate is Available for Download on our Website***

## **RETURN POLICY**

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Products may only be returned with QED's authorization and must be in good working condition, with complete identification, shipped freight prepaid and returned to the Distribution Center from which they were shipped or picked up. The price on the original invoice will be the basis for credit for any authorized return. QED may impose a 25% restocking fee as a condition of accepting a return. Custom-built products may not be returned.

Prior to returning any Product, Customer must first obtain a Return Material Authorization (RMA) from QED and include that RMA number on the packing slip for returned Product. Product must be returned within 30 days after the RMA is issued. QED may refuse to accept the return of Products for which Customer has not provided an RMA number or for which the RMA number was issued more than 30 days prior to the return.

Except where Products are defective, returns must be in clean, unopened, factory packaging, in unmarked condition. In the case of cardboard box packaging, the seal must not be broken.

Returned Product must include all items originally packaged with or accompanying Products. In all instances, when returning Products, original paperwork, with invoice/receipt information must be supplied with return.

QED reserves the right to inspect and require proof of the defect prior to accepting returns.

# RADIOGRAPHY

## RADIOGRAPHIC AIDS

### FILM VIEWING/ MEASURING DEVICES

#### LED Film Viewers



*\*Viewer pictured above has underwent Anti-Corrosion Treatment. See Service Section for More Information\**

► QED Viewer Kits Include: Rugged Aluminum Carrying Case with LED Film Viewer, Foot Pedal, Operation Guide and Test Report

► LCNDT Viewer Kits Include: LED Film Viewer, External Mask, Foot Pedal, Manual, Test Report, Warranty Card and Carrying Bag depending on Model

Brand	Model	Viewing Window	Intensity	Max Viewing Density	Price
QED	A2	2.5" x 8"	110,000 Cd/m sq	4.1 D	<i>Call for Pricing</i>
	A8L	3.14" x 15.7"			
LCNDT	FV-2009 Plus <i>FV-2009T</i>	2.5" x 8"	120,000 Cd/m sq	4.1 D	
	FV-2010 Plus <i>FV-2010T Plus</i>	4" x 15.8"	130,000 Cd/m sq	4.2 D	
	FV-2018 Iris	0.2" thru 4"	300,000 Cd/m sq	4.5 D	
	FV-2014	13" x 16.1"	82,800 Cd/m sq	3.8 D	

*\*LCNDT Film Viewer Models ending in "T" include a Built-in Densitometer\**



*\*A2\**



*\*A8L\**



*\*FV-2009 PLUS\**



*\*FV-2010 PLUS\**



*\*FV-2018 IRIS\**



*\*FV-2014\**

#### Densitometer & Density Step Tablets

Brand	Item or Model	Measuring/Tablet Range	Description	Price
Eseco Speedmaster	5009	0.00 - 5.00 D	SM-10 Portable B/W Transmission Densitometer	<i>Call for Pricing</i>
	5012	0.00 - 4.00 D	SM-12 Compact Densitometer (Built-in Light Source, Limited to a 3" Film Measuring Depth)	
	5014	0.00 - 4.00 D	SM-14 Compact Densitometer (Reads Directly from Film Viewers)	
	5099	.08 - 4.00 D	4 Step Transmission Density Tablet (Uncertified)	
	5005	.08 - 4.00 D	5 Step Transmission Density Tablet (NIST Certified)	
LCNDT	5004	.15 - 5.00 D	21 Step Transmission Density Tablet (NIST Certified)	<i>Call for Pricing</i>
	DT-300	0.00 - 5.00 D	LCNDT Tabletop Densitometer (Replacement for X-Rite 301)	
	DT-100	0.00 - 5.00 D	LCNDT Portable Densitometer	

*\*LCNDT Densitometers do not include a Transmission Density Tablet\**

#### ESECO Speedmaster®



*\*5009\**



*\*5004\**



*\*5012\**



*\*5014\**



*\*5005\**



*\*DT-300\**



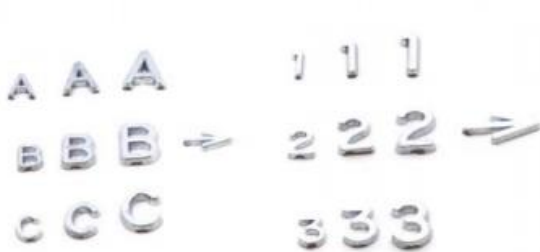
*\*DT-100\**

## FILM MARKERS

### South & QED Lead Figures

Our manufacturing process makes a clean, sharp-edged character, free of flash and porosity. All numbers and letters are pre-packed and sold in quantities as follows:

Item	Style	Quantity	Price
1/4" Lead Figures	Deep "V" (South) Flat Face (QED)	Pack of 100	<i>Call for Pricing</i>
3/8" Lead Figures	Deep "V" (South) Flat Face (South)	Pack of 50 Pack of 100	
1/2" Lead Figures	Deep "V" (South) Flat Face (South)	Pack of 50 Pack of 100	
3/4" Lead Figures	High Energy (South)	Each	



Flat Face Figures & Arrows



High Energy Figures



Deep "V" Figures

### Lead Figure Cases

Designed to hold both numbers and letters. These lead number cases are made of ABS high impact plastic and contain a polyethylene sponge inside the cover which prevents accidental mixing of numbers and letters when the cover is closed.

Item	Color	Number of Compartments	Price
LL-CASE	Red	38	<i>Call for Pricing</i>

### ID Printer (Film Flasher)

Item	Description	Price
17104	WOLF Manual ID Printer	<i>Call for Pricing</i>

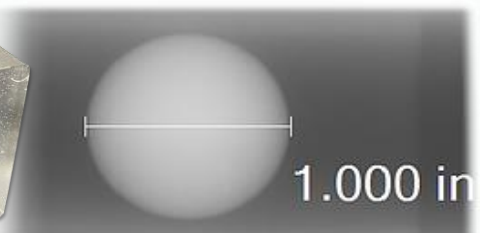
### 1" Reference Standard

Like magic... 1" reference ball attaches itself to any ferromagnetic material, making a radiographers life just a little easier. The ball can be used as a reference for measuring pipe wall.

For accurate measurement, the ball must be put as near as possible to the exact side of the pipe parallel to the image media so that the enlargement of the pipe wall is the same as that of the ball.

If the comparator or ball is not touching the pipe because of insulation, aim the source at the center of the space between the two. This will help insure an equal amount of enlargement to the ball and the pipe wall. (Think of how the source side of an elliptical 2" weld is distorted more than the film side).

Item	Description	Price
SP*001218	1" OD Non-Magnetic Reference Ball (Includes Certificate of Conformance)	<i>Call for Pricing</i>
SP*001201	1" OD MAGNETIC Reference Ball (Includes Certificate of Conformance)	
Q-RBC	QED Epoxy Square 1" OD Steel MAGNETIC Reference Ball (Serialized & Certified +/- .002")	





# IMAGE QUALITY INDICATORS (IQI's)

## South Plaque Type Penetraters

SOUTH precision IQI's rigidly conform to and exceed requirements of each code. Lead figures identifying the IQI size are affixed to the IQI and each IQI is chemically etched identifying the specification. All IQI's are accompanied by a certificate of conformity and are traceable to the National Institute of Standards and Technology (NIST).



Item	Material Group	Material	Sizes	Price
ASTM E1025 (E142)	1	Stainless Steel	#5, #7, #10, #12, #15, #17 and #20 #25, #30, #35, #40, #45 and #50	<b>Call for Pricing</b>
ASME Section V	2	Aluminum	#5, #7, #10, #12, #15, #17 and #20 #25, #30, #35, #40, #45 and #50	
	1	Carbon Steel	#60, #70 and #80 #90, #100, #110, #120, #130, #140 and #160 #180 and #200	

**\*API 1104 Specifies the use of IQI's Conforming to Requirements of ASTM E747 for Wire Type IQI's**

**\*Additional Codes, Sizes and Material Groups are available upon request**

## IQI SELECTION

All ASME sections reference ASME Section V SE 1025 (identical to ASTM E1025). IQI selection for use is determined using Table T-276 as shown below:

Nominal Single-Wall Material Thickness Range, in. (mm)	IQI					
	Source Side			Film Side		
	Hole-Type Designation	Essential Hole	Wire-Type Essential Wire	Hole-Type Designation	Essential Hole	Wire-Type Essential Wire
Up to 0.25, incl. (6.4)	12	2T	5	10	2T	4
Over 0.25 through 0.375 (6.4 through 9.5)	15	2T	6	12	2T	5
Over 0.375 through 0.50 (9.5 through 12.7)	17	2T	7	15	2T	6
Over 0.50 through 0.75 (12.7 through 19.0)	20	2T	8	17	2T	7
Over 0.75 through 1.00 (19.0 through 25.4)	25	2T	9	20	2T	8
Over 1.00 through 1.50 (25.4 through 38.1)	30	2T	10	25	2T	9
Over 1.50 through 2.00 (38.1 through 50.8)	35	2T	11	30	2T	10
Over 2.00 through 2.50 (50.8 through 63.5)	40	2T	12	35	2T	11
Over 2.50 through 4.00 (63.5 through 101.6)	50	2T	13	40	2T	12
Over 4.00 through 6.00 (101.6 through 152.4)	60	2T	14	50	2T	13
Over 6.00 through 8.00 (152.4 through 203.2)	80	2T	16	60	2T	14
Over 8.00 through 10.00 (203.2 through 254.0)	100	2T	17	80	2T	16
Over 10.00 through 12.00 (254.0 through 304.8)	120	2T	18	100	2T	17
Over 12.00 through 16.00 (304.8 through 406.4)	160	2T	20	120	2T	18
Over 16.00 through 20.00 (406.4 through 508.0)	200	2T	21	160	2T	20

## South Standard Penetrater Shims

Some codes require that shims be placed under the IQI to compensate for the thickness of a backing ring or weld reinforcement. Shims are supplied in the same materials as IQI's. They are usually available in increments of 1/16", from 1/16" thick thru 1.0". The general dimension (3/4" W x 1 3/4" L) allows approximately 1/8" clearance on each side of the IQI they are to be used with.

Item	Image	Description	Price
S-1/64-CS-SHIM		SOUTH 1/64" Carbon Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	<b>Call for Pricing</b>
S-1/32-CS-SHIM		SOUTH 1/32" Carbon Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	
S-1/16-CS-SHIM		SOUTH 1/16" Carbon Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	
S-1/8-CS-SHIM		SOUTH 1/8" Carbon Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	
S-3/16-CS-SHIM		SOUTH 3/16" Carbon Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	
S-1/4-CS-SHIM		SOUTH 1/4" Carbon Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	
S-3/8-CS-SHIM		SOUTH 3/8" Carbon Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	
S-1/2-CS-SHIM		SOUTH 1/2" Carbon Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	
S-1-CS-SHIM		SOUTH 1.0" Carbon Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	

Item	Image	Description	Price
S-1/64-SS-SHIM		SOUTH 1/64" Stainless Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	<b>Call for Pricing</b>
S-1/32-SS-SHIM		SOUTH 1/32" Stainless Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	
S-1/16-SS-SHIM		SOUTH 1/16" Stainless Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	
S-1/8-SS-SHIM		SOUTH 1/8" Stainless Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	
S-3/16-SS-SHIM		SOUTH 3/16" Stainless Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	
S-1/4-SS-SHIM		SOUTH 1/4" Stainless Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	
S-3/8-SS-SHIM		SOUTH 3/8" Stainless Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	
S-1/2-SS-SHIM		SOUTH 1/2" Stainless Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	
S-1-SS-SHIM		SOUTH 1.0" Stainless Steel Standard Penetrater Shim (3/4" W x 1 3/4" L)	

**\*Additional Sizes and Materials are available upon request**

## Wire Type IQI's

The only IQI acceptable by API 1104 (20th Edition) and accepted as an alternative to plaque type IQI's by ASME Section V and AWS, these Wire Type IQI's are encapsulated in vinyl for durability. Available in 4 sizes (Sets A, B, C and D) and inspected with instruments calibrated and traceable to the National Institute of Standards and Technology (NIST).

ASTM E747 Wire Type IQI's are manufactured with 6 wires in each size, as shown in Table 1. Each size IQI covers a range of thicknesses for which it is used, based on a standard 2T level of inspection.

IQI SIZE	THICKNESS RANGE
Set A	.25" thru .75"
Set B	.75" thru 1.7"
Set C	1.7" thru 4.0"
Set D	4.0" thru 10.0"



**TABLE 1 Wire IQI Sizes and Wire Identity Numbers**

SET A		SET B	
Wire Diameter in. (mm)	Wire Identity	Wire Diameter in. (mm)	Wire Identity
0.0032 (0.08) <sup>A</sup>	1	0.010 (0.25)	6
0.004 (0.1)	2	0.013 (0.33)	7
0.005 (0.13)	3	0.016 (0.4)	8
0.0063 (0.16)	4	0.020 (0.51)	9
0.008 (0.2)	5	0.025 (0.64)	10
0.010 (0.25)	6	0.032 (0.81)	11

SET C		SET D	
Wire Diameter in. (mm)	Wire Identity	Wire Diameter in. (mm)	Wire Identity
0.032 (0.81)	11	0.10 (2.5)	16
0.040 (1.02)	12	0.126 (3.2)	17
0.050 (1.27)	13	0.160 (4.06)	18
0.063 (1.6)	14	0.20 (5.1)	19
0.080 (2.03)	15	0.25 (6.4)	20
0.100 (2.5)	16	0.32 (8)	21

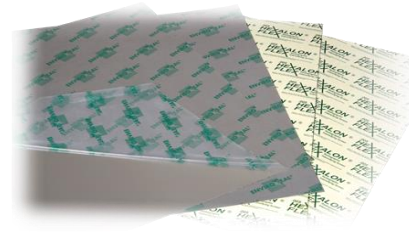

Item	Size	Wire Length	Material Group	QED Price (LWD)	South Price (No LWD)	South Price (LWD)
ASTM E747	Set A	2"	1 (Stainless Steel) 2 (Aluminum)	<i>Call for Pricing</i>		
		3"	1 (Stainless Steel)			
	Set B	2"	1 (Stainless Steel) 2 (Aluminum)			
		3"	1 (Stainless Steel)			
	Set C	2"	1 (Stainless Steel) 2 (Aluminum)			
			3"			
		4"	1 (Stainless Steel)			
	Set D	4"	1 (Stainless Steel)			

*\*Additional lengths and Material Groups are available upon request*

## FILM HOLDERS

### Hexalon (FLEX & ULTRA) Intensifying Screens

Hexalon is the popular industry standard lead intensifying screen when performing radiographic testing. The FLEX screen includes a proprietary fiber 90 backing for greater flex and durability. The ULTRA screen is the best production screen available and offers the greatest flexibility and resistance to crimping than any other screen on the market.

Item	Size	Thickness	FLEX Price	ULTRA Price	
<b>FLEX</b> 	70mm X 10"	.005" .010"	<i>Call for Pricing</i>		
	70mm X 17"	.005" .010"			
	3.5" X 10"	.005" .010"			
	3.5" X 17"	.005" .010"			
	4.5" X 10"	.005" .010"			
	4.5" X 17"	.005" .010"			
	5" X 7"	.005" .010"			
	<b>ULTRA</b> 	6" x 10"			.005" .010"
		6" x 17"			.005" .010"
		7" X 17"			.005" .010"
8" X 10"		.005" .010"			
10" X 12"		.005" .010"			
11" X 14"		.005" .010"			
14" X 17"		.005" .010"			
2.75" (approx. 70mm wide)		300' 180'			.005" .010"
3.5" (approx. 90mm wide)		300' 180'			.005" .010"
4.5" (approx. 115mm wide)		300' 180'			.005" .010"
17" (approx. 432mm wide)	95' 54'	.005" .010"			

*\*Cut Screens come standard with 1/2" radius cut corners*

## Film Cassettes

- ▶ **SOUTH** - This completely flexible film holder (cassette) is easily molded around irregular shapes to ensure proper contact necessary in direct exposure technique. Made from vinyl treated paper with all edges reinforced with tape for durability, this rugged cassette is available in various sizes. Black Only.
- ▶ **CLOTH** - Tough, water resistant, and highly durable. Our cloth cassettes are made with the seam in the center, on the back cassette. One end of the cassettes is sealed with gaffers tape and the other includes a rubber band for easy opening and closing of the cassette.
- \*Custom Sizes are Available Upon Request*
- ▶ **WARREN** - "Flexible" Type Film Holders: Outer Cover made of tough vinyl impregnated fiber stock but flexible enough to contour around shapes. Comes in two colors (specify when ordering) Blue or Black. Inner film envelope made of black shoe material for light tight protection.

*\*Also Available Upon Request - WARREN - "Semi-Rigid" or "Rigid" Film Holders. Ideal for Heavy Castings*

Item	Size	SOUTH	CLOTH	WARREN
FILM CASSETTES	70mm X 10"		<i>Call for Pricing</i>	
	70mm X 17"			
	3.5" X 10"			
	3.5" X 17"			
	4.5" X 10"			
	4.5" X 17"			
	5" X 7"			
	6" x 10"			
	6" x 17"			
	7" X 17"			
	8" X 10"			
	10" X 12"			
	11" X 14"			
14" X 17"				

## Cloth Cassette Material

This product is constructed by bonding a sheet of neoprene rubber between two high grade duct cloths of the finest quality durable fabrics. The combination of our dual chain stitch construction and the rugged light-proof material makes a product that has proven reliable for many years.

Item	Size	Price
BELTING	70mm x 1'	<i>Call for Pricing</i>
	3.5" x 1'	
	4.5" x 1'	

## Backing Material

Our .050" and .062" nylon backing is available in rolls, or cut to specified lengths with corners radiused. This flexible material will not buckle or deteriorate under normal use. Therefore, it can be used as support in new cassettes many times.

Item	Size	Thickness	Price	
BACKING	70 mm x 1'	.050"	<i>Call for Pricing</i>	
		.062"		
	3.5" x 1'	.050"		
		.062"		
		4.5" x 1'		.050"
				.062"



## EXPOSURE AIDS

### Cassette Holders

Item	Description	Price
SP*001312	Nylon RT Clamp with Rubber Molded Tips, 9 1/2" Length x 5" Opening	<i>Call for Pricing</i>
SP*001002	Magnetic Film Holders are made of a spring steel arc with a forty (40) lb. pull magnet attached through center of arc. Quick release mechanism allows the cassette to be changed without removing magnet from vessel. Holder end of spring steel is equipped with lead rubber to prevent back scattering exposure of the cassette	
PM	Paddle magnets are made of a high-impact plastic with a circular ring magnet at one end and a 3" x 4" flap at the other end	
SP*001085	1/4" Black Bungee Cord, 100' Roll	



## Swivel Clamps, Pipe Jigs & Source Stands

Item	Description	Price
SP*00001793	2.5" Heavy Duty Stainless Steel Grip Head with "T" Top and 5/8" Socket	<b>Call for Pricing</b>
SP*001153	Swivel Clamp Holder	
SP*001305	2" Contact Jig (Standard)	
SP*001306	2" Fitting to Fitting Contact Jig	
SP*001268	18" Source Stick with Built-In Collimator Holder	
SP*001575	RT Jig - 11" C-Clamp with Welded Angle Iron and an 18" CS Rod Welded and Painted Black	
SP*001577	RT Magnetic Source Stand with (3) 90lb pull magnets including handle and crossbar painted black	
SP*00001986	Aluminum Magnetic Source Stand with (2) 225lb pull magnets and a 18" x 5/8" rod	
SP*001082	Source Stand 8" x 10" Carbon Steel U-Channel Base with Threaded 5/8" Diameter x 36" Long Aluminum Rod	

*\*Custom Items are available upon request*



## Source Guide Tubes, Extensions & Bayonet Adaptor

Source Guide Tubes are flexible stainless-steel tubes with a protective polyvinyl covering. Available in both Standard (Yellow) and Extreme Condition (Black) Styles.



Item	Compatible	Style	Type	Tip Diameter	Length	Price
Q-48906	QSA Global (SENTINEL)	Standard (Yellow)	Fixed Stop	Ø ½ Inch	7 Foot	<b>Call for Pricing</b>
Q-48906G-7		Temperature Rating	Swivel End	<b>N/A</b>		
Q-48907		40°F – 120°F	Extension			
Q-95020		Extreme Condition (Black)	Fixed Stop	Ø ½ Inch		
Q-95020G-7	Temperature Rating	Swivel End	<b>N/A</b>			
Q-95021	-65°F – 250+°F	Extension				

*\*Bayonet Adaptor required to connect Guide Tubes to SENTINEL Series Source Projectors*

Item	Compatible	Description	Price
Q-88082	QSA Global (SENTINEL)	Guide Tube Bayonet Adaptor for your SENTINEL Series Source Projector	<b>Call for Pricing</b>

## QED Mini Beam Collimator

High density collimator machined from solid tungsten bars, supplies a 4.5 Half Value Layer (HVL) of shielding for IR 192. Custom machined to fit standard source tubes. Collimator beam has an 60 degree cone window that eliminates film cut-off even on short source to film distances.



Item	Description	Guide Tube Selection	Price
Q-CO-60M-4.5	60 Degree Angle Beam Mini Collimator, 4.5 HVL (Ir 192)	Ø ½ Inch Tip or Smaller	<b>Call for Pricing</b>

## Collimator Clamp

Item	Description	Price
C-CLAMP	Designed to fit 1.5" diameter Collimator. Made of .062" stainless spring steel with slotted ears to accommodate a 6 foot web belt (included) for securing to the pipe	<b>Call for Pricing</b>



## Gamma Remote Control Assemblies

Gamma radiography control assemblies are used to move a radioisotope source assembly out of a gamma-ray source projector to the radiographic exposure position. When radiographic exposure is complete, the radiographer retracts the source assembly from the exposure position back to the secured shielded location of the gamma-ray source projector.

QED control assemblies feature a durable drive cable sheathed in either extreme condition or Ambient (Standard) conduits and attached to a new, robust hand crank. Our new hand crank consists of an aluminum handle assembly and hanger to minimize equipment damage and reduce unnecessary downtime. A unique ergonomic crank designed specifically for ease of operation reduces crank resistance by up to 50%, allowing for more productivity and less operator fatigue.

Item	Compatible	Description	Length	Price
Q-HS88625	QSA Global (SENTINEL)	Flexible Yellow High Speed Hand Crank Remote Controls	25 Foot	<b>Call for Pricing</b>
Q-HS88635			35 Foot	

## Industrial Tapes

Item	Description	Size	UOM	Price
PM2	Intertape Tan Kraft Flatback Paper Tape	1" x 60 Yards	Case of 36	<i>Call for Pricing</i>
2060	3M Scotch Green Masking Tape		Case of 48	
PC 600	Shurtape Silver Cloth Duct Tape	1" x 55 Yards	Roll	
TAPE-GAFFERS-1 TAPE-GAFFERS-2	ProTapes Black Cloth Gaffers Tape	2" x 55 Yards		



## Paint Markers

▶ Since the 1970's, Sakura has been developing markers and pens for use in industrial environments. Extensive research, development and user feedback have kept Sakura in the forefront of meeting the market demand for specific product performance in various industrial applications such as ship building, welding, HVAC, highway construction, aerospace, plumbing, automotive assembly, petrochemical, shipping and electronics.

▶ Markal Valve Action is a fast-drying liquid paint marker that provides long-lasting, wear- and weather-resistant marks that are safe for almost any surface. As the most versatile liquid paint marker in the world, the xylene-free paint reduces user health risks and is available in 18 bold and fluorescent colors for accurate mark identification.

Brand	Model	Available Colors	Tip Diameter	Temperature Range	Price
	Solid Marker Original	11 - White, Black, Blue, Red, Green, Purple, Orange, Yellow, Fl. Lemon, Fl. Orange and Fl. Pink	13mm	14 - 392 °F	<i>Call for Pricing</i>
	SM Low Temperature	6 - White, Yellow, Red, Blue, Green and Black	13mm	-40 - 212 °F	
	SM Low Temperature Slim	5 - White, Yellow, Red, Blue and Black	10mm		
	SM Low Halogen	4 - White, Black, Red and Yellow	13mm		
	Pen-Touch Medium	10 - White, Black, Yellow, Red, Purple, Green, Blue, Gold, Silver and Copper	2mm	41 - 104 °F	
	Valve Action (Low Corrosion)	18 - Brown, Purple, White, Yellow, Red, Black, Orange, Blue, Green, Gold, Light Green, Pink, Aluminum, Light Blue, Fl. Yellow, Fl. Green, Fl. Orange, Fl. Pink	3mm	-50 - 150°F	

*\*Additional Brands and Models are Available Upon Request / Markers are Sold per Box of 12*

## FILM STORAGE

### Interleave Paper

Brand	Item	Size	Color	UOM	Price
QED	IP4.5X10-200	4.5" x 10"	White	Pack of 200	<i>Call for Pricing</i>
	IP4.5X17-200	4.5" x 17"			
	IP7X17-200	7" x 17"			
	IP14X17-200	14" x 17"			
South	INT3.5X10-200	3.5" x 10"	Yellow		<i>Call for Pricing</i>
	INT3.5X17-200	3.5" x 17"			
	INT5X7-200	5" X 7"			
	INT8X10-200	8" X 10"			
	INT10X12-200	10" X 12"			
	INT11X14-200	11" X 14"			

### Film Storage Envelopes

High Grade 28 oz. and 32 oz. brownkraft exposed film storage envelopes. Available in both Unprinted and PRINTED. Printed envelopes are customized as per your company design or our standard layout. A one time set-up fee for all Printed Envelopes applies for the cost of the metal imprint plate.

Item (UNPRINTED)	Size	UOM	PRINTED Example	UNPRINTED	PRINTED
E45X10	4.5" x 10"	Pack of 100 Case of 500		<i>Call for Pricing</i>	<i>Call for Pricing</i>
E45X17	4.5" X 17"	Pack of 100 Case of 500			
ENV5X7	5" X 7"	Pack of 100 Case of 1,000			
E7X17	7" X 17"	Pack of 100 Case of 500			
ENV8X10	8" X 10"	Pack of 100 Case of 500			
E10X12	10" X 12"	Pack of 100 Case of 500			
ENV11X14	11" X 14"	Case of 500			
ENV14X17	14" X 17"	Pack of 100 Case of 500			

*\*Printed Envelopes have a unique item number specific to each Customer*

## 70mm Film Storage Boxes (100 Count)

Item	Description	Quantity	Price
S-70/100	<p>The top and bottom of our one-hundred (100) cell film storage box is constructed of heavy (200 BP) white corrugated cardboard. The die cut design with locking tabs is easily assembled by hand without the use of tape or staples. The pre-assembled one-hundred (100) cell divider sets in the bottom of the box, over a numbered grid that automatically denotes a space for each of the one-hundred (100) film.</p> <p>The separate lid is die cut design and printed with spaces allowing for all pertinent information as to the pipeline owner, engineering company, contractor, radiography contractor, job numbers, film numbers, etc. The lid also has a printed grid that allows space to record the disposition of each weld x-rayed. This 17" x 17" x 3" storage container allows an inventory of radiographs to be taken without calculating how many odd number films each box contains.</p>	10 Thru 190	<i>Call for Pricing</i>
		200 Thru 490	
		500+	

*\*Sold in Lots of 25 Only*

## 70mm Film Storage Boxes (25 or 49 Count)

Item	Description	Quantity	Price
S-70/25 S-70/49	<p>12" x 12" x 3" corrugated cardboard storage box with a pre-assembled forty-nine (49) or twenty five (25) cell egg crate divider can be assembled with tape or a box stapling machine.</p>	10 Thru 190	<i>Call for Pricing</i>
		200 Thru 490	
		500+	

*\*Sold in Lots of 10 Only*

## 100mm Film Storage Boxes (100 Count)

Item	Description	Quantity	Price
S-100/100	<p>15 9/16" x 15 9/16" x 100mm (4") corrugated cardboard box with a pre-assembled 100 cell egg crate divider can be assembled with tape or a box stapling machine.</p>	10 Thru 190	<i>Call for Pricing</i>
		200 Thru 490	
		500+	

*\*Sold in Lots of 10 Only*



**\*70mm x 100 Compartment Box\***



**\*70mm x 49 Compartment Box\***



**\*100mm x 100 Compartment Box\***

# RADIATION SAFETY WARNING SIGNS & LABELS



## Radiation Signs

Our radiation signs, sun fast and sealed in two sheets of .016" vinyl, are manufactured in a variety of types. Our most popular are:

- ▶ DANGER – High Radiation Area
- ▶ CAUTION - Radiation Area Authorized Personnel Only

Available with Velcro for securing to a barrier rope or grommets on the corners of attachment to a flat surface.

Item	Sign Reads	Price
Radiation Signs	Danger - High Radiation Area Caution - Radiation Area Authorized Personnel Only	<i>Call for Pricing</i>

## Barricade Rope & Reel

- ▶ SP\*001212 - Sun-fast, non-conductive, and reusable, yellow/magenta polypropylene barricade rope is a safe and easy method for marking off radiation areas. Ideal for hanging Velcro secured signs on.
- ▶ RR - Made of high impact polyethylene with ABS handle and knob.

Item	Description	Price
SP*001212	Radiation Barricade Rope, 5/16" diameter x 1'	<i>Call for Pricing</i>
RR	13" Polyethylene Reel (holds both Barricade Rope and Tape)	
SP*001261	Storage Wheel with Side-Mounted Handle Allowing you to Quickly Wind and Unwind Barricade Tape or Rope	

*\*Barricade Rope is Sold in 600' Rolls*



## Barricade Tape

Yellow/magenta barricade tape is safe, economical, and an easy method of marking a large radiation area quickly. The nylon reinforced tape is sun-fast, non-conductive, and reusable. Available in the following:

Item	Size	Strength	Price
BT-3/4"	3/4" X 150 ft. Roll	100 lb. Tensile Strength	<i>Call for Pricing</i>
BT-2"	2" X 150 ft. Roll	300 lb. Tensile Strength	
BT-3"	3" X 1000 ft. Roll	500 lb. Tensile Strength	

## Adhesive Signs & Cones

- ▶ Adhesive Backed Vinyl Signs - 7" x 10" made with Outdoor Durable Vinyl.

Item	Description	Price
H1418-AB	Caution Radiation Area Keep Out Sign, 7" x 10", Outdoor Durable Vinyl (Adhesive Backed)	<i>Call for Pricing</i>
H1402-AB	Caution High Radiation Area Sign, 7" x 10", Outdoor Durable Vinyl (Adhesive Backed)	
SP*001252	Caution Radioactive Materials Sign, 7" x 10", Outdoor Durable Vinyl (Adhesive Backed)	
OC-18	18" Orange Premium PVC Safety Cones - No Reflective Collar	



## Transport Labels

Item	Description	UOM	Price
SP*001073	1 1/2" Diameter RQ Circle Labels	500/Roll	<i>Call for Pricing</i>
SP*001074	4" x 4" Radioactive II D.O.T. Class 7 Hazard Labels		
SP*001078	4" x 4" Radioactive III D.O.T. Class 7 Hazard Labels		



## PERSONAL DOSIMETRY

### Tracerco T402 Dose Rate Survey Meter

With a lightweight design and robust and reliable housing, the Tracerco T402 handheld radiation dose rate monitor measures x-ray and gamma-ray dose rate and peak dose exposure. The T402 responds quickly and has an extended range for measurements up to 100 mSv/h (10 rem/hr).

This versatile, rugged, and high-performance dose rate monitor is ideally suited for a range of applications such as oil and gas, mining, nuclear, medical, and environmental and life sciences. With peak dose rate memory for recording maximum exposure levels and easy-to-use controls with a backlight display, the T402 is the perfect companion when using your gamma-ray source projectors.

### Survey Meter, Rate Alarm and Pencil Type Dosimeter

Item	Description	Price
T402	Tracerco T402 Dose Rate (0-1000 mR/hr) Digital Numeric Display Survey Meter	<i>Call for Pricing</i>
ND-2000	NDS Products 3 Range (0-1000, 0-100, 0-10 mR/hr) Survey Meter	
RA-500	NDS Products 500 mR/hr Audible Rate Alarm	
4329	W138, Pencil Type Dosimeter, 0-200 mR	



Typical Graduated Scale

### Dosimeter Chargers and Pouches

► 750-6 Piezoelectric Dosimeter Charger requires absolutely no batteries...ever! By pulling the trigger, a dosimeter is easily placed in or removed from the Charger. The clamping action automatically holds the dosimeter for you. Ideal for using in Field Operations.

► 909B Dosimeter Charger - Easier charging, viewing, dosimeter protection and improved accuracy... these are the biggest reasons that the 909B Dosimeter Charger is the best value on the market today!

Item	Description	Price
750-6	Pistol Grip Piezoelectric Dosimeter Charger	<i>Call for Pricing</i>
909B	Battery Powered Dosimeter Charger	
SP*001221	Multi-Purpose Poly Holder, Fits Rate Alarms, Pencil Type Dosimeters & other Small Tools	
RACASE	NDS Products Black Mesh Rate Alarm/Dosimeter Holder	



\*750-6\*



\*909B\*



\*SP\*001221\*



\*RACASE\*

## DARKROOM PROCESSING AIDS

### Safelights

Item	Description	Price
SP*001535	18' LED Rope Safelight, Red (Lasts up to 50,000 hours); Easy to install; Hardware included	<i>Call for Pricing</i>
19198	The Swivel Safelight is perfect for direct spotlighting. This wall mounted unit swivels to any position. Easy to install via 2 keyholes, the Swivel Safelight includes a GBX Type filter, light bulb, and a 6' cord with a three prong plug.	
SP*001674	24" Fixture and LED Tube Safelight (Lasts up to 50,000 hours)	
SP*001675	24" LED Tube Safelight Only (Lasts up to 50,000 hours)	



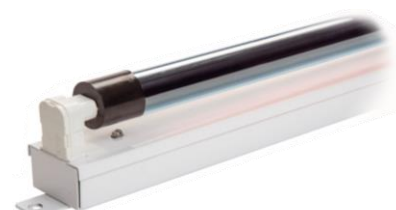
\*SP\*001535\*



\*19198\*



\*SP\*001675\*



\*SP\*001674\*



## WOLF Developing Hangers (Clip-Type)

Clip-type hangers for tank development of sheet films. Four clips are attached to a stainless steel frame; the upper two are mounted on a bow string to keep the film taut. The interlock design of the clip results in accurate alignment of pin and hole and permits better washing in the clip areas. Larger sized have loop guides to hold the bow spring and top clips in line to maintain proper tension. Hangers hold two film - Made in the USA!

Item	Description	Price
16317	WOLF Industrial Developing Hanger, Two Film, Clip/Tension Type, Stainless Steel Construction, 4.5" x 10"	<i>Call for Pricing</i>
16317-S	WOLF Industrial Developing Hanger, Two Film, Clip/Tension Type, Stainless Steel Construction, 4.5" x 10" with 3" Spacer	
16319	WOLF Industrial Developing Hanger, Two Film, Clip/Tension Type, Stainless Steel Construction, 4.5" x 17"	

## Developing Reels and Rod

- ▶ Developing Reels are made of durable ABS plastic, designed for the developing of 70mm roll film. Each Developing Reel will hold 13 feet of roll film.
- ▶ Developing Rod is constructed with a 24" x 3/4" PVC pipe to ensure minimum contamination of chemicals; not fancy, but effective.

Item	Description	Price
SP*001309	70mm Developing Reel	<i>Call for Pricing</i>
90MM-DR	90mm Developing Reel	
100MM-DR	100mm Developing Reel	
4.5"-DR	4.5" Developing Reel	
ROD-PVC	Developing Rod, 24"L x 3/4" Diameter PVC	



## Miscellaneous Darkroom Supplies

- ▶ The Mini Comparater 7X is a handy and accurate optical measuring instrument composed of a #5 reticle. Compared with conventional magnifiers, the Mini Comparater 7X is smaller, more convenient for carrying and reasonably priced.
- ▶ MD-1 is a pocket-sized plastic scale to aid radiographers in the correct size identification of internal gas porosity and rounded indications in welds. Can be used in conjunction with the ASME codes dealing with rounded indications characteristics.
- ▶ MD-2 is a pocket-sized plastic scale to aid radiographers in the correct size identification of indications in pipe welds with outside diameters greater than or equal to 60.33 mm (2-3/8 in.). Can be used in conjunction with API 1104.
- ▶ Radiation Dose / Distance Calculator - This is a companion tool to the Radiation Exposure Calculators. This calculator estimates the hazard area associated with isotope radiographic operations. Can be used to assist auditors and radiation safety officers when checking the accuracy of radiation survey reports.
- ▶ Exposure Calculator - Available in durable plastic, exposure calculators are designed to provide rapid and precise exposure times for gamma radiography of both Cobalt 60 and Iridium 192.
- ▶ Carestream NDT Image Guide - This guide is designed to help you identify and understand a wide variety of casting and welding defects that appear on images obtained during Non-Destructive Testing (NDT).

Item	Description	Price
SP*001237	14" x 17" Processor Clean-Up Film, 100/Pack	<i>Call for Pricing</i>
SP*00001770	Mini Comparater 7X with #5 Reticle and Fabric Pouch	
MD-1	Model-1 (ASME) Film Image Scale w/certs	
MD-2	Model-2 (API 1104) Film Image Scale w/certs	
DDC	Radiation Dose/ Distance Calculator	
EXPCALC-EN	Carestream Film Exposure Calculator, Iridium 192 (Same as JEM & other brands)	
8924177	Carestream NDT Image Guide	
300	GRALAB Model 300 Timer	
Squeegee	Squeegee, 4.75" Wiper Length	
2150SS	Electra SAFE-HETE All-Purpose 5 1/2" x 5 1/2" Portable Electric Water Heater Insulated Handle	
3150SS	Electra SAFE-HETE All-Purpose 5 1/2" x 11 1/2" Portable Electric Water Heater Insulated Handle	
SP*001326	28" Plastic Stirring Paddle	
SP*001072	7 1/4" Floating Thermometer w/ String Cord & F/C Display (30°F-120°F/ 0°C-50°C)	



# MOBILE DARKROOMS

## Lemker & Harris Darkrooms

### Building Darkrooms Since 1975

Lemker & Harris is the leading manufacturer of mobile fiberglass RT darkrooms and developing tanks for the NDT service and inspection industry in the USA. We've been a family owned business operating since 1975.

We have three models of darkrooms in our "off the shelf" designs. They are the 6', 8', and 8' Generator. All of these models include a developing tank, front foil, 26 hanger dryer, driver side cabinet, and a cabinet above the developing tanks recessed into the foil. You then have the option of whether or not you want to go with the roof mount RV Style air conditioner, or if you want us to install a standard window unit.

We are here for the long haul and stand behind what we build. Our typical unit usable life is over a decade and with proper care, we see them last even longer.



Item	Description	Price
CR6	L&H 6' Darkroom w/ Rear Mount AC	<i>Call for Pricing</i>
CR8	L&H 8' Darkroom w/ Rear Mount AC (Full bed width without generator compartment)	
CR8G	L&H 8' Generator Darkroom w/ Rear Mount AC	
CR8G-CR	L&H 8' Generator CR Darkroom w/ Rear Mount AC and Additional Cabinetry for CR Workflow	

*\*Roof Mount AC is an Available \$575 Option\**

### 6' Darkroom

This unit is the most popular with pipeline work. Combined with an 8' bed you have ample storage for anything you may not want to load into a darkroom, but need on the right-of-way.



### 8' Darkroom

Our 8' units give the technician the most room inside possible for them to work. They also have the most storage inside of the unit. For plant/shop work, this unit is a go to for many companies.

### 8' Generator Darkroom

This is just like our standard 8' unit, but with the exception of having a convenient storage compartment on the driver's side to store a generator. This unit is versatile as it allows you to have the interior space of an 8' unit with space to keep a generator for those times that there is no supplied power to hook up to.



*We will install your new darkroom on your truck at no additional cost, if you pick up at our Houston facility.*



## Miscellaneous Darkroom Products

### L&H DEVELOPING TANKS

*Our Developing Tanks are Widely Considered to be the Industry Standard*

The standard design is (5) 10 gallon compartments, which we refer to as the "5 Even". This has been the design that 95%+ of companies have preferred for at least the past 15 years, but we are also happy to provide a developing tank built to your specifications to fit your needs.

Starting in late 2019, we replaced the welded stainless pipe/stud that was used to secure the lid with a serviceable stainless forged receiver with a removable stud that allows you to replace the threaded stud at any point if needed.

It is one of the many ways that we are constantly pushing ourselves to see if there is a better way for us to provide an even better product for our customers.



**L&H LEMKER & HARRIS** SINCE 1975



\*SP\*001764\*

Item	Description	Price
SP*001764	L&H Developing Tank w/ 5 Even (10 Gallon) Compartments and PVC Plumbing	<i>Call for Pricing</i>
SP*001499	21" Wide x 3/4" Thick x 1" Long Developing Tank Replacement Seal with Peel off Adhesive (Specify Length When Ordering)	
SP*001053	Replacement Low-Profile Darkroom Heater/Blower	
SP*00001982	Camera Security Box with Mounting Bracket Fits all OEM's Gamma Ray Projectors (ID: 16"L x 10"W x 11"H)	



\*SP\*001499\*



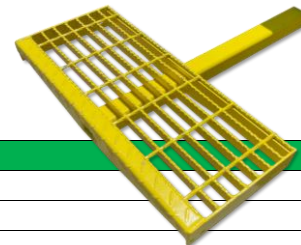
\*SP\*001053\*



\*SP\*00001982\*

### DARKROOM TRUCK STEP

QED Steps are Aluminum Construction - Never need grease or paint, only two moving quick releases. Slides into receiver hitch and lifts up during travel and down for use. Helps reduce or eliminate any possible falling accidents.



\*LH-FS\*

Item	Description	Price
LH-FS	Lemker & Harris Carbon Steel Fixed Darkroom Truck Step, Yellow	<i>Call for Pricing</i>
Q-AHS	QED Aluminum Hinged Darkroom Truck Step	
Q-AHS-R	QED Aluminum Hinged w/ Handrail Darkroom Truck Step	



\*Q-AHS\*



\*Q-AHS-R\*



# COMPUTERIZED RADIOGRAPHY (CR) CR IMAGING PLATES

## Carestream NDT

The Carestream INDUSTREX improved Flex GP, HR and XL Blue Digital Imaging Plates are:

- Flexible – Wrap around most shapes
- Sharp – Better resolution than high-speed films, and a suitable replacement for many applications
- Versatile – Use in a rigid or flexible cassette
- Efficient – Phosphor plates can be erased and reused thousands of times, require less exposure than film, and provide faster image access
- Certified – All plates meet requirements for the highest system class per EN 14784-1 and ASTM E 2446



### General Purpose (GP)

The general purpose imaging plate is ideal for shots where fine detail is not required. Good for profile shots. It requires the lowest dose, which helps productivity. This plate is best utilized for high energy X-ray or Gamma applications. Typical industries are security, military, and castings.

Item	Size	Carestream Packaging		QED Packaging Price
		Quantity	Price	
1008564	14" x 17"	1 - 24 25+		<i>Call for Pricing</i>

### High Resolution (HR)

The high resolution imaging plate is best for applications where the best imaging quality is required. This plate produces weld quality images, and has the best detectability (contrast sensitivity) in the industry. This plate can be used for general X-ray, and Iridium or Selenium applications. Typical industries are oil and gas and aerospace.

Item	Size	Carestream Packaging		QED Packaging Price
		Quantity	Price	
8802324	70mm x 10"	1 - 24 25+	<i>Call for Pricing</i>	
8348641	70mm x 17"	1 - 24 25+		
1006105	70mm x 24"	1 - 24 25+		
1004746	70mm x 36"	1 - 24 25+		
8094922	3.5" x 10"	1 - 24 25+		
1904267	3.5" x 17"	1 - 24 25+		
1680214	4.5" x 10"	1 - 24 25+		
1466945	4.5" x 17"	1 - 24 25+		
1848688	7" x 17"	1 - 24 25+		
1775576	8" x 10"	1 - 24 25+		
8360521	14" x 17"	1 - 24 25+		

### HR-PRO (High Resolution - Laminated)

The HR-PRO Plate is designed with improved physical properties for use in HPX-PRO Readers in tough handling environments.

Item	Size	Carestream Packaging		QED Packaging Price
		Quantity	Price	
1752955	70mm x 10"	1 - 24 25+	<i>Call for Pricing</i>	
1752971	70mm x 17"	1 - 24 25+		
1753110	3.5" x 10"	1 - 24 25+		
1753136	3.5" x 17"	1 - 24 25+		
1753235	4.5" x 10"	1 - 24 25+		
1753243	4.5" x 17"	1 - 24 25+		

### Imaging Plate Accessories

Item	Description	Price
SP*00001954	14" x 17" Profile Board	<i>Call for Pricing</i>
8607020	Carestream X-OMAT Antistatic Cleaning Solution for Intensifying Screens, 8oz Bottle	
33390	KIMTECH Pure 100% Polypropylene W4 Dry Wipers 9" x 9", Pack of 100	

# MAGNETIC PARTICLE MPI CONSUMABLES



Improve your magnetic particle inspection with Magnaflux fluorescent powders, visible and colored magnetic particles, contrast aid paint and other products for mag particle testing.



## MAGNAGLO - Wet Fluorescent Magnetic Particles

Item	Product	Description	Size	Price
01-0130-71	14A	Wet Method Fluorescent Powder Concentrate (Makes 94 Gallons)	1 lb. Jar	<i>Call for Pricing</i>
01-1725-78	14A Aqua-Glo	Water-Based Fluorescent Magnetic Particle	12 Aerosols/Case	
01-0145-78	14AM	Fluorescent Prepared Bath with Carrier II	12 Aerosols/Case	
01-0145-40			5 Gallon Pail	

## MAGNAVIS - Wet Visible (Black) Magnetic Particles / White Contrast Paint

Item	Product	Description	Size	Price
01-1580-78	7HF	Black Visible Premix with Carrier II	12 Aerosols/Case	<i>Call for Pricing</i>
01-9140-78	MV-740	Water-Based Visible Magnetic Particle Ready-to-Use Suspension		
01-2250-78	WCP-2	White Contrast Paint		

## MAGNAVIS - Dry Visible Magnetic Particles

Item	Product	Description	Size	Price
01-1780-69	8A Red	Red Non-Fluorescent Magnetic Powder	10 lb. Pail	<i>Call for Pricing</i>
01-1780-87			45 lb. Pail	
01-1716-69	#1 Gray	Gray Non-Fluorescent Magnetic Powder	10 lb. Pail	
01-1716-87			45 lb. Pail	
01-1732-69	#2 Yellow	Yellow Non-Fluorescent Magnetic Powder	10 lb. Pail	
01-1732-87			45 lb. Pail	



Circle Systems designs products with worker safety and environmental protection in mind. Circle has led the way in developing products for use in water based carriers to replace petroleum based chemistry in many applications. Circle has eliminated harmful propellants from the CircleSafe aerosol products.



## CircleSafe - Wet Fluorescent Magnetic Particles

Item	Product	Description	Size	Price
FG-3572	778s-RTU	Wet Fluorescent (Water Media)	6 x 1 Quart Bottles	<i>Call for Pricing</i>
FG-3145	800LS-RTU	Wet Fluorescent (Oil Media)		

## CircleSafe - Wet Fluorescent & Visible (Dual) Red Magnetic Particles

Item	Product	Description	Size	Price
FG-3642	850s-RTU	Visible & Fluorescent (Dual) Red Magnetic Particle Bath (Water Media)	6 x 1 Quart Bottles	<i>Call for Pricing</i>

## CircleSafe - Wet Visible (Black) Magnetic Particles

Item	Product	Description	Size	Price
FG-3612	820s-RTU	Nonfluorescent Black (Water Media)	6 x 1 Quart Bottles	<i>Call for Pricing</i>

## Mi-Glow - White Contrast Paint

Item	Product	Description	Size	Price
FG-3740	WCP	White Contrast Paint	12 Aerosols/Case	<i>Call for Pricing</i>

Sherwin Incorporated has manufactured its Dubl-Chek line of products since 1964. Dubl-Chek products are approved by governing agencies worldwide, including the US Government, ASME, ASTM, as well as the prime aerospace and military contractors and OEM's.



## DUBL-CHEK - Wet Florescent Magnetic Particles

Item	Product	Description	Size	Price
GLO-NETIC-16	GLO-NETIC	Fluorescent Premix with Petroleum Carrier	9 Aerosols/Case	<i>Call for Pricing</i>

## DUBL-CHEK - Wet Visible (Black) Magnetic Particles / White Contrast Paint

Item	Product	Description	Size	Price
BLACK-OXIDE-16	BLACK-OXIDE	Black Oxide Particles with Petroleum Carrier	9 Aerosols/Case	<i>Call for Pricing</i>
CP-2-16	CP-2	White Contrast Paint (Non-Stripable)		

# MPI CONSUMABLE AIDS MATERIAL ACCESSORIES

## Applicators & Centrifuge Tubes

► Magnaflux Centrifuge Tubes are individually Calibrated to monitor the precise concentration of magnetic particles in suspensions made with Fluorescent and Visible magnetic particles as per ASTM E709, ASTM E1444 or ASME Section V.

► Type 2000 Magnetic Stripe Card is used for instantly evaluating the performance of the fluorescent wet-method bath as per ASTM E-709 & ASTM E-3024. This card can be used to quantitatively evaluate the performance of the fluorescent materials by displaying the number of indications that can be observed after the material has been applied to the stripe.

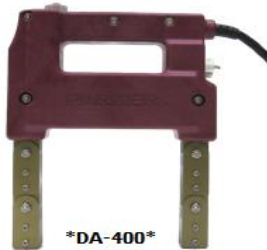
Item	Description	Price
PB-1	Magnetic Powder Blower provides reliable and controlled application of magnetic inspection powder to areas previously inaccessible	<i>Call for Pricing</i>
RB-4	Green Rubber Powder Applicator	
RB-1	Powder Removal Bulb, Blue	
625773	Model M 24 oz. Capacity Black Anodized Aluminum Sprayer w/ Nozzle #602, Adjustable from Extra Fine Mist to Pin Stream	
2800	Type 2000 Magnetic Stripe Card	
SP*001682	Centrifuge Tube for Fluorescent Magnetic Particles, 0 - 1.0 ml in 0.05 graduations (Certified)	
SP*001683	Centrifuge Tube for Visible Magnetic Particles, 0 - 1.5 ml in 0.10 graduations (Certified)	
SP*001684	Centrifuge Tube Stand	



## YOKES

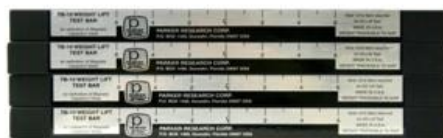
### PARKER RESEARCH/ MAGNAFLUX YOKES

Item	Description	Price
B-100	Parker AC Contour Probe, 6.5 lbs.	<i>Call for Pricing</i>
B-200	Parker AC Contour Probe, 7.0 lbs. Slim line Ergonomic Handle and Oversized Operating Switch Provides a Comfortable Grip	
B-300	Parker AC Contour Probe, 7.5 lbs.	
DA-400	Parker AC/DC Contour Probe, 8.5 lbs.	
628554	Magnaflux Y-2 AC Yoke, 4.8 lbs. (Detachable Cord)	
625643	Magnaflux Y-7 AC/DC Yoke, 7.4 lbs.	



## YOKE ACCESSORIES

Item	Description	Price
TB-10	Magnetic 10lb Weight Lift Test Bar (Weight is stamped on each bar and is traceable to NIST)	<i>Call for Pricing</i>
TB-10S-4	Set of 4 10lb Weight Lift Test Bars (Weight is stamped on each bar and is traceable to NIST)	
Y200-1	Parker Y-200 Yoke Light (designed to fit B-200 Contour Probe)	
Y300	Parker Y-300 Yoke Light (designed to fit B-300 Contour Probe)	
Y400	Parker Y-400 Yoke Light (designed to fit B-100 or DA-400 Contour Probe)	
628840	Magnaflux Y-2 LED Yoke Light	



# MAGNETIC PARTICLE AIDS FIELD INDICATORS

Item	Description	Price
SP*001226	MD-220 Hall Effect Magnetic Field Strength Indicator	<b>Call for Pricing</b>
SP*001105	Pie Gauge Magnetic Field indicator with Certification	
MG-25-10	Model 25 Magnetic Field Indicator, Range 10-0-10 (Calibrated)	
MG-25-20	Model 25 Magnetic Field Indicator, Range 20-0-20 (Calibrated)	
SP*001548	Economy Magnetic Field Indicator, Range 10-0-10 (Un-Calibrated)	



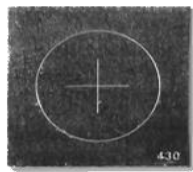
## QUANTITATIVE QUALITY INDICATORS (QQIs)

Quantitative Quality Indicators (QQI) are magnetic particle test piece shims with artificial defects used to verify field direction and relative strength. QQI's are also used to balance multi-directional fields and to increase productivity by minimizing magnetizing shots.

- ▶ CX-230 - 0.002 inch (0.05 mm) thickness with a notch flaw depth of 30% of shim thickness
- ▶ CX-430 - 0.004 inch (0.10 mm) thickness with a notch flaw depth of 30% of shim thickness
- ▶ CX4-230 - Four circle-cross notch patterns, to be cut by user into four separate shims. 0.002 inch (0.05 mm) thickness with a notch flaw depth of 30% of shim thickness

Item	Description	Price
631590	Standard QQI, CX-230	<b>Call for Pricing</b>
631591	Standard QQI, CX-430	
631592	Miniature QQI, CX4-230	

*\*Above pricing is per each QQI, QQI's are sold in Sets of 5.*



## TEST PIECES

- ▶ Magnetic Flux Indicator Strip - Flexible indicators used to detect directional orientation during the magnetic particle testing process. Each indicator contains three milled slots with widths of .0075", .009" and .010" that share a common depth. The indicators are manufactured from permeable magnetic steel sandwiched between two brass plates and designed for repeated use in setting and monitoring magnetic field strength in wet and dry MPI applications.
- ▶ Ketos Ring - System Performance Test Piece - The tool steel ring is manufactured to AS-5282 requirements to demonstrate magnetic particle system performance. A progressive series of sub-surface holes are used to verify equipment performance at different amperages using HWDC or FWDC waveforms.
- ▶ The Notch Defect Test Bar - System Performance Test Piece - The MPI test bar is a standardized test piece conforming to NAVSEA T907A-AS-GIB-010/271 requirements to demonstrate magnetic particle system performance. The test bar includes both surface and sub-surface defects in two directions to verify both circular and longitudinal fields using AC or DC waveforms.
- ▶ The MTU-3 Test Block is used to check the sensitivity of magnetic particle materials.

Item	Description	Price
008M004	Magnetic Flux Indicator Strips (Burma Castrol) Type I (G)eneral, Set of 5	<b>Call for Pricing</b>
SP*001685	Ketos Ring (AS-5282 Ring), O-1 Tool Steel including Certification Report	
NA16	Notch Defect Test Bar (System Performance Test Piece - NAVSEA T907A-AS-GIB-010/271)	
MTU-3	Reference Block Type 1 /MTU-3/ EN ISO 9934-2:2002 Magnetic Particle Test Block	



## MPI EQUIPMENT & ACCESSORIES PORTABLE COIL

### Parker Portable Coil

The Parker PL-10 Portable Magnetizing Coil (9 7/8" inside diameter) is designed for magnetic particle inspection of ferrous metal parts. The coil allows for the use of either dry powder or wet fluorescent inspection media and may be used for demagnetizing as well.

The coil is molded in a tough black polyurethane material and comes equipped with the standard foot switch or an optional hand switch and 10' yellow neoprene power cord. The sealed electrical connection box has a 2" x 5" flat base allowing the coil to stand in a vertical position.



Item	Description	Price
PL-10H	Parker 10" Portable Magnetizing Coil with Hand Switch, 115VAC with Carrying Case	<b>Call for Pricing</b>
PL-10F	Parker 10" Portable Magnetizing Coil with Foot Switch, 115VAC with Carrying Case	

# LIQUID PENETRANT LPI CONSUMABLES

Magnaflux provides NDT-pros, engineers, and technician inspectors with chemical consumable products developed and tested to maximize process reliability in fluorescent penetrant inspection (FPI) and dye penetrant testing.



## ZYGLO - Fluorescent Penetrant (Type 1)

*Methods A (Water Washable) & C (Solvent Removable)*

Item	Product	Description	Sensitivity	Size	Price
01-3272-78	ZL-60D	Fluorescent Penetrant	Level 2 (Medium)	12 Aerosols/Case	<b>Call for Pricing</b>

## ZYGLO - Fluorescent Penetrant (Type 1)

*Methods B (P.E., Lipophilic) & C (Solvent Removable)*

Item	Product	Description	Sensitivity	Size	Price
01-3187-78	ZL-27A	Fluorescent Penetrant	Level 3 (High)	12 Aerosols/Case	<b>Call for Pricing</b>
01-3188-78	ZL-37		Level 4 (Ultra High)		

## SPOTCHECK - Visible Penetrant (Type 2)

*Methods A (Water Washable) & C (Solvent Removable)*

Item	Product	Description	Method	Size	Price
01-5155-78	SKL-SP2	Visible Penetrant	C	12 Aerosols/Case 5 Gallon Pail	<b>Call for Pricing</b>
01-5190-78			A & C	12 Aerosols/Case 5 Gallon Pail	
01-5190-40	SKL-WP2				

## SPOTCHECK - Cleaner & Remover

*(Used for both Type 1 & 2 Penetrants)*

Item	Product	Description	Class	Size	Price
01-5750-78	SKC-S	Solvent Cleaner & Remover	2	12 Aerosols/Case	<b>Call for Pricing</b>
01-5750-40				5 Gallon Pail	

## ZYGLO / SPOTCHECK - Developer (Used for both Type 1 & 2 Penetrants)

*(Used for both Type 1 & 2 Penetrants)*

Item	Product	Description	Form	Size	Price
01-3354-78	ZP-9F	Solvent-based Developer	d/e	12 Aerosols/Case	<b>Call for Pricing</b>
01-5352-78	SKD-S2				

Met-L-Chek, a McGean company, is an approved manufacturer, qualification laboratory, and supplier of liquid penetrant inspection materials under SAE QPL AMS 2644 by the United States Air Force Research Laboratory's Materials and Manufacturing Directorate at Wright Paterson Air Force Base.



## Met-L-Chek - Visible Penetrant (Type 2)

*Methods A (Water Washable), B (P.E., Lipophilic) & C (Solvent Removable)*

Item	Product	Description	Method	Size	Price
M-VP-31A-16	VP-31A	Visible Penetrant	B & C	12 Aerosols/Case	<b>Call for Pricing</b>
M-VP-30-16	VP-30		A & C		

## Met-L-Chek - Cleaner/Remover & Developer

*(Used for both Type 1 & 2 Penetrants)*

Item	Product	Description	Class / Form	Size	Price
M-E-E9A-16	E-59A	Solvent Cleaner & Remover	Class 2	12 Aerosols/Case	<b>Call for Pricing</b>
M-D-70-16	D-70	Developer Non-Aqueous	Form d/e		



SHERWIN Dubl-Chek products are approved by governing agencies worldwide, including the US Government, ASME, ASTM, as well as the prime aerospace and military contractors and OEM's.

## DUBL-CHEK - Visible Penetrant (Type 2)

*Methods A (Water Washable), B (P.E., Lipophilic), C (Solvent Removable) & D (P.E., Hydrophilic)*

Item	Product	Description	Method	Size	Price
DP-40-16	DP-40	Visible Penetrant	B, C & D	9 Aerosols/Case	<b>Call for Pricing</b>
DP-51-16	DP-51		A & C		

## DUBL-CHEK - Cleaner/Remover & Developer

*(Used for both Type 1 & 2 Penetrants)*

Item	Product	Description	Class / Form	Size	Price
DR-60-16	DR-60	Cleaner/Remover	Class 2	9 Aerosols/Case	<b>Call for Pricing</b>
D-100-16	D-100	Developer Non-Aqueous	Form d/e		

## DUBL-CHEK - Hi-Temp Visible Penetrant (Type 2), Remover & Developer

*(Can be used up to 350°)*

Item	Product	Description	Method / Class / Form	Size	Price
KO-17-16	KO-17	Hi-Temp Visible Penetrant	Method A & C	9 Aerosols/Case	<b>Call for Pricing</b>
KO-19-16	KO-19	Hi-Temp Remover	Class 2		
D-350-16	D-350	Hi-Temp Developer	Form d/e		



# LPI ACCESSORIES

## MATERIAL ACCESSORIES

### LPI Applicators & Sprayers

► DEMA Injector Kit - For spraying Hydrophilic Emulsifier. The emulsifier is drawn into the water stream by the Dema valve, emitting an emulsifier/water spray. The Dema Injector allows the penetrant user to process parts with the Hydrophilic method without adding large dip tanks.

Item	Description	Price
625773	Model M 24 oz. Capacity Black Anodized Aluminum Sprayer w/ Nozzle #602, Adjustable from Extra Fine Mist to Pin Stream	<i>Call for Pricing</i>
SP*001693	Dry Developer Sprayer, One Quart Capacity	
S-1/2HH-25-D	Tri-Con NDT Rinse/Spray Gun Complete	
520090	Magnaflux Water Spray Gun w/ Hose Adapter	
SP*001695	244CT DEMA Injector Kit - for emitting an Hydrophilic Emulsifier/Water Spray	



### Monitoring Devices & Wiping Cloths

► Refractometer - Easy to use device to measure the concentration of the Hydrophilic Emulsifier remover in water and is required to meet Pratt and Whitney and GE concentration specifications for Hydrophilic removers.

► Hydrometer - Water Based Developers are designed for optimum performance within a specific concentration range. To control the concentration, the specific gravity is measured using the Hydrometer. If the reading is high, the concentration is high and water is generally added. If the reading is low, developer is added to the bath.

Item	Description	Price
300	GRALAB Model 300 Timer	<i>Call for Pricing</i>
513829	Refractometer	
5857	Hydrometer (for monitoring developer concentration)	
RAGS-50	White Lint Free Rags, 50 lb. Box	



## TAM PANEL & CLEANING UNIT

### Hoffman Precision Star TAM Panels

The Panel is made from a 0.100" stainless steel plate. Half of the test surface is hard coated with 0.003" hard alloy chrome. Five crack centers are evenly spaced in the hard coated strip. The crack centers are circular patterns forming a star. The un-plated side is grit blasted to Ra = 2.0 roughness for washability background tests.

#### Kit Includes:

- Hoffman TAM Panel with Transparent Storage Box
- Calibration Certificate (includes measurements and 5 photos)
- Foil print, glued on the storage box (includes measurements and 5 photos)

#### TAM Panel Approvals:

- Pratt & Whitney TAM 146060
- Delta Air Lines / MTU Maintenance
- Rolls Royce / General Electric



Item	Description	Price
SP*001637	Hoffmann Polished Precision TAM Panel Standard Kit	<i>Call for Pricing</i>
SP*001638	Hoffmann Polished Precision TAM Panel Standard Kit plus full size panel photo in Certificate	
SP*001639	Hoffmann Grit Precision TAM Panel Standard Kit	
SP*001640	Hoffmann Grit Precision TAM Panel Standard Kit plus full size panel photo in Certificate	

### Ultrasonic Cleaning Unit & Solution

Quickly and professionally clean your test panels with the desktop ultrasonic cleaning unit. It completely removes excess penetrant from indications as well as the surface of the panel. We recommend using Met-L-Chek 300LF or equivalent for proper cleaning.

Includes: Normal Frequency, Sweep & Degas Functions, Operator Temperature Controls, Digital Ultrasonic Timer, Basket, Cover and Side Handles

Specifications: Ultrasonic Frequency - 40,000Hz, Tank Material - Stainless Steel, Temperature Controlled Heat for best cleaning performance, Unit Size - 10" L x 6"W x 9.5"H, Tank Dimensions - 9"L x 5.5"W x 4"H, Tank Capacity - 3/4 Gallon

Item	Description	Price
SP*001696	Heated Ultrasonic Cleaning Unit	<i>Call for Pricing</i>
M-300LF-01	Met-L-Chek 300LF Aqueous Alkaline Concentrate, 1 Gallon Pail	

## ADDITIONAL LPI PANELS/BLOCKS

### NiCr Twin Cracked Test Panels

NiCr Panels are used to compare new and used penetrants and can also be used for comparing performance of different penetrant materials or different processing techniques. Each set consists of a pair of identical panels marked A and B with manufacturer's Certification and Crack photograph.

These panels are made by plating hard Nickel Chromium alloy on a 2mm thick brass substrate and stressing the panel in tension. The hard NiCr coating is brittle in comparison to the brass substrate so that the cracks created in the plated layer are limited to the thickness of the NiCr layer. The panel is then cut in half perpendicular to the direction of the cracks thus creating a matching pair of virtually identical cracks of controlled depth.

Specification Compliance: ASTM E1417, AMS 2647D, ISO 3452-3 & JIS Z 2343-3



Sensitivity* (Unofficial)		<ul style="list-style-type: none"> <li>Fluorescent Penetrant Sensitivity Levels are established by the USAF Laboratory at Wright Patterson AFB under highly controlled conditions.</li> <li>Sensitivity testing is not something the penetrant manufacturer or user can do. What you can do is compare samples using appropriate NiCr Cracked Panels.</li> </ul>
Crack Depth	Level	
50 µm	1, 2, 3, 4	
30 µm	2, 3, 4	
20 µm	3, 4	
10 µm	4	

Item	Description	Price
NiCr-10	NiCr Test Panels, 10µm (0.0004") Flaw Depth	<i>Call for Pricing</i>
NiCr-20	NiCr Test Panels, 20µm (0.0008") Flaw Depth	
NiCr-30	NiCr Test Panels, 30µm (0.0012") Flaw Depth	
NiCr-50	NiCr Test Panels, 50µm (0.002") Flaw Depth	

### Additional LPI Test Panels & Blocks

▶ WTP-1 SHERWIN Wash Test Panel is used to run monthly removability testing as required by ASTM E1417 and MIL-STD-6866. The panel is made of stainless steel measuring 4" x 6" and 0.090" thick with two parallel, "medium rough" strips, each 6" x 1.5" separated by a smooth 1" strip.

▶ WTP-2 SHERWIN Wash Test Panel is used to run removability tests. The 1.5" x 2" panel is made from 16 gauge 301 or 302 stainless steel, by grit blasting with 80 mesh aluminum oxide grit and 60 psi of air pressure. The roughened surface that is produced is free of scratches and blemishes.

▶ ADP-1 SHERWIN Aqueous Developer Test Panel is used to check the fluorescence and coverage of soluble and suspendable aqueous developers as per ASTM E1417. The panel is made of aluminum measuring 3" x 10".

▶ Cracked Aluminum Test Blocks compare sensitivity of different penetrants or sensitivity of new and used penetrants. This is done by processing one half of the block with used penetrant and the other half with fresh penetrant. A 1/8" wide groove separates the blocks two sides to facilitate side-by-side penetrant comparison.

Item	Description	Price
WTP-1	SHERWIN Wash Test Panel (Removability as per ASTM E1417 & MIL-STD-6866)	<i>Call for Pricing</i>
WTP-2	SHERWIN Wash Test Panel (Removability)	
ADP-1	SHERWIN Aqueous Developer Test Panel (as per ASTM E1417)	
CAB	Cracked Aluminum Test Block	

*\*Cracked Aluminum Test Blocks are meant for one-time use as once the penetrant gets in the crack it is very difficult to completely clean.*

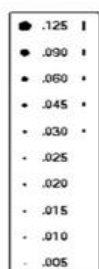


## LPI MEASURING AIDS

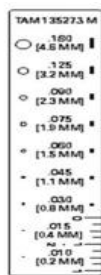
### Crack Comparators

Crack comparators are used to measure the actual size of indications identified during the liquid penetrant inspection process.

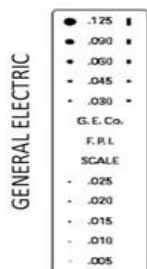
Item	Description	Price
514048	Fluorescent Green General Purpose Crack Comparator, measured in increments 0.005" to 0.125"	<i>Call for Pricing</i>
514050	Fluorescent Green Pratt & Whitney (TAM 135273) Crack Comparator, measured in increments 0.010" to 0.180"	
SP*001697	Fluorescent Green General Electric Crack Comparator, measured in increments 0.005" to 0.125"	
SP*001698	Fluorescent Green Fractional Size Crack Comparator, measured from 1/64" to 1/4"	
SP*001699	Fluorescent Green Swing Away General Purpose Crack Comparator, measured in increments 0.005" to 0.125"	
SP*001481	Fluorescent Green Swing Away (TAM 190466) Crack Comparator, measured in increments 0.005" to 0.180"	



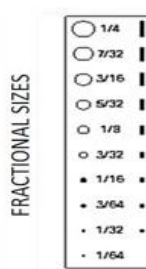
\*514048\*



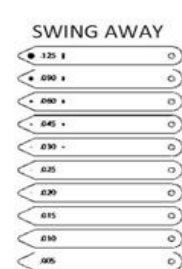
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# BLACKLIGHTS HANDHELD LED UV-A LAMPS

## MAGNAFLUX HANDHELD

### EV6000 Inspection Lamp

The EV6000 features a large 9 inch (5,000  $\mu\text{W}/\text{cm}^2$ ), uniform beam without hot spots that is one of the widest in the industry and is certified to NDT standards for LED UV lamps and certified for Aerospace Prime and OEM specifications for emission spectrum and beam profile. Each unit is shipped with a manufacturer's certificate of conformance which meets or exceeds all current specifications for use with fluorescent liquid penetrant and magnetic particle testing.



Item	Description	Compliance	UV Intensity	UV Coverage	Price
625784	EV6000 Hand-Held LED UV lamp	ISO 3059, ASTM E3022 & RRES 90061	5,000 $\mu\text{W}/\text{cm}^2$	Ø 9 Inches	<i>Call for Pricing</i>



### UVISION 365 Series Inspection Lamps

The Uvision 365 SERIES is Spectrolite's innovative line of compact, broad-beam NDT handheld lamps. These lightweight yet rugged lamps boast an IP65 rating – they are dust-tight and water resistant. Using a state-of-the-art heat sink design, the uVision™ is mechanically cooled without the need for a fan. In addition to three powerful UV-A (365 nm) LEDs, it has a convenient white light LED for illuminating work areas. Compliant versions have embedded microprocessors to keep lamps within specifications.

#### What's included

Mains Model - Comes complete Uvision 365 LED UV-A Lamp, in-line AC power supply, UV-absorbing spectacles, and padded protective case.

Battery Model - Comes complete Uvision 365 LED UV-A Lamp with in-handle lithium battery, in-line AC charger and cord, UV-absorbing spectacles, and padded protective case.



Item	Model	Version	Compliance	UV Intensity	UV Coverage	Price
UV-365HC	DELUXE	HC (AC)	ISO 3059 & ASTM E3022	6,000 $\mu\text{W}/\text{cm}^2$	Ø 6.4 Inches	<i>Call for Pricing</i>
UV-365ZHC		ZHC (Battery)		8,000 $\mu\text{W}/\text{cm}^2$	Ø 7.5 Inches	

*\*Additional options that comply with Rolls-Royce RRES 90061 are available upon request.*

## LABINO HANDHELD

### MB 3.0 Series Inspection Lamps

This compact light is simply Genius! A combination of smart mechanics and efficient electronics, designed to survive extreme temperatures and harsh working conditions, 24 x 7. Penetrant resistant, with acoustic battery indicator and certified with an ingress protection marking of IP68. Depending on the model, the beam diameter is 8-9 inches and with intensities that vary from 4,500 to 9,000  $\mu\text{W}/\text{cm}^2$ . Zeus and Selene are equipped with a strong white light as well. The AC (mains) operated model weighs just 1.4 lbs and the battery operated model weighs just 1.5 lbs.



#### Mains AC Version Package Includes:

Lamp with 13 foot cord, Power Supply Unit 100-240V AC, AC power cord, UV Block Glasses and Carrying Case. The cord can be customized to the length of your choice.

#### Battery Version Package Includes:

Lamp, Car Charger, Four Batteries, UV Block Glasses, External Charger for wall outlet, Carrying Case, Belt holster and Power supply for charging batteries while operating.



*Pictured w/ Athena*

**2 Year Warranty**

Item	Model	Version	Compliance	UV Intensity	UV Coverage	Price
L119	<b>ZEUS</b> Built in White Light	AC	ISO 3059, ASTM E3022, RRES 90061, AITM6-1001, Pratt & Whitney & Boeing	4,500 $\mu\text{W}/\text{cm}^2$	Ø 9 Inches	<i>Call for Pricing</i>
<b>L118</b>		Battery				
L121	<b>HERMES</b>	AC	ISO 3059, ASTM E3022, RRES 90061, AITM6-1001, Pratt & Whitney, Boeing & USAF	9,000 $\mu\text{W}/\text{cm}^2$	Ø 8 Inches	
L120		Battery				
L139	<b>SELENE</b> Built in White Light	AC	ISO 3059, ASTM E3022, AITM6-1001 & Pratt & Whitney	9,000 $\mu\text{W}/\text{cm}^2$	Ø 8 Inches	
<b>L138</b>		Battery				
L125	<b>ATLAS</b>	AC	ISO 3059, ASTM E3022, AITM6-1001, Pratt & Whitney & USAF	9,000 $\mu\text{W}/\text{cm}^2$	Ø 8 Inches	
L124		Battery				

#### Optional Spray Can Holder Accessory "Athena" (pictured above)

Athena mounts on the light and can fit ALL aerosol brands that are used in NDT. Buy it factory installed or add it later (Item A503).



**Drop it,  
Kick it,  
Bake it in  
an Oven,  
Run it over  
by a Tank? -  
It will still  
Work!**

## HERCULES Ex Inspection Lamp

**4 Year Warranty**

Designed upon request of the military, Hercules is probably the most durable and shock-proof UV light in the world today, suitable for any "heavy duty" environment. It comes with explosion proof approvals and is tested to comply with ASTM E3022-18 and all PRIMES requirements, including Rolls-Royce RRES 90061 and Airbus AITM6-1001. Accidentally dropped it, kicked it, baked it in an oven, run it over by a tank? – it will still work! – The battery is inside the light; you don't need to worry it got smashed like ordinary lights.

### Explosive Atmosphere Certifications

ATEX certified for Group II, Zone II (Certificate: ITS17AT-EX402144X), IECEx, NFPA 70 Article 500 for Class I (divisions II locations), Explosive Atmosphere Test as per MIL-STD-810G.

### Operate the Lamp as Mains while Charging Batteries

A separate PSU supplied can charge the batteries. This charger can only be used outside explosive atmospheres.

### Four UV LEDs with White Light Block Filters

Four high quality UV LEDs with respective high quality white light block filters that do not suffer from solarization.

Item	Model	Version	Compliance	UV Intensity	UV Coverage	Price
L3000	HERCULES	Battery	ISO 3059, ASTM E3022, RRES 90061, AITM6-1001, Pratt & Whitney, Boeing & USAF	4,000 $\mu\text{W}/\text{cm}^2$	$\varnothing$ 8 Inches	<i>Call for Pricing</i>



### On/Off Switch

On/Off Switch at the back prevents accidental activation.

### Battery Powered

Hercules Ex is powered with two rechargeable batteries for ease of use in field inspections and tight work spaces.



### Package Includes

Lamp, Car Charger, Four Batteries, UV Block Glasses, External Charger for wall outlet, Carrying Case, Charging Power Supply.



## BB 2.0 Series Inspection Lamps

Powerful, penetrant resistant and with an Ingress Protection 68 (IP68 Waterproof). Beam profile is probably the largest and smoothest from any portable UV-A light on the market today. Depending on the model, the beam diameter is 10-11 inches and with intensities that vary from 4,000 to 22,000  $\mu\text{W}/\text{cm}^2$ . Selected models have been tested to comply with ASTM E3022-18, Rolls-Royce RRES 90061 and Airbus AITM6-1001. Battery running times are up to 7 hours.

### Powered via Battery and AC (DUO) or Just AC

Powered with your choice of either battery and mains or just mains. The battery version (referred to as DUO) can also be used as mains and operate the lamp while charging the battery.

### BB 2.0 Battery (DUO) or Mains on a Flexible Arm

All BB 2.0 Series models can be mounted on a flexible arm with the help of a handle adaptor. The flexible arm (PN: A536) can be supplied by QED.

**2 Year Warranty**

Item	Model	Version	Compliance	UV Intensity	UV Coverage	Price
L1074	IKAROS	AC	ISO 3059, ASTM E3022, RRES 90061, AITM6-1001, Pratt & Whitney & Boeing & USAF	4,000 $\mu\text{W}/\text{cm}^2$	$\varnothing$ 10.6 Inches	<i>Call for Pricing</i>
L1075		Battery				
L1076	HELIOS	AC	ISO 3059, ASTM E3022, AITM6-1001, Pratt & Whitney & USAF	9,000 $\mu\text{W}/\text{cm}^2$	$\varnothing$ 11 Inches	
L1077		Battery				
L1078	ARTEMIS	AC	ISO 3059 & ASTM E3022	22,000 $\mu\text{W}/\text{cm}^2$	$\varnothing$ 10.3 Inches	
L1079		Battery				

# FLASHLIGHT LED UV-A LAMP

## SPECTRO-UV FLASHLIGHT



### CLARITY 365 Series Kit

The Clarity 365 SERIES is the highest quality, longest running, COMPLIANT LED UV-A flashlight in the world! The IP68-rating means that it can withstand continuous immersion in one meter of water, making it ideal for rough environments. The 9-hour battery life is enough for a full work shift, making it the longest-running NDT flashlight on the market. Standing up to strict NDT standards, this product provides all of the top features including an induction charging base.

#### What's included

Lithium-Ion Version Includes - Flashlight w/ battery, induction charging dock, AC power cord, USB power cord, belt holster, UV-absorbing glasses & carrying case

*\*Additional options are available upon request.*

Item	Model	Version	Compliance	UV Intensity	UV Coverage	Price
SPN-CLR365-SC	<b>STANDARD INTENSITY</b>	SC (Lithium-Ion)	ISO 3059 & ASTM E3022	4,500 $\mu\text{W}/\text{cm}^2$	$\varnothing$ 4 Inches	<i>Call for Pricing</i>

## LABINO FLASHLIGHT / HEADLIGHT

### UVG3 2.0 Series Inspection Flashlights

Powerful, penetrant resistant and with an Ingress Protection 68 (Waterproof). The beam profile is probably the largest and smoothest from any UV-A torch light on the market. Depending on the model, the beam diameter is 3-5 inches and with intensities that vary from 4,000 to 80,000  $\mu\text{W}/\text{cm}^2$ ! Battery running times are up to 8 hours.

#### One UV LED with White Light Block Filter

A high quality UV LED with respective high quality white light block filter that does not suffer from solarization.

#### UVG3 2.0 Single Kit Package Includes:

Lamp, Car Charger, Two Batteries, UV Block Glasses, External Charger for wall outlet, carrying case, belt holsters, wrist band, rubber bumper.



**2 Year Warranty**

Item	Model	Compliance	UV Intensity	UV Coverage	Battery Run Time	Price
L134	<b>Spotlight</b>	ISO 3059 & ASTM E3022	80,000 $\mu\text{W}/\text{cm}^2$	$\varnothing$ 3 Inches	4 Hours	<i>Call for Pricing</i>
<b>L135</b>	<b>Midlight</b>	ISO 3059, ASTM E3022, AITM6-1001, Pratt & Whitney & USAF	9,000 $\mu\text{W}/\text{cm}^2$	$\varnothing$ 3.8 Inches	8 Hours	
<b>L136</b>	<b>Floodlight</b>	ISO 3059, ASTM E3022, RRES 90061, AITM6-1001, Pratt & Whitney & Boeing & USAF	4,000 $\mu\text{W}/\text{cm}^2$	$\varnothing$ 4.8 Inches	4 Hours	

### UVG5 2.0 Series Inspection Headlight



Extremely durable! Compact, powerful and adjustable headlight that frees your hands during inspections. White light is optional. The beam profile is probably the largest and smoothest from any UV-A headlight on the market today. Depending on the model, the beam diameter is 3-5 inches and with intensities that vary from 4,000 to 80,000  $\mu\text{W}/\text{cm}^2$ ! Battery running times are up to 14 hours.

#### Battery Powered

Powered by two lithium batteries that can be recharged either by a cigarette outlet in a vehicle, a wall outlet or a PSU charger (without removing the batteries).

#### One UV LED with White Light Block Filter and Optional Four White Light LEDs

A high quality UV LED with respective high quality white light block filter that does not suffer from solarization. Two different white lights: (a) a strong "search" white light for use in dark and tight spaces such as pipes and tanks and (b) a visual inspection white light.

**3 Year Warranty**

Item	Model	Compliance	UV Intensity	UV Coverage	Battery Run Time	Price
L127	<b>Spotlight</b> Built in White Light	ISO 3059 & ASTM E3022	80,000 $\mu\text{W}/\text{cm}^2$	$\varnothing$ 3 Inches	8 Hours	<i>Call for Pricing</i>
<b>L128</b> L129	<b>Midlight</b> L128 - Built in White Light	ISO 3059, ASTM E3022, AITM6-1001 & Pratt & Whitney	9,000 $\mu\text{W}/\text{cm}^2$	$\varnothing$ 3.8 Inches	14 Hours	
<b>L130</b> L131	<b>Floodlight</b> L130 - Built in White Light	ISO 3059, ASTM E3022, RRES 90061, AITM6-1001, Pratt & Whitney & Boeing	4,000 $\mu\text{W}/\text{cm}^2$	$\varnothing$ 4.8 Inches	8 Hours	

*\*USAF has a requirement of No White Light and a Maximum Intensity of 10,000  $\mu\text{W}/\text{cm}^2$  making L129 the preferred Lamp.*

# OVERHEAD LED UV-A LAMPS

## LABINO OVERHEAD

4 Year Warranty

### GX ORION Series Modular Overhead UV System

There are three different GX Orion stationery UV LED models (Remote, UV & WH and UV only) producing different intensities and tested to comply with a number of NDT standards. All 3 models come as AC (Mains) powered and are modular devices able to connect as many extension modules as you may require to increase the covered area in your station.

There are two types of what we refer to as "extension" units. The difference of the two is the white light. GX Orion UV & WH Extension unit (PN L3104), is used to extend the coverage of GX Orion UV & WH mother unit or GX Orion REMOTE mother unit. Both these units have white light that emits 1,076 lux (100 fc) at a distance of 12 inches. GX Orion UV Extension unit (PN L3105), is used to extend the coverage of GX Orion UV only as this mother unit does not have a white light.

#### Key Features

- ▶ Certified with an ingress protection marking of IP68 Waterproof
- ▶ Classified as Penetrant Resistant
- ▶ PLC Interface - All GX Orion units come with a PLC interface that can be used to monitor the UV light from a computerized panel.
- ▶ Tested to comply with ASTM E3022-18, ROLLS-ROYCE RRES 90061 and AIRBUS AITM6-1001
- ▶ Carries a 4-YEAR WARRANTY, the longest in the industry!



Item	Model	Compliance	UV Intensity	UV Coverage	Price
L3100	<b>REMOTE</b> Built in White Light	ISO 3059 & ASTM E3022	1,500 - 7,000 $\mu\text{W}/\text{cm}^2$	$\varnothing$ 13 Inches x 9 Inches	<i>Call for Pricing</i>
L3101	<b>UV &amp; WH</b> Built in White Light	ISO 3059, ASTM E3022, AITM6-1001 & Pratt & Whitney	7,000 $\mu\text{W}/\text{cm}^2$	$\varnothing$ 13 Inches x 9 Inches	
L3102	<b>UV</b>	ISO 3059, ASTM E3022, RRES 90061, AITM6-1001, Pratt & Whitney & Boeing & USAF	4,500 $\mu\text{W}/\text{cm}^2$	$\varnothing$ 10 Inches x 7 Inches	
L3104 L3105	<b>EXTENSION</b>	Fits GX ORION REMOTE and GX ORION UV & WH Mother Units Fits GX ORION UV Mother Unit Only			

## LIGHT METERS

### LABINO, SPECTRO-UV & ECONOMICAL LIGHT METERS

- ▶ LABINO - APOLLO 3.0 Series - Radiometer/photometer measuring UV and visible light via a wireless sensor. Apollo 3.0 is traceable to NIST and is in compliance with ISO 3059. Apollo 3.0 Series Light Meters include a 4 Year Warranty.
- ▶ SPECTRO-UV - AccuPRO Series - Features an advanced, microprocessor-controlled readout unit with a single dual-wavelength sensor detector designed to measure and display both UV-A and Visible Light readings.
- ▶ SPECTRO-UV - AccuMAX Series - Compact, lightweight and battery-operated for convenient use in the factory, field or any other location where measurements need to be taken. Measures both ultraviolet and visible light. Optional Luminance Sensor Detector is available upon request (XS-555/L).

MANUFACTURER	Item	Description	UV Light Sensor Operating Range	White Light Sensor Operating Range	Price
<b>LABINO</b> <b>APOLLO 3.0 Series</b>	<b>M513</b>	Single Kit w/ Carrying Case	0 - 50,000 $\mu\text{W}/\text{cm}^2$	0 - 10,000 Lux (930 fc)	<i>Call for Pricing</i>
	M514	Double Kit (x2 Sensors) w/ Carrying Case			
<b>SPECTRO-UV</b> <b>AccuPRO</b>	XP-2000	Dual Sensor, Complete with Rechargeable "AAA" Batteries, AC Charger and Carrying Case	0 - 100,000 $\mu\text{W}/\text{cm}^2$	0 - 5,382 Lux (500 fc)	
<b>SPECTRO-UV</b> <b>AccuMAX</b>	XRP-3000	Complete w/ Digital Readout Unit (XR-1000) and Protective Rubber Boot, Dual Sensor (XDS-1000), Water Resistant USB Cable and Carrying Case.			
<b>Economical</b> <b>Off Brand</b>	SP*001477	Digital Illuminance Meter	<i>N/A</i>	0 - 200,000 Lux (20,000 fc)	
	SP*001197	Digital UV-A/B Meter	0 - 40,000 $\mu\text{W}/\text{cm}^2$	<i>N/A</i>	



4 Year Warranty



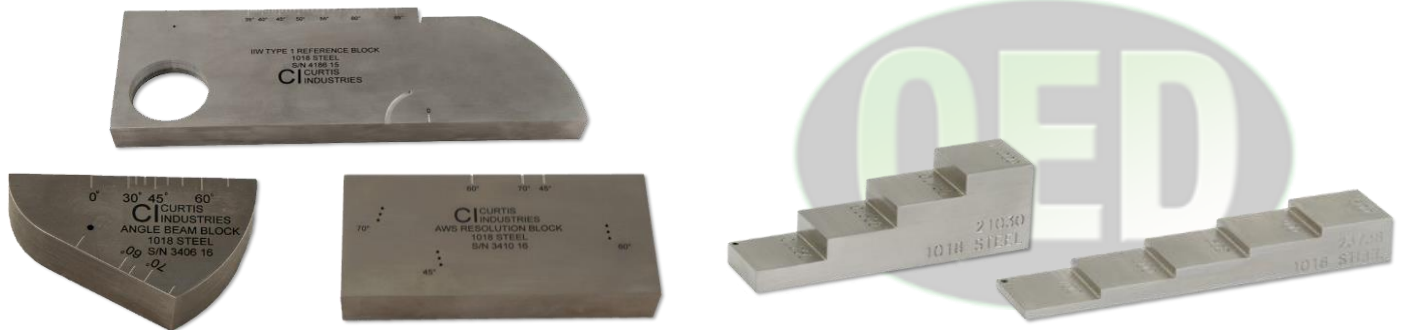
# ULTRASONIC CALIBRATION BLOCKS



## REFERENCE STANDARDS

Block Type	Description	Item	Alloy	Price
IIW-Type 1	Used for calibration of shear and longitudinal transducers, and verification of shear wedge exit point and refracted angle. Can also be used for resolution and sensitivity checking. In accordance with: IIW (International Institute of Welding) and ASTM E164.	CI-IIW1.I1018	1018 Steel	
		CI-IIW1.ISS	304 Stainless Steel	
		CI-IIW1.WC	Wooden Case	
IIW-Type 2	A modified version of the original IIW-Type 1 design. Includes a 2.0" radius x 0.250" deep cut-out superposed on the 4.0" radius for distance calibration. Also includes numbers 3, 5 and 8 through holes (3/64", 5/64" AND 8/64" diameter) for sensitivity testing or surface wave inspection, and distance calibration marks to the 2.0" hole. In accordance with International Institute of Welding, ASTM E164 and U.S. Air Force NDI Manual T.O. 33B-1-1 specifications.	CI-IIW2.I1018	1018 Steel	
		CI-IIW2.ISS	304 Stainless Steel	
		CI-IIW2.WC	Wooden Case	
Angle Beam	The Angle Beam Block also known as a "Rompas" block or simply "Angle Beam" is the ASTM and U.S. Air Force substitute for the DSC block for distance, beam index, refracted angle and sensitivity calibration. Block is 1.0" thick, contains a 1.0" radius opposite a 2.0" radius, and a 5/64" diameter x 0.375" deep flat-bottom hole.	CI-AB.ICS	1018 Steel	
		CI-AB.ISS	304 Stainless Steel	
		CI-AB.WC	Wooden Case	
QED 5-Step Block	5-Step Block for thickness and linearity calibration in accordance with ASTM E797. Step Thickness: 0.100", 0.200", 0.300", 0.400", and 0.500"	Q55-1018	1018 Steel	
		Q55-304	304 Stainless Steel	
		SP*001356	Plastic Case	
Curtis 5-Step Block	5-Step Block for thickness and linearity calibration in accordance with ASTM E797. Step Thickness: 0.100", 0.200", 0.300", 0.400", and 0.500"	CI-5STEP.I1018	1018 Steel	
		CI-5STEP.I304	304 Stainless Steel	
		CI-5STEP.WC	Wooden Case	
QED 4-Step Block	4-Step Block for thickness and linearity calibration in accordance with ASTM E797. Step Thickness: 0.250", 0.500", 0.750", and 1.000"	Q45-1018	1018 Steel	
		Q45-304	304 Stainless Steel	
		SP*001356	Plastic Case	
Curtis 4-Step Block	4-Step Block for thickness and linearity calibration in accordance with ASTM E797. Step Thickness: 0.250", 0.500", 0.750", and 1.000"	CI-4STEP.I1018	1018 Steel	
		CI-4STEP.I304	304 Stainless Steel	
		CI-4STEP.WC	Wooden Case	
TIPSY	Special Step Block for thickness and linearity calibration. This versatile block contains eight (8) steps. Set it down on one side and get the 1.0, 2.0, 3.0 and 4.0" steps. Then "TIP" it over and get the 1.5, 2.5, 3.5, and 4.5" steps.	CI-TIPSY.ICS	1018 Steel	<i>Call for Pricing</i>
		CI-TIPSY.ISS	304 Stainless Steel	
		CI-TIPSY.WC	Wooden Case	
DSC	AWS-type block used for shear wave distance and sensitivity calibration. Contains a 1.0" radius opposite a 3.0" radius. The 3.0" radius includes a 0.375" deep x 0.032" wide radiused slot. Also contains a 0° reference point for checking exit point on wedge, and a 0.125" diameter through hole and corresponding markings at 45°, 60°, and 70° for measuring actual refracted angle. In accordance with ASTM E164 and AWS 6.16.1B.	CI-DSCBLOCK.ICS	1018 Steel	
		CI-DSCBLOCK.ISS	304 Stainless Steel	
		CI-DSCBLOCK.WC	Wooden Case	
NAVSHIP	Used for distance amplitude correction, sensitivity levels and flaw depth information. Contains six 3/64" diameter side-drilled through-holes at distances of 0.25" to 2.75" in 0.25" increments. MTDs are engraved near both scan edges on one face. In accordance with MIL-STD-271G Figure 9, and NAVSHIPS Specification 0900-006-3010/Section 6. Comes with a Standard 32 Finish. If a 125 Finish is needed please call for pricing.	CI-NAV32.ICS	1018 Steel	
		CI-NAV32.ISS	304 Stainless Steel	
		CI-NAV.WC	Wooden Case	
AWS Resolution	Also called an RC block, the AWS Resolution Reference Block is used for checking resolution capabilities of angle beam transducers. Contains three sets of 0.0625" diameter through-holes for 45°, 60° and 70°. In accordance with AWS Welding Highway and Railway Bridges specification D2.0, and Structural Welding Code ANSI/AWS D1.1.	CI-AWS.CS	1018 Steel	
		CI-AWS.SS	304 Stainless Steel	
		CI-AWS.WC	Wooden Case	
DC	AWS-type block used for shear wave distance calibration. Contains a 1.0" radius overlaying a 2.0" radius on a 180° segment. In accordance with ASTM E164 and BRR/AWS X-1 specifications.	CI-DCBLOCK.ICS	1018 Steel	
		CI-DCBLOCK.ISS	304 Stainless Steel	
		CI-DCBLOCK.WC	Wooden Case	
SC	AWS-type block used for shear wave sensitivity calibration. Contains two 0.062" diameter through holes. In accordance with ASTM E164 and BRR/AWS requirements.	CI-SCBLOCK.ICS	1018 Steel	
		CI-SCBLOCK.ISS	304 Stainless Steel	
		CI-SCBLOCK.WC	Wooden Case	
DS	AWS-type block used for longitudinal distance and sensitivity calibration. Contains a 2.0" high section between two 4.0" sections. In accordance with AWS requirements.	CI-DSBLOCK.CS	1018 Steel	
		CI-DSBLOCK.SS	304 Stainless Steel	
		DI-DSBLOCK.WC	Wooden Case	

**Additional Blocks & Material Types are Available Upon Request. 7075 Aluminum Pricing is the same as 1018 Steel for all Curtis Blocks.**



# ULTRASONIC COUPLANT



## GENERAL PURPOSE

• Echogel® 20 is an economical, basic-use couplant in medium-thick gel viscosity for ultrasonic inspections, like flaw detection/sizing and thickness gauging, where salt cake or metal corrosion salts are present. It provides good corrosion inhibition and resists viscosity breakdown on salt-caked boilers and other corroded materials.

• Sonotrace 30® is a general-purpose ultrasonic couplant in medium-thick gel viscosity for flaw detection and thickness gauging applications. This glycerin-free couplant is a great choice for applications requiring minimum halogens, sulfur and low melting point metals, and offers good performance at a lower price point.

• UT-X® Powder is a cost-effective couplant powder for flaw detection and thickness gaging applications where ferrous corrosion inhibition is required. UT-X Powder retains viscosity on salt caked boiler tubes, corroded pipe, structural steel, steel billets, welds and ship plate. Mixed with water at the inspection site, its compact and lightweight packets are easy to transport to a job site or to store as an emergency couplant for unanticipated shortages.



• Ultragel® II is an industry-leading, high-performance, ultrasonic couplant for flaw detection and sizing, thickness gauging, flow metering and acoustic emission testing. This general-purpose medium viscosity gel is known for its outstanding performance, excellent corrosion protection, thixotropic properties and comprehensive range of specifications and approvals.

Item	Product	Temperature Range	Container Size	Price
48-901	Echogel 20	27 to 140°F	1 Gallon Cubitainer	<b>Call for Pricing</b>
48-905			5 Gallon Cubitainer	
48-955			55 Gallon Drum	
42-901	Sonotrace 30	25 to 175°F	1 Gallon Cubitainer	
42-905			5 Gallon Cubitainer	
42-955			55 Gallon Drum	
25-901	Ultragel II	-10 to 210°F	1 Gallon Cubitainer	
25-905			5 Gallon Cubitainer	
25-955			55 Gallon Drum	
62-110	UT-X Powder	32 to 120°F	1 Gallon Packet	
62-510			5 Gallon Packet	

## HIGH TEMPERATURE

• Sono 600 is a versatile, multi-purpose couplant with a wide operating temperature range for flaw detection, thickness gauging and acoustic emission testing in petrochemical, power generation, automotive, aerospace, food processing equipment and pharmaceutical manufacturing.

• Sono 1100 provides coupling for high-temperature thickness gauging and will maintain acoustic coupling at high temperatures beyond 15 seconds to give ample time to obtain thickness readings. In most cases, the signal strength increases with time to the point of the couplant's thermal decomposition.



Item	Product	Temperature Range	Container Size	Price
45-T04	Sono 600	700 to 775°F	4 oz Tube	<b>Call for Pricing</b>
45-901			1 Gallon Cubitainer	
30-T04	Sono 1100	0 to 700°F	4 oz Tube	
30-901			1 Gallon Pail	

**\*Additional Couplant Options are Available Upon Request**



	Echogel 20	Sonotrace 30	Ultragel II	UT-X Powder	Sono 600	Sono 1100
Form	Gel	Gel	Gel	Powder	Thick Gel	Medium Paste
Viscosity*	5.5	4.5	5	Variable	N/A	N/A
Silicone					<b>X</b>	<b>X</b>
Glycerin			<b>X</b>			
Propylene Glycol	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	
Temperature Range	27 to 140°F	25 to 175°F	-10 to 210°F	32 to 120°F	700 to 775°F	0 to 700°F
<b>SPECIFICATION COMPLIANCE</b>						
API	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>
ASME BPVC	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>
ASTM F519	<b>X</b>		<b>X</b>			
ASTM F945			<b>X</b>			
AWS	<b>X</b>	<b>X</b>	<b>X</b>		<b>X</b>	<b>X</b>
Pratt & Whitney			<b>X</b>			
PWA 36604			<b>X</b>			

*\*Subjective measure on a 0 - 10 scale where 0 = water, 5 = medium gel, 10 = very thick paste*

## COUPLANT ACCESSORIES

Item	Description	Price
SP*001453	White Cylindrical 8 oz. Couplant Bottle with Flip Top Cap	<b>Call for Pricing</b>
SP*001537	Translucent 1 Gallon Couplant Jug with Handle & Pump	
SP*001492	55 Gallon Drum Pump	



# UT EQUIPMENT

## THICKNESS GAUGES

### Danatronics EHC-09 Series Thickness Gauges



The EHC-09 series is available in 6 models to suit every budget and application. What's best is our simple upgrade path where all gauges are capable of quickly and easily (directly from the keypad) adding any software options. Features include a graphic display with multiple languages, vibrate on alarm, fast minimum, echo to echo to ignore coatings, 100K reading Datalogger with export to excel, B-scan and live A-scan with waveform adjust.

Standard EHC-09 Wave Series includes: Ultrasonic thickness gauge, DKS-537, 5 MHz 0.375 inch diameter potted cable, operational manual, Data XL interface program, couplant, and transport case. See chart below for standard inclusions for each gauge.

**\*Limited 2 Year Warranty on Parts & Labor**

**\*ECHO Thickness Gauge Pictured**

Model	Description	Price
EHC-09A	Hand-Held Digital Ultrasonic thickness gage including, NIST Traceable calibration certificate	<b>Call for Pricing</b>
EHC-09B	Hand-Held Digital Ultrasonic thickness gage including, NIST Traceable calibration certificate	
EHC-09	Hand-Held Digital Ultrasonic thickness gage including: Echo to Echo software, NIST Traceable calibration certificate	
EHC-09DL	Hand-Held Digital Ultrasonic thickness gage including: Echo to Echo & Datalogger w/ B-Scan software, NIST Traceable calibration certificate	
EHC-09-W	Hand-Held Digital Ultrasonic thickness gage with including: Live Waveform/A-Scan, Echo to Echo, NIST traceable calibration certificate	
EHC-09DLW	Hand-Held Digital Ultrasonic thickness gage including: Echo to Echo, Datalogger w/ B-Scan & Live Waveform/A-scan software, NIST Traceable calibration certificate	

### Danatronics ECHO Thickness Gauges

The ECHO series has a remarkable sunlight readable 3.5" color display, up to 32 Gb of micro SD memory, built-in rechargeable high capacity Li Ion battery all packaged in a custom case designed for IP67 rating. Not sure which model to choose? Don't worry, the ECHO series is fully capable of field upgrades directly from the keypad so you will never be stuck with an obsolete product or experience any downtime. ECHO Series can measure from .020" to 23" in steel in corrosion mode or as thin as .006" in steel when configured as a precision gauge.

Standard Inclusions: ECHO series ultrasonic thickness gauge, DKS-537, transducer up to 10 MHz, LM-06 cable, 2oz bottle of couplant, operation manual, Data XL interface program, USB cable, Charger Adapter, Transport Case \*A transducer is included with each model.

#### ECHO 9 - Corrosion Thickness Gauge

**\*Limited 2 Year Warranty on Parts & Labor**

Model	Description	Price
ECHO 9	Hand-Held Digital Ultrasonic CORROSION thickness gage including: Echo to Echo software, NIST Traceable calibration certificate	<b>Call for Pricing</b>
ECHO 9W	Hand-Held Digital Ultrasonic CORROSION thickness gage including: Echo to Echo & Live Waveform/A-Scan software, NIST Traceable calibration certificate	
ECHO 9DL	Hand-Held Digital Ultrasonic CORROSION thickness gage including: Echo to Echo & Datalogger w/ B-Scan software, NIST Traceable calibration certificate	
ECHO 9DLW	Hand-Held Digital Ultrasonic CORROSION thickness gage including: Echo to Echo, Datalogger w/ B-Scan & Live Waveform/A-Scan software, NIST Traceable calibration certificate	

**\*ECHO 7 (Precision) & ECHO 8 (Corrosion and Precision) Series Thickness Gauges are Available Upon Request**

### Dakota Ultrasonics ZX Series Thickness Gauges

The ZX Series of thickness gauges are packaged in an all aluminum case making them the most durable gauges on the market. The features included in the ZX Series offer a quality tool that will meet or exceed your application requirements. Our 5 year limited warranty indicates how we feel about the reliability and durability of the ZX Series gauges.

ZX Series Kits Include: Ultrasonic thickness gauge, selectable transducer, couplant, manual, plastic carrying case, certificate of calibration and AA batteries. PC software and data transfer cable included with data logging gauges. PC software available for download from website.

**\*Limited 5 Year Warranty**



Model	Item	Description	Price
ZX-1	Z-300-0001	Single velocity calibration. Velocity manually set using the VEL key on the keypad. Backlit display.	<b>Call for Pricing</b>
ZX-2	Z-301-0001	Single velocity calibration. Selectable 8 common material velocities , 2 custom velocities, or set manually using the VEL key. Backlit Display.	
ZX-3	Z-302-0001	Easy field calibration; 1 or 2 point options. Selectable 8 common material velocities , 2 custom velocities, or set manually using the CAL key. Auto/manual zero, adjustable gain, selectable probe diameter (linearity), high Speed Scanning, and Backlit Display.	
ZX-5	Z-303-0001	Same features as the ZX-3 plus Alarm Mode (high/low limits), Differential Mode, and VX velocity gauge. CDC compatible serial over USB (standard). <b>*Optional accessory RS232 serial or Bluetooth modules available</b>	
ZX-5 DL	Z-304-0001	Same features as the ZX-5 (less serial over USB), plus an on-board data logger - Stores 10,000 readings in 40 files of 250 readings per file. USB-C connectivity, Includes transfer cable.	
ZX-6	Z-305-0001	Same features/options as the ZX-5, plus echo-echo through paint multi mode. Thru-Paint range: 0.100" – 6.0" of base metal, with coating thickness from 0.001 to 0.075". Six selectable high damped probe diameters and frequencies. <b>*Optional accessory RS232 serial or Bluetooth modules available</b>	
ZX-6 DL	Z-306-0001	Same features as the ZX-6 (less serial over USB), plus an on-board data logger - Stores 10,000 readings in 40 files of 250 readings per file. USB-C connectivity, includes transfer cable.	

**\*Additional Dakota Ultrasonics Thickness Gauges are Available Upon Request**

# FLAW DETECTORS

Simplicity | Capability | Reliability

## Sonatest

### Sonatest WAVE Interactive Flaw Detector

Introducing WAVE by Sonatest. It integrates the latest technologies available in order to create a revolution in the ultrasonic non-destructive testing equipment market. Not only is it innovative, but the customisable interface also optimises the daily workflow, and a unique and embedded interactive scan plan, with ray-tracing capability and simulation tools, consolidates your results.

#### Interactive Scan Plan

The WAVE interactive scan plan has been developed to ease diagnostics on the inspected part. The scan plan can reproduce complex geometries such as Curved parts and T-joints. Combined with a real-time Raytracer, this unique feature facilitates the distinction between a real flaw and a geometrical indication. Thus avoiding unnecessary repair.

Kit Includes: WAVE Flaw Detector, Battery & Charger (with mains cable), Ultrasonic Couplant, Ethernet Adapter & Cable, User Manual, Quick Start Guide, Certificate of Calibration & Carrying Case.



Model	Description	Price
WAVE BNC	Sonatest WAVE BNC Kit	<b>Call for Pricing</b>

*\*Additional Sonatest Flaw Detectors are Available Upon Request*

## TRANSDUCERS AND WEDGES



### Ultrasonic Transducers and Accessories

QED has partnered with select Manufacturers such as CoreNDT, Olympus, Sensor Networks, Sonatest and Technisonic to offer a complete range of High Performance Ultrasonic Transducers for Thickness Measurement, General Flaw Detection and Phased Array applications.



Each transducer is made to exact standards regarding acoustical, electronic and mechanical properties. All transducers are thoroughly tested, typically at three stages of manufacture. A complete range of transducer types are available with a variety of connector styles, case configurations, frequencies and element sizes.

### CoreNDT - High Performance Ultrasonics

Manufactures two series of Standard Transducers: General Purpose (G) and High Resolution (H). Please refer to the information below to determine which series is best suited for your application.



#### General Purpose (G) Series

Offers the best combination of sensitivity and resolution for the majority of contact flaw detection applications and recommended for the majority of pulse-echo applications. Typically having two to three full ring cycles, these transducers are tuned to provide the best balance between gain and resolution for general purpose testing, with a bandwidth of 30% to 60% at -6 dB.

#### High Resolution (H) Series

Designed for optimum resolution and maximum bandwidth. The H Series are broadband transducers, making them an excellent choice for thickness gaging applications. While gain is somewhat lower than the G Series, they are damped to the limits of current technology, exhibiting one or two ring cycles with a bandwidth of 60% to 100% at -6 dB.

### CoreNDT Angle Beam Transducers & Wedges

Angle Beam transducers are used in conjunction with a wedge to introduce a refracted shear wave into the material being tested. Our standard angle beams are built to be low noise and offer substantial power.



*Custom Axial and Circumferential Wedges are Available Upon Request*

Transducer Type	Transducer Style	Part Number	Size	Frequency (MHz)	Connector Type	Price
Angle Beam	Standard	AB-1-500-G	.500" Ø	1	Top Mount BNC	<b>Call for Pricing</b>
		AB-1-500-1000-G	.500" x 1.00"			
		AB-2-500-G	.500" Ø	2.25		
		AB-2-500-500-G	.500" x .500"			
		AB-2-500-1000-G	.500" x 1.00"			
		AB-2-750-1000-G	.750" x 1.00"			
		AB-2-1000-G	1.00" Ø	5		
		AB-5-500-G	.500" Ø			
		AB-5-500-500-G	.500" x .500"			
		AB-5-500-1000-G	.500" x 1.00"			
AB-5-1000-G	1.00" Ø					

*\*High Resolution Series are Available Upon Request at an Additional Cost of \$31/Each*

Refracted Shear Wave Angle	45°	60°	70°	Price
Angle Beam Wedge (Standard 4-40 Threads)	.500" Ø	AB-W-500-45	AB-W-500-60	AB-W-500-70
	.500" x .500"	AB-W-500-500-45	AB-W-500-500-60	AB-W-500-500-70
	.500" x 1.00"	AB-W-500-1000-45	AB-W-500-1000-60	AB-W-500-1000-70
	.750" x 1.00"	AB-W-750-1000-45	AB-W-750-1000-60	AB-W-750-1000-70
	1.00" Ø	AB-W-1000-45	AB-W-1000-60	AB-W-1000-70

**Call for Pricing**

## CoreNDT AWS Angle Beam Transducers & Wedges

AWS angle beam transducers from CoreNDT are used with an AWS wedge to introduce a refracted shear wave into the material being tested. CoreNDT's AWS transducers are meeting or exceeding the American Welding Society's requirements.



Transducer Type	Transducer Style	Part Number	Size	Frequency (MHz)	Connector Type	Price
Angle Beam	AWS	AB-2-625-625-AWS	.625" x .625"	2.25	Top Mount BNC	<i>Call for Pricing</i>
		AB-2-625-750-AWS	.625" x .750"			
		AB-2-750-750-AWS	.750" x .750"			
Refracted Shear Wave Angle			45°	60°	70°	Price
AWS Snail Wedge (Standard 4-40 Threads)		.625" x .625"	AB-AWS-45	AB-AWS-60	AB-AWS-70	<i>Call for Pricing</i>
		.625" x .750"				
		.750" x .750"				

## CoreNDT Quick Change Angle Beam Transducers & Wedges

Transducer Type	Transducer Style	Part Number	Size	Frequency (MHz)	Connector Type	Price
Angle Beam	Quick Change	ABQC-2-250-G	.250" Ø	2.25	Top Mount Microdot	<i>Call for Pricing</i>
		ABQC-2-375-G	.375" Ø			
		ABQC-2-500-G	.500" Ø			
		ABQC-5-250-G	.250" Ø	5		
		ABQC-5-375-G	.375" Ø			
		ABQC-5-500-G	.500" Ø			
		ABQC-10-250-G	.250" Ø	10		
		ABQC-10-375-G	.375" Ø			
		ABQC-10-500-G	.500" Ø			

*\*High Resolution Series are Available Upon Request at an Additional Cost of \$31/Each*

Refracted Shear Wave Angle		45°	60°	70°	Price
Quick Change Wedge	.250" Ø	ABQC-W-250-45	ABQC-W-250-60	ABQC-W-250-70	<i>Call for Pricing</i>
	.375" Ø	ABQC-W-375-45	ABQC-W-375-60	ABQC-W-375-70	
	.500" Ø	ABQC-W-500-45	ABQC-W-500-60	ABQC-W-500-70	

*\*Quick Change Short Exit Wedges are Available Upon Request - \$65/Each*

## CoreNDT Contact Transducers

CoreNDT contact longitudinal wave transducers are rugged and built to withstand direct contact with a variety of materials. They are used in many applications such as straight beam flaw detection and thickness gaging, detecting and sizing delamination, and inspecting plates, billets, bars, and other metallic and nonmetallic components.



Transducer Type	Transducer Style	Part Number	Size	Frequency (MHz)	Connector Type	Price
Contact	Fingertip	FC-2-250-G	.250" Ø	2.25	Top Mount Microdot	<i>Call for Pricing</i>
		FC-2-375-G	.375" Ø			
		FC-2-500-G	.500" Ø			
		FC-2-750-G	.750" Ø			
		FC-5-250-G	.250" Ø	5		
		FC-5-375-G	.375" Ø			
	FC-5-500-G	.500" Ø				
	Standard Contact	C-2-500-G	.500" Ø	2.25	Side BNC	
		C-2-750-G	.750" Ø			
		C-2-1000-G	1.00" Ø			
		C-5-500-G	.500" Ø	5		
		C-5-750-G	.750" Ø			
		C-5-1000-G	1.00" Ø			
C-10-500-G		.500" Ø	10			

*\*High Resolution Series are Available Upon Request at an Additional Cost of \$12/Each*

## CoreNDT Removable Delay Line Transducers

CoreNDT delay line transducers are typically used for thin thickness gaging and searching for small flaws. These removable delay line introduce a time delay into the sound wave which improves near-surface resolution. Delays are standard in 0.500" length but available in custom length and shapes for custom job applications.



Transducer Type	Transducer Style	Part Number	Size	Frequency (MHz)	Connector Type	Price
Removable Delay Line	Delay Line	RDL-2-250-H	.250" Ø	2.25	Side Microdot	<i>Call for Pricing</i>
		RDL-2-500-H	.500" Ø			
		RDL-5-250-H	.250" Ø	5		
		RDL-5-500-H	.500" Ø			
		RDL-10-250-H	.250" Ø	10		
		RDL-10-500-H	.500" Ø			
		RDL-15-250-H	.250" Ø			

## Olympus Corrosion Thickness Gauging Transducer



Olympus offers a complete line of dual element and single element transducers for use with its corrosion thickness gages. Most of these transducers feature automatic probe recognition for maximum gage performance for each transducer.

Transducer Type	Transducer Style	Part Number	Tip Size	Frequency (MHz)	Connector Type	Price
Dual Element	High Temperature Thickness Gauging	D790-SM	0.434" Ø	5	Top Dual Microdot	<i>Call for Pricing</i>

**\*D790-SM Transducer to be used with the LCMD-316-5B Cable.**

Item	Description	Price
LCMD-316-5B	Olympus Dual Molded LEMO 00 to Microdot cable, 5 ft, for use with D790-SM	<i>Call for Pricing</i>

## CABLES

Offering a wide variety of cables in all different configurations, CoreNDT is a leader in constructing high quality, low noise cables.

We offer many cable types (RG 174, RG 196, RG 58, RG 316 to name a few) as well as many connector types (BNC, Lemo, Microdot, and UHF to name a few) to fulfill your cable needs.



**\*Custom Configurations and Lengths are Available Upon Request.**

Connector Type	Part Number	Cable Type	Length	Standard Cable Price	Cable w/ Protective Sheathing Price
BNC - BNC	C-BB174-6 C-BB58-6	RG 174 RG 58	6'	<i>Call for Pricing</i>	<i>Call for Pricing</i>
BNC - Lemo (Lemo 00 & Lemo 1)	C-BL00-174-6 C-BL1-174-6	RG 174			
Lemo - Lemo (Lemo 00 & Lemo 1)	C-L00L00-174-6 C-L00L1-174-6	RG 174			
Microdot - BNC	C-MB-174-6	RG 174			
Microdot - Lemo 00 Microdot - Microdot	C-ML00-174-6 C-MM-174-6				

**\*Heavy-Duty Protective Sheathing Colors Available: Aqua, Black, Neo Pink, Dark Blue, Neon Orange, Red, Neon Green and Purple.**

## VISUAL MEASURING DEVICES WELDING GAUGES



QED Offers high-quality precision Weld Measuring Gauges for checking weld thickness, butt welds, pits, undercuts and much more.

Our products include the 7-Piece Fillet Weld Set, Bridge Cam Gauge and the Adjustable Fillet Weld Gauge; to name a few.

Item	Description	Price
SP*001144	Economy Single Purpose Hi-Lo Welding Gauge (Inch)	<i>Call for Pricing</i>
SP*001145	V-WAC Welding Gauge (Inch)	
SP*001146	Bridge Cam Gauge Welding Gauge (Inch & Metric)	
SP*001147	Pipe Pit Welding Gauge (Inch)	
SP*001148	Automatic Weld Size Welding Gauge (Inch)	
SP*001149	7-Piece Fillet Weld Gauge Set (Inch & Metric)	

**\*If you require a Gauge or other item not shown above please contact us for a Solution.**



## VIDEO INSPECTION SYSTEM WOHLER VIS 700 HD Inspection System

The Wohler VIS 700 inspection camera offers exactly what professionals have been waiting for: razor sharp high definition images, a focus function for precise inspection, and now wireless locating. The Wohler VIS 700 is the ideal inspection camera for waste water pipes, flue gas and ventilation lines as well as NDT applications.

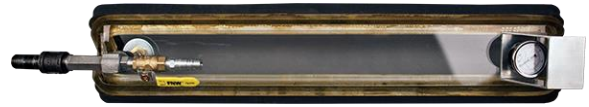
### Fully Digital Camera System

A new digital high-resolution sensor assures amazingly sharp images. With the Wohler VIS 700, professionals are able to plan their maintenance services on the basis of clearly visible facts. The displayed level indication ensures you to keep orientation in the pipe. The camera display shows the camera head position and angle for ease of navigation. The home function allows you to realign the camera head straight forward when needed. HD images are displayed for you on the brilliant, touch screen high-resolution monitor.



Item	Description	Price
7498	Wohler VIS 700 Monitor with 7" HD TFT-broad band color monitor incl. 5 ft connection cable, Glare shield, Li-Ion battery, Wohler HD miniature camera head 1" (detachable), Wohler HD pan-and tiltable camera head 1.5" (detachable), SD card 32 GB, Camera rod 0.34" x 0.22" - 100 ft long, 3 replacement plastic domes, Anti-slide mat, USB charger with USB-C cable, plastic carrying case, Guidance sleeve and Guidance sleeve with protection cage	<i>Call for Pricing</i>

# LEAK DETECTION VACUUM BOX TESTING VACUUM BOXES, ACCESSORIES & SOLUTION



Used for leak testing in building of ships, barges, tanks, or any seal weld application. All Vacuum Boxes come with a complete Venturi and Non-Certified Gauge.

Item	Design	Size	Price
VB18	Flat	18"	<i>Call for Pricing</i>
VB30		30"	
VB18C	Corner	18"	
VB30C		30"	
VB30FX	Flexible	30"	
VB3WIC	3 Way Inside Corner	Triangle - 9.9" x 8.6" with .25" Radius	
VB24BT	Boat Tail Flat	24"	

*\*Pricing is Based off a Non-Certified Gauge, Call for Pricing if a Certified Gauge is Required*

Item	Design	Price
VB-PUMP	Vacuum Pump - Air Flow 26.5" Mercury; 110 Volt; 13 PSI	<i>Call for Pricing</i>
VB-Venturi	Venturi made of steel with inlet thread of 3/8" NPT outlet and vacuum ports are 1/2" NPT able to Vacuum up to 23 Hg (Used with Compressed Air)	
VB-Gauge	2" Steel gauge with brass 1/4" NPT range is 0-30 Hg VAC (Non-Certified)	
VB-Gauge-C	2" Steel gauge with brass 1/4" NPT range is 0-30 Hg VAC (NIST Certified)	
SP*001550	Type 1 SHERLOCK 5-Second Leak Detector, 1 Gallon	



## HARDNESS TESTING TELEWELD

### BRINELL HARDNESS TESTING

Telebrineller hardness measurements are a direct comparison to a known physical reference and therefore, measurements are not subject to inaccuracies due to; alloy, thickness, geometry, position, etc., that are common with many other portable testers.

Item	Description	Price
BHNTS	Telebrineller Complete Set; Includes five (5) bars of selected hardness; Microscope; Computer; Bar Holder; Calculation Pad, all inside Carrying Case	<i>Call for Pricing</i>
BHNXXX	Telebrineller Test Bars (Available in 145-350 Hardness) <i>*BHN Bars have a Minimum Order of 3 Pieces - Bars can be Mixed to Obtain Quantity Pricing*</i>	
239-24	Halteman Filletester (Designed for Brinell Hardness Testing of fillet welds and other hard to reach areas)	

## PHASE II

### PORTABLE HARDNESS TESTER

State of the art, digital portable hardness tester is designed to test the hardness of large hard metal parts. Loaded with useful functions only found on high priced models the PHT-1800 portable hardness tester is clearly setting a new industry standard by being the most accurate, economically priced portable hardness tester on the market today. Fast test speeds coupled with memory and output, this unit is a hand's down winner whether you are out in the field or in the QC shop.

Item	Description	Price
PHT-1800	Digital Portable Hardness Tester which can perform tests that easily convert to the most popular hardness scales (Rockwell, Brinell, Vickers, Shore, etc.). Includes: Base instrument, Impact device D, Calibrated test block, Custom carry case, Cleaning brush and Operation manual	<i>Call for Pricing</i>



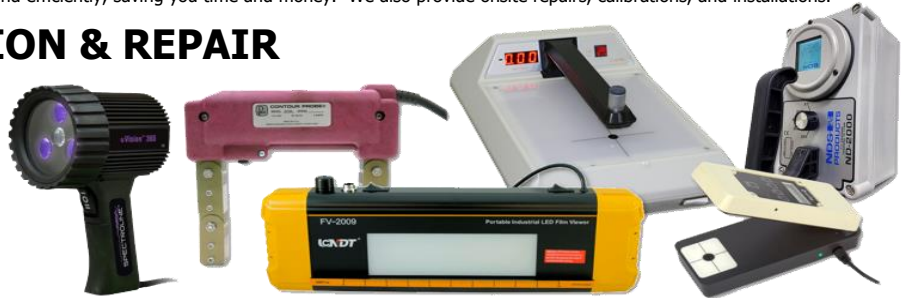
# SERVICE

QED provides comprehensive repair services for equipment across all NDT modalities and manufacturers. Our team of qualified technicians will restore your equipment to working order in accordance with manufacturer standards quickly and efficiently, saving you time and money. We also provide onsite repairs, calibrations, and installations.

## EQUIPMENT EVALUATION & REPAIR

### WHAT WE REPAIR

- ▶ UV Lights
- ▶ MPI Equipment (Yokes, Portables and Bench Units)
- ▶ LED Film Viewers
- ▶ Densitometers
- ▶ X-Ray Equipment (Controllers, Generators & Tubes)
- ▶ Radiation Safety/Survey Equipment
- ▶ Film Processors



Item	Description	Price
SP*001437	In-House Equipment Evaluation Fee	<b>Call for Pricing</b>
ROC	Rush Order Charge	
ISTL	In-House Service Technician Labor (Hour)	

**\*In-House Evaluation Fee (Per piece of Equipment) will be waived if Equipment is Repaired or New Equipment is Purchased**

## EQUIPMENT CALIBRATION/CERTIFICATION

QED provides professional calibration services in compliance with the National Institute of Standards and Technology (NIST) for a wide range of meters, gauges, and other NDT equipment used in various industries.



### RADIOGRAPHY

Item	Code	Frequency	Description	Price
C-RSM	State & NRC	6 Months	Radiation Survey Meters	<b>Call for Pricing</b>
C-ARM	State & NRC	12 Months	Alarming Rate Meters	
C-PD			Pocket Dosimeters	
C-PED	State & NRC	12 Months	Personal Electronic Dosimeter (PED)	
SP*001503	ASME Sec. V	90 Days	Densitometer	
SP*001557	ASTM E1390	Upon Repair	Certification of Light Intensity on Film Viewers per ASTM E1390	
SP*001504	ASME Sec. V	12 Months	Certification of Density Step Tablet (All Brands)	

## BLACKLIGHTS & LIGHT METERS

Item	Code	Frequency	Description	Price
SP*001650	EN ISO 3059	12 Months	Certification of Light Output	<b>Call for Pricing</b>
SP*001335	ASTM E1444 & E1417	6 Months	Calibration of a Dual Sensor Light Meter (Non-Programmable)	
SP*001336			Calibration of a Single Sensor Light Meter (Non-Programmable)	
SP*001527	ASME Sec. V, ASTM E3024 & E165	12 Months	Calibration of a Dual Sensor Light Meter (Non-Programmable)	
SP*001528			Calibration of a Single Sensor Light Meter (Non-Programmable)	
XR-1000/R	ASTM	6 or 12 Months	Calibration of AccuMAX XR-1000 Read Out Unit	
XDS-1000/R		(Depending upon ASTM Standard)	Calibration of AccuMAX XDS-1000 Dual (UV-A / VIS) Light Sensor	
XS-555/L/R	ASTM E1742	12 Months	Calibration of AccuMAX XS-555/L Luminance Sensor	
XP-2000/R	ASTM	6 or 12 Months	Calibration of AccuPRO XP-2000 Dual (UV-A / VIS) Sensor Light Meter	
APOLLO/R	ASTM	6 or 12 Months	Calibration of LABINO Apollo Series Light Meter	

## MAGNETIC PARTICLE

Item	Code	Frequency	Description	Price
SP*001026	ASTM E1444 & E3024	6 Months	Yokes (All Makes & Models)	<b>Call for Pricing</b>
SP*001262	Customer	12 Months	Certification of 10 lb. Test Weight	
SP*001021	ASTM E1444 & E3024	6 Months	Magnetic Particle Calibration (Bench or Portable Unit)	
SP*001529	ASME Sec. V	12 Months		
SP*001154	ASTM E1444 & E3024	6 Months	Analog Magnetometer/Gaussmeter Calibration	
SP*001645	ASTM E1444	6 Months	Electronic (Digital) Gaussmeter Calibration	
SP*001646	ASTM E3024	12 Months		

**\*Pricing does not include applicable travel expenditures if Calibration is required at Customer's location**

## ULTRASONIC & HARDNESS TESTERS

Item	Code	Frequency	Description	Price
SP*001500	ASTM E317	12 Months	Calibration of an Ultrasonic Thickness Gauge	<b>Call for Pricing</b>
SP*001562	ASME Sec. V		Calibration of an Ultrasonic Flaw Detector	
SP*001505	ASTM E797		Certification of Ultrasonic Thickness Step Wedges	
SP*001456	ASTM E18 & A956		Certification of Hardness Tester	

# SPECIAL SERVICES

## LED FILM VIEWER MODIFICATION

### Anti-Corrosion Treatment



Item	Description	Price
SP*001710	Anti-Corrosion Treatment to NEW LED Film Viewer	<b>Call for Pricing</b>
SP*001710-USED	Anti-Corrosion Treatment to USED LED Film Viewer. Includes pre-existing corrosion clean and replacement (as required) of switches, cooling fans and dimmer.	

*\*Modification is available for most make and model LED Film Viewers*

## PREVENTATIVE MAINTENANCE (PM)

QED offers customized Preventative Maintenance Services to minimize downtime and ensure quality inspections. Our detailed electronic PM records allow us to not only identify unusual machine wear but also operator misuse that could cause premature equipment failure or safety concerns.



## FILM PROCESSORS

Item	Brand	Model	Description	Price
SP*001510	CARESTREAM	M37 Plus	Clean Racks/Tanks with Systems Cleaners and Replace Filters - Check Racks, Drive, Dryer and Pumps for Missing or Worn Parts	<b>Call for Pricing</b>
SP*001455		M43IC		
SP*001359	GE (AGFA)	NOVA		
SP*001337		M-ECO		
SP*001348		NDT-U		
SP*001454		NDT-Si		

## RADIOGRAPHIC CLEANER / ALGACIDE SYSTEM AND DOSING SOLUTION

► T2 Max Radiographic Cleaner - Safe for all industrial film processors. Cleans: developer, fixer, oxidation, silver, and algae deposits from rollers, tanks, webs, and transports in 3-5 minutes. Acid-free, chromate-free, 100% biodegradable and non-toxic, no hazardous shipping charge required.

► EASY CLEAN Algae Pump System - A simple to use dosing system to inject Easy Clean Algae AD solution directly into a processor wash tank at programmed times and at the required dosage during the working day and night.

► EASY CLEAN Algae AD - Safe, Non-Toxic, Non-Corrosive, Bio-Degradable A highly concentrated, blend of unique cleaning agents. Rapidly breaks down the bio-film which causes slimy, clogging bio-slime. Regular use keeps wash/rinse water clean and fresh. Formulated for use with the Colenta automatic dosing pump system to place small quantities of additive into the wash tank at the selective times and at the required dosing rates during every 24 hour cycle.



Item	Description	Price
3690	T2 Max Universal Radiographic Cleaner, 32oz. Spray Bottle	<b>Call for Pricing</b>
9050555	Colenta EASY CLEAN Anti-Algae Dosing Pump Assembly	
9050502	Colenta EASY CLEAN Anti-Algae AD, 4 x 5 Liter Bottles	

## IS-199 CHEMICAL MIXER

The ultimate automatic x-ray chemical mixer with the specific gravity control producing a consistent mix each and every time. The mixer responds to the addition of concentrated chemicals and adds the correct amount of water automatically. Includes a low level warning system. Over 15 years of proven reliability; all electronic components are chosen for dependability and straight forward circuitry eliminates the need for circuit boards for increased reliability.

### Features:

- Specific Gravity Mixing System
- Rugged Field Tested Components
- Low Level Warning Systems
- Easy-to-Service Design
- UL/CSA Listed Power Supply
- 24 Volt Operation



WHITE MOUNTAIN IMAGING



**One Year Warranty on all Parts**

Item	Description	Capacity	Chemical Brand	Price
19945	IS-199 Chemical Mixer	12.5 Gallons	T2	<b>Call for Pricing</b>
19956-I		Developer	Carestream	
19960-I		&	AGFA	
19966-FNDT		Fixer	Fuji	

*\*Other Chemical Brand Options are available upon request.*

## FIELD SERVICE CALL-OUT RATES

The below rates are based off work being performed Monday - Friday (8AM-5PM). If work is needed to be performed outside of this time, then an Estimate will be provided

Item	Description	Price
STT	Service Technician Travel	<b>Call for Pricing</b>
STL	Service Technician Labor	
ESTL	Emergency (Rush) Service Technician Labor	

*\*A Four (4) Hour Labor (On-Site) Minimum applies for all local call-outs in addition to applicable Travel Time*

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