

# ELECTROMATIC EQUIP'T

## Flaw Detectors, Accessories & Probes - Price List

Date: 1/1/09

Models:	Connector Type	Part #	Price US
DFX-615	BNC	Z-211-0001	\$7,195.00
DFX-615	LEMO	Z-211-0002	\$7,195.00
DFX-625	BNC	Z-212-0001	\$7,495.00
DFX-625	LEMO	Z-212-0002	\$7,495.00
DFX-635	BNC	Z-213-0001	\$7,995.00
DFX-635	LEMO	Z-213-0002	\$7,995.00
DFX-638	BNC	Z-214-0001	\$8,750.00
DFX-638	LEMO	Z-214-0002	\$8,750.00

Kit Includes:	
Lithium ion battery	Operating manual
Line power adaptor	Calibration certificate
Universal power cable	Certificate of conformity
Canvas instrument case	

Additional Options:	Part #	Price US
Firmware software upgrade included w/service	Call for RMA	250.00
Firmware software upgrade only	Call for RMA	350.00
WinDFX2 Reporting Software & Cable – USB Interface	F-211-0008	725.00

Accessory Items:	Part #	Price US
Lithium ion battery pack	B-020-3100	225.00
External smart battery charger	B-030-0000	245.00
Power adaptor (18 volts 3.9amps w/6' cable)	N-006-0202	95.00
Universal power cable	N-506-0060	15.00
Instrument case	F-211-0007	150.00
Operators manual DFX-615	P-211-0007	35.00
Operators manual DFX-625	P-211-0008	35.00
Operators manual DFX-635	P-211-0009	35.00
Operators manual DFX-638	P-211-0010	35.00
USB to LEMO cable (winDFX2 reporting software)	165028	90.00
Video output cable	152119	75.00
RS232 PC cable ( 9 pin )	N-406-0750	70.00

Educational Training Software ( self-paced courses – CD's ):	Part #	Price US
Ultrasonic Testing ( U/T )	UTEDU	825.00
Penetrant Testing ( PT )	PTEDU	215.00
Magnetic Testing ( MT )	MTEDU	375.00
Radiographic Testing ( RT )	RTEDU	825.00

## TRANSDUCER CABLES & CABLE ADAPTORS

<b>Single probe cable – 6' length</b>					
Type	Part #	Price	Type	Part #	Price
BNC - S'BVIS	152022	45.00	BNC - M'DOT	152052	40.00
BNC - BNC	152053	35.00	LEMO 00 - M'DOT	152102	40.00
BNC - MINI BNC	152054	60.00	LEMO 1 - LEMO 1	152074	90.00
BNC - LEMO 00	152086	45.00	BNC - UHF	152058	90.00
LEMO 1 - LEMO 00	152076	80.00	LEMO 1 - UHF	152059	90.00
BNC - LEMO 1	152055	65.00	UHF - UHF	152079	90.00
LEMO 1 - S'VIS	152056	65.00	LEMO 1 - M'DOT	152057	70.00
FISCHER - M'DOT	152126	90.00	Premium Flex cable BNC-BNC		75.00

<b>Dual probe cable – 6' length</b>					
Type	Part #	Price	Type	Part #	Price
BNC - S'BVIS	152023	90.00	LEMO 1 - LEMO 00	152088	160.00
BNC - MINI BNC	152051	120.00	BNC - M'DOT	152060	75.00
BNC - LEMO 00	152087	90.00	LEMO 00 - M'DOT	152115	75.00
LEMO 1 - S'VIS	152061	130.00	LEMO 1 - M'DOT	152062	140.00
FISCHER - M'DOT	152131	130.00			

## TRANSDUCERS

<b>SINGLE ELEMENT CONTACT TRANSDUCERS ( SLM ) – HIGH WEAR</b>				
<b>Description:</b>	High wear contact transducers with extended stainless steel ring.			
<b>Used:</b>	Rough surfaces, Castings, Billets, and Extruded Parts.			
<b>Damping:</b>	Medium			
<b>Connectors:</b>	BNC (B), Lemo 1 (L) *Specify connector type after part #			
<b>Price:</b>	<b>\$285.00 US **\$335.00 (P) Composite option – 1MHz &amp; 3.5MHz only available with Composite. ***Call for price on 3.5MHz.</b>			
<b>Element Size</b>	<b>**1.0 MHz</b>	<b>2.25 MHz</b>	<b>***3.5 MHz</b>	<b>5.0 MHz</b>
<b>.500" DIA.</b>	PSLM501	SLM5025	PSLM5035	SLM5050
<b>.750" DIA.</b>	PSLM751	SLM7525	PSLM7535	SLM7550
<b>1.00" DIA.</b>	PSLM101	SLM1025	PSLM1035	SLM1050
Ordering Example: SLM7525B = SLM .750" x 2.25MHz BNC				

SINGLE ELEMENT CONTACT TRANSDUCERS ( SLF ) – MEMBRANE				
<b>Description:</b>	Replaceable membrane protected contact transducers.			
<b>Used:</b>	Rough surfaces, Castings (provides better contact).			
<b>Damping:</b>	High Gain			
<b>Connectors:</b>	BNC			
<b>Price:</b>	<b>\$285.00 US **\$335.00 (P) Composite option - 1MHz &amp; 3.5MHz only available with Composite.</b>			
<b>Element Size</b>	<b>**1.0 MHz</b>	<b>2.25 MHz</b>	<b>**3.5 MHz</b>	<b>5.0 MHz</b>
<b>.500" DIA.</b>	PSLF501	SLF5025	PSLF5035	SLF5050
<b>1.00" DIA.</b>	PSLF101	SLF1025	PSLF1035	SLF1050
Ordering Example: SLF101 = SLF 1.00" x 1.0 MHz				

SINGLE ELEMENT CONTACT TRANSDUCERS ( SLH ) – HIGH DAMPED				
<b>Description:</b>	High wear contact transducers with extended stainless steel housing.			
<b>Used:</b>	Rough surfaces, Castings, Billets, and Extruded Parts.			
<b>Damping:</b>	High Damped			
<b>Connectors:</b>	BNC (B), Lemo 1 (L) *Specify connector type after part #			
<b>Price:</b>	<b>\$310.00 US **\$360.00 (P) Composite option - 1MHz &amp; 3.5MHz only available with Composite. ***Call for price on 3.5MHz.</b>			
<b>Element Size</b>	<b>**1.0 MHz</b>	<b>2.25 MHz</b>	<b>***3.5 MHz</b>	<b>5.0 MHz</b>
<b>.500" DIA.</b>	PSLH501	SLH5025	PSLH5035	SLH5050
<b>.750" DIA.</b>	PSLH751	SLH7525	PSLH7535	SLH7550
<b>1.00" DIA.</b>	PSLH101	SLH1025	PSLH1035	SLH1050
Ordering Example: SLH7525B = SLH .750" x 2.25MHz BNC				

SINGLE ELEMENT CONTACT TRANSDUCERS ( FC ) – FINGER TIP					
<b>Description:</b>	General contact style transducers with stainless steel construction. Good for near surface resolution with a 70% bandwidth.				
<b>Used:</b>	Common metals, plastics				
<b>Damping:</b>	High gain (G), Resolution (R) *Specify damping after (FC), No Damping on 1MHz or 3.5MHz - Composite.				
<b>Connectors:</b>	Microdot Side Entry *Optional top connect (T)				
<b>Price:</b>	<b>\$260.00 US **\$285.00 ***310.00 (P) Composite option - 1MHz &amp; 3.5MHz only available with Composite. *Specify connector mount after part #</b>				
<b>Element Size</b>	<b>***1.0 MHz</b>	<b>2.25 MHz</b>	<b>***3.5 MHz</b>	<b>5.0 MHz</b>	<b>**10.0 MHz</b>
<b>.250" DIA.</b>	—	FC2525	PFC2535	FC2550	FC2510
<b>.375" DIA.</b>	—	FC3725	PFC3735	FC3750	FC3710
<b>.500" DIA.</b>	PFC501	FC5025	PFC5035	FC5050	FC5010
<b>.750" DIA.</b>	PFC751	FC7525	PFC7535	FC7550	—
Ordering Example: FCR5025T = FC Resolution .500" x 2.25MHz TOP MOUNT					

**SINGLE ELEMENT CONTACT TRANSDUCERS ( FCSL ) – FINGER TIP (SLIM LINE)**

<b>Description:</b> Line high frequency general contact transducers with a stainless steel housing.				
<b>Used:</b> Common metals, plastics				
<b>Damping:</b> High Damped				
<b>Connectors:</b> Microdot Side Entry *Optional top connect (T), Specify after part #				
<b>Price:</b> See below				
<b>Element Size</b>	<b>5.0 MHz</b>	<b>10.0 MHz</b>	<b>15.0 MHz</b>	<b>20.0 MHz</b>
<b>Price</b>	\$310	\$335	\$360	\$385
<b>.125" DIA.</b>	FCSL1250	FCSL1210	FCSL1215	FCSL1220
Ordering Example:	FCSL1250M = FC	SL .125" x 5MHz		

**STANDARD SHEAR WAVE TRANSDUCERS ( SS )**

<b>Description:</b> Shear wave transducers designed to use a variety of angle beam wedges for general weld inspection & A.W.S, and constructed in a low noise plastic or stainless steel housing.			
<b>Used:</b> General weld inspection.			
<b>Damping:</b> High gain (G), Resolution (R) *Specify damping after (SS), No damping on 1MHz - Composite.			
<b>Connectors:</b> BNC (B), Microdot (M) *Specify connector after part #			
<b>Price:</b> \$260.00 US **310.00 (P) Composite option - 1MHz only available with Composite.			
<b>Element Size</b>	<b>**1.0 MHz</b>	<b>2.25 MHz</b>	<b>5.0 MHz</b>
<b>.500" x .500"</b>	PSS50501	SS50502	SS50505
<b>.500" x 1.00"</b>	PSS50101	SS50102	SS50105
<b>.625" x .625"</b>	PSS62621	SS62622	SS62625
<b>.625" x .750"</b>	PSS62751	SS62752	SS62755
<b>.750" x .750"</b>	PSS75751	SS75752	SS75755
Ordering Example:	SSG50502 = SS	High Gain 1/2" x 1/2"	2.25MHz

**STANDARD WEDGES ( SW )**

<b>Price:</b> \$39.50 US			
<b>Angle Beam Wedges – Custom angles available on request.</b>			
<b>Element Size</b>	<b>45°</b>	<b>60°</b>	<b>70°</b>
<b>.500" x .500"</b>	SW5045	SW5060	SW5070
<b>.500" x 1.00"</b>	SW5145	SW5160	SW5170
<b>.625" x .625"</b>	SW6245	SW6260	SW6270
<b>Note:</b> An additional \$10 will be charged to radius edges.			
Ordering Example: SW5045 = SW 1/2" x 1/2" 45 Degree steel			

<b>SNAIL (AWS TYPE) WEDGES ( SNW )</b>			
<b>Price:</b>	<b>\$49.50 US</b>		
<b>Angle Beam Wedges</b> – Custom angles available on request.			
<b>Element Size</b>	<b>45°</b>	<b>60°</b>	<b>70°</b>
<b>.625" x .625"</b>	SNW6245	SNW6260	SNW6270
<b>Note:</b> An additional \$10 will be charged to radius edges.			
Ordering Example: SNW6245 = SNW 5/8" x 5/8" 45 Degree steel			

<b>MINI SHEAR WAVE TRANSDUCERS ( MS )</b>			
<b>Description:</b>	Small shear wave transducers designed for inspections that are inaccessible for larger units, curved surfaces, or for reducing the "offset". Constructed in a low noise stainless steel housing.		
<b>Used:</b>	General weld inspection (hard to get to areas).		
<b>Damping:</b>	High gain (G), Resolution (R) *Specify damping after (MS)		
<b>Connectors:</b>	Microdot		
<b>Price:</b>	<b>\$260.00 US **\$285.00 US</b>		
<b>Element Size</b>	<b>2.25 MHz</b>	<b>5.0 MHz</b>	<b>**10.0 MHz</b>
<b>.125" DIA.</b>	MS1225	MS1250	MS1210
<b>.250" DIA.</b>	MS2525	MS2550	MS2510
<b>.375" DIA.</b>	MS3725	MS3750	MS3710
<b>.500" DIA.</b>	MS5025	MS5050	MS5010
Ordering Example: MSG2550 = MS High Gain .250" x 5MHz			

<b>MINI SHEAR WAVE WEDGES ( MW )</b>			
<b>Price:</b>	<b>\$39.50 US</b>		
<b>Angle Beam Wedges</b> – Custom angles available on request.			
<b>Element Size</b>	<b>45°</b>	<b>60°</b>	<b>70°</b>
<b>.125" DIA.</b>	MW1245	MW1260	MW1270
<b>.250" DIA.</b>	MW2545	MW2560	MW2570
<b>.375" DIA.</b>	MW3745	MW3760	MW3770
<b>.500" DIA.</b>	MW5045	MW5060	MW5070
Ordering Example: MW2545 = MW .250" 45 Degree			

<b>QUICK CHANGE SHEAR WAVE TRANSDUCERS ( QC )</b>				
<b>Description:</b>	Threaded shear wave transducers for quickly interchanging between wedges. Ideal for limited access and curved surfaces.			
<b>Used:</b>	General weld inspection			
<b>Damping:</b>	High gain (G), Resolution (R) *Specify damping after (QC), No damping on 3.5MHz			
<b>Connectors:</b>	Microdot			
<b>Price:</b>	<b>\$260.00 US **310.00 (P) Composite option – 3.5MHz only available with Composite.</b>			
<b>Element Size</b>	<b>2.25 MHz</b>	<b>**3.5 MHz</b>	<b>5.0 MHz</b>	<b>10.0 MHz</b>
<b>.250" DIA.</b>	QC2525	—	QC2550	QC2510
<b>.375" DIA.</b>	QC3725	—	QC3750	QC3710
<b>.500" DIA.</b>	QC5025	PQC5035	QC5050	QC5010
Ordering Example: QCR2510 = QC Resolution .250" x 10MHz				

<b>STANDARD QUICK CHANGE WEDGES ( QW )</b>			
<b>Price:</b>	<b>\$39.50 US</b>		
<b>Quick Change Wedges – Custom angles available on request.</b>			
<b>Element Size</b>	<b>45°</b>	<b>60°</b>	<b>70°</b>
<b>.250" DIA.</b>	QW2545	QW2560	QW2570
<b>.375" DIA.</b>	QW3745	QW3760	QW3770
<b>.500" DIA.</b>	QW5045	QW5060	QW5070
Ordering Example: QW2545 = QW .250" 45 Degree			

<b>DUAL SHEAR WAVE TRANSDUCERS ( CDA )</b>			
<b>Description:</b>	Designed for thin material and weld inspections that require near surface resolution. Will Detect of IGSCC (Inter Granular Stress Corrosion Cracking).		
<b>Used:</b>	Weld inspection		
<b>Damping:</b>	Medium Damped		
<b>Connectors:</b>	Microdot End (E) or Top (T) connect *Specify after part #		
<b>Price:</b>	<b>\$310.00 US **360.00 (P) Composite option – 1MHz only available with Composite.</b>		
<b>Element Size</b>	<b>1.0 MHz**</b>	<b>2.25 MHz</b>	<b>5.0 MHz</b>
<b>.250" x .250"</b>	PCDA251	CDA2525	CDA2550
<b>.250" x .375"</b>	PCDA25371	CDA253725	CDA253750
<b>.375" x .375"</b>	PCDA371	CDA3725	CDA3750
<b>.500" x .500"</b>	PCDA501	CDA5025	CDA5050
Ordering Example: CDA252560T = CDA 1/4" x 1/4" 2.25 MHz, 60 Degree Top Connector.			

<b>CDA ANGLE OPTIONS – NOT INTERCHANGEABLE</b>			
<b>Element Size</b>	<b>45°</b>	<b>60°</b>	<b>70°</b>
<b>ALL</b>	ADD 45 TO PT#	ADD 60 TO PT#	ADD 70 TO PT#

<b>MINIATURE ANGLE BEAM POTTED ( MAP )</b>	
<b>Description:</b>	Mini angle beam transducers with a fixed angle. Stainless steel Housing, all angles are in steel, aluminum angle available on request.
<b>Used:</b>	Weld inspection (tight areas).
<b>Damping:</b>	Medium Damped
<b>Connectors:</b>	Microdot Side Entry
<b>Price:</b>	<b>\$260.00 US **\$285.00 US</b>

Element Size	2.25 MHz			5.0 MHz		
	45°	60°	70°	45°	60°	70°
.187" DIA.	MAP 182545	MAP 182560	MAP 182570	MAP 185045	MAP 185060	MAP 185070
.250" DIA.	MAP 252545	MAP 252560	MAP 252570	MAP 255045	MAP 255060	MAP 255070
.375" DIA.	MAP 372545	MAP 372560	MAP 372570	MAP 375045	MAP 375060	MAP 375070

Element Size	<b>**10.0 MHz</b>		
	45°	60°	70°
.187" DIA.	MAP 181045	MAP 181060	MAP 181070
.250" DIA.	MAP 251045	MAP 251060	MAP 251070
.375" DIA.	MAP 371045	MAP 371060	MAP 371070

<b>MINI MINIATURE ANGLE BEAM POTTED ( MMAP ) – DIM .375"L x .250"W x .37"H</b>	
<b>Description:</b>	Mini miniature angle beam potted transducers with a fixed angle, are designed with stainless steel Housing for durability. Standard angles are in steel, all other non-standard angles with specific materials can be produced.
<b>Used:</b>	Weld inspection (tight areas).
<b>Damping:</b>	Medium Damped
<b>Connectors:</b>	Microdot Side Entry
<b>Price:</b>	<b>\$335.00 US **\$385.00 US</b>

Element Size	2.25 MHz			5.0 MHz		
	45°	60°	70°	45°	60°	70°
.187" DIA.	MMAP 182545	MMAP 182560	MMAP 182570	MMAP 185045	MMAP 185060	MMAP 185070

Element Size	<b>**10.0 MHz</b>		
	45°	60°	70°
.187" DIA.	MMAP 181045	MMAP 181060	MMAP 181070

<b>IMMERSION TRANSDUCERS ( IM )</b>					
<b>Description:</b>	Designed for immersion tank or bubbler system inspections. Stainless steel housing with UHF connector. Three different lens configurations are available – Flat, Spherical focus and Cylindrical focus.				
<b>Used:</b>	Immersion and bubbler inspections				
<b>Damping:</b>	High Gain (G), Resolution (R), and High Resolution (HR), No damping on 1MHz (P) Composite Option Only.				
<b>Connectors:</b>	UHF				
<b>Price:</b>	<b>\$285.00 US **\$310 US ***\$385.00 Add: \$50.00 for focusing (HR)</b>				
<b>Note:</b> Specify damping after (IM), Lens configuration, or focal length when placing order.					
<b>Note:</b> Higher frequencies available upon request.					
<b>Element Size</b>	<b>1.0 MHz</b>	<b>2.25 MHz</b>	<b>5.0 MHz</b>	<b>**10.0 MHz</b>	<b>***15.0 MHz</b>
<b>.250" DIA.</b>	—	IM2525	IM2550	IM2510	IM2515
<b>.375" DIA.</b>	—	IM3725	IM3750	IM3710	—
<b>.500" DIA.</b>	PIM501 (\$335.00)	IM5025	IM5050	IM5010	—
<b>.750" DIA.</b>	PIM751 (\$360.00)	IM7525	IM7550	IM7510	—
<b>1.00" DIA.</b>	PIM101 (\$385.00)	IM1025	IM1050	—	—
Ordering Example: IMR7550 = IM Resolution .750" 5MHz					

## ULTRASONIC TEST AND CALIBRATION BLOCKS

BLOCK TYPE	STEEL	7075 AL	304 SS	TITANIUM	CASE
<b>IIW TYPE 1</b> – per institute of welding (IIW), ASTM -E-164 & MIL-STD-2154	\$485	\$485	\$815	\$1450	\$80
<b>Application</b> – Calibration of transverse and longitudinal wave distance setting determination of the sound beam point of incidence and exact angle of propagation. <b>Geometry</b> – 1" x 4" x 12". Contains 2" dia. hole and 4" radius. Also 1/8" x 1" radius alternate reflector 1/16" deep on echo side.					
<b>IIW V-1 (METRIC)</b> – (European version of IIW) per BS-2704	\$485	\$530	\$895	\$1620	\$80
<b>IIW TYPE 2</b> – per IIW & USAFTO 33 B-1-1 (6-1-84)	\$555	\$555	\$925	\$1700	\$80
<b>Application</b> – Modified version of IIW Type 1, with a 2" radius ¼" deep cut out test side, and 3 extra side drilled resolution holes.					
<b>MINI IIW</b>	\$535	\$535	\$790	\$1420	\$80
<b>Application</b> – Miniature version of IIW type blocks resembling the Type 2. <b>Geometry</b> – 1" x 2" x 6". Contains 1" diameter hole, 2" radius ¼" deep cut out test side 3 side drilled resolution holes, and ¾" sq. x .100" deep cut out.					
<b>DSC</b> – per AWS & ATM-E-164	\$290	\$290	\$480	\$835	\$45
<b>Application</b> – Shear wave distance and sensitivity calibration. <b>Geometry</b> – 1" thick, 4" long with 1" radius and 3" radius. Contains a 3/8" deep x 1/32" radius notch and a ½" dia. side drilled hole for 45, 60, & 70 degrees.					
<b>DS -DISTANCE &amp; SENSITIVITY</b> per ANSI / AWS	\$685	\$685	\$1100	\$1980	\$105
<b>Application</b> – Distance and sensitivity. <b>Geometry</b> – 2" x 2" x 6" with a 2" wide cutout.					
<b>ANGLE BEAM (ROMPAS)</b> - per ASTM-E-164 & USAFTO 33 B-1-1 (6-1-84) - Kidney	\$270	\$270	\$445	\$795	\$45
<b>Application</b> – Angle beam calibration. <b>Geometry</b> – ½" or 1" thick, 1" radius opposite 2" radius with 5/64" dia. by ¾" deep flat bottom hole (1" thick only).					
<b>ANGLE BEAM (V-2) METRIC</b> 20MM or 12.5MM & 5MM or 1.5MM dia. target hole.	\$270	\$270	\$450	\$800	\$45
<b>Application</b> – Angle beam calibration. <b>Geometry</b> – European version of Angle Beam calibration block. Optional 20mm or 12.5mm versions with 5mm or 1.5mm target hole.					
<b>ANSI/AWS RESOLUTION - RC</b>	\$275	\$275	\$470	\$845	\$45
<b>Application</b> – Checking resolution capabilities of angle beam transducers. Per AWS and BPR. <b>Geometry</b> – 1" x 3" x 6". Contains nine .062" dia. holes for 45, 60, and 70 degrees.					
<b>SC</b> – per AWS / ASTM-E-164	\$180	\$180	\$325	\$580	\$45
<b>Application</b> – Sensitivity calibration (shear wave). <b>Geometry</b> - .905" x 1.25" x 3". Contains two .062" diameter side drilled holes.					
<b>DC</b> – per AWS & ASTM-E-164	\$255	\$255	\$440	\$790	\$45
<b>Application</b> – Distance calibration (shear wave). <b>Geometry</b> – 1" radius overlying 2" radius on 180 degree half circle.					
<b>IOW BEAM PROFILE</b> – English or metric. Per BS2704 (British Standards).	\$615	\$615	\$1045	\$1875	\$85
<b>Application</b> – Beam profile measurement of angle beam transducer. <b>Geometry</b> – 2" x 3" x 12". Contains two 1/16" diameter x 7/8" deep calibration holes on far side. Also contains five 1/16" diameter resolution holes drilled on 10 degree slope, far side only.					
<b>NAVSHIPS</b> – per NAVSEA T 9074-AS-GIB-010/271 formerly Navships 0900-006-3010Sec. 6 & MIL STD-271F	\$470	\$470	\$810	\$1460	\$85
<b>Application</b> – Distance correction and sensitivity levels. <b>Geometry</b> – 1 ¼" x 3" x 12". Contains seven 3/64" dia. side drilled holes at distances of 1/8" through 2 ¾".					

<b>ASME ref. block 0" - 1"</b>	\$430	\$430	\$595	call	\$95
<b>Application</b> – Angle beam calibration <b>Geometry</b> – 1" or less – 3/4" x 6" x 7"					
<b>ASME ref. block 1" – 2"</b>	\$690	\$690	\$860	call	\$130
<b>Application</b> – Angle beam calibration <b>Geometry</b> – Over 1" through 2" – 1.5" x 6" x 10"					
<b>ASME ref. block 2" – 4"</b>	\$1040	\$1040	call	call	call
<b>Application</b> – Angle beam calibration <b>Geometry</b> – Over 2" through 4" – 3" x 6" x 12"					