

AEROFAB NDT, LLC
SINCE 2013

This brochure is a sample of the products offered by AeroFab NDT. Please contact our sales team below for all further inquiries.

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KENT, WA 98031 - USA



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PRODUCT BROCHURE

2019



EDDY CURRENT PROBES

REFERENCE STANDARDS

ULTRASONIC TRANSDUCERS

AEROFAB NDT, LLC

8629 SOUTH 212TH STREET
KENT, WA 98031 - USA
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ABOUT US

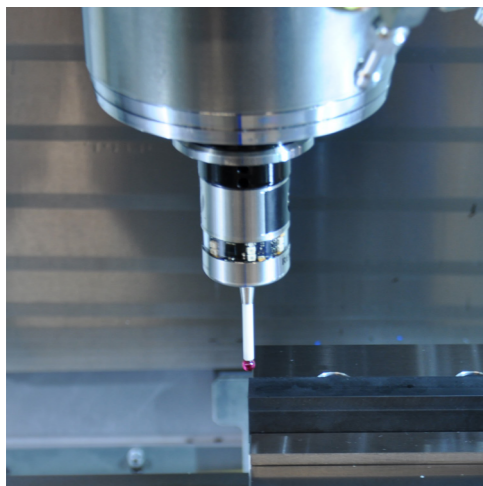
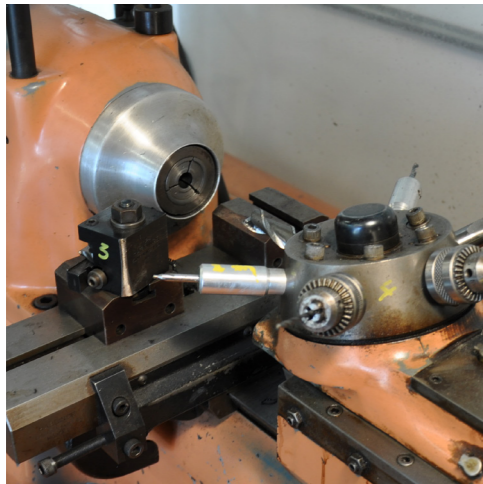
Founded in 2013 - Headquartered in Kent, WA - USA

AeroFab NDT is a fully equipped machine shop providing NDT services in support of the Aerospace & Aviation industry. We specialize in the sale and manufacture of nondestructive testing (**NDT**) tools for customer inspection requirements. We have over 50 years' experience in NDT fabrication/design and are continually expanding our product knowledge to meet the evolving needs of this industry. In-house operations enable control over quality and ensures we provide the shortest lead times.

We offer custom tools designed and manufactured to customer specifications along with accessories, machining/EDM, and repair services.

Specialities:

- » Reference standards (*Boeing, Airbus, Bombardier, McDonnell Douglas, Military*)
- » Eddy current probes
- » Ultrasonic Transducer
- » Custom kit boxes



AIRCRAFT COMPOSITES

The drive to increase fuel efficiency and improve aerodynamic performance is leading designers to move away from using aluminum in airframes. As the use of carbon fiber composites in aircraft structures has grown, so has the need for reliable nondestructive testing.



C12/F12 SERIES

C12-DIS-3C1N

C12-DEL-3C1N

C12-PSC-3C1N

C12-POT-3C1N

F12-DIS-3C1N

F12-DEL-3C1N

F12-PCS-3C1N

ST SERIES

ST8870-1

ST8870-4

ST8870-7

ST8870-8

ST8870-9

ST8871D

ST8871

NDT SERIES

NDT1033-10

NDT1038

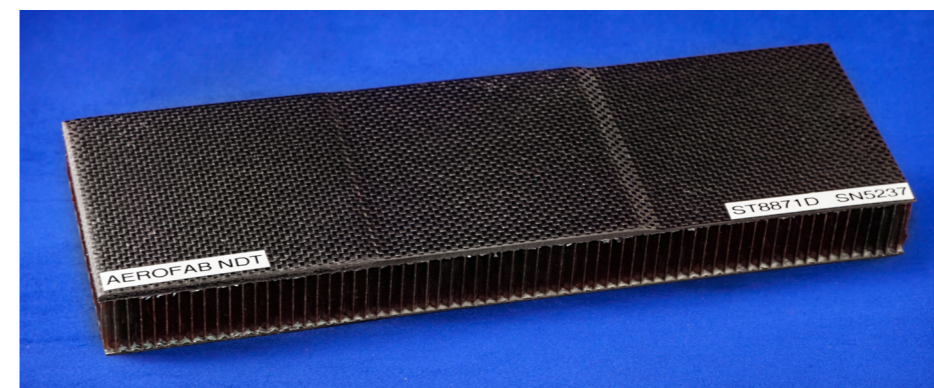
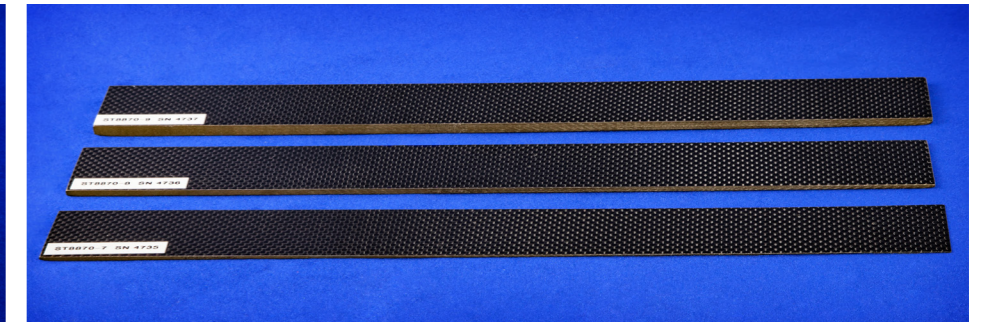
NDT1106

NDT1046-XX

AIRBUS

99D55109001000

99D51407291001



EDDY CURRENT PROBES

Traditionally used to determine material thickness, non-conductive coating thickness, conductivity and plating measurement, and cracks.

SCANNER PROBES



ROTATING STAINLESS STEEL

Ideal for detecting flaws inside fastener holes. These probes are extremely resistant to damage. Wear-resistant stainless steel tip. Increased sensitivity to small surface cracks.



ROTARY PROBE

Used to scan the inside of a bore for cracks. Manually adjustable to meet different hole diameters. Standard working length ranges 1.1" - 2.0".

SURFACE PROBES

Standard features: 0.125" diameter - delrin handle - 50-500 kHz - Microdot connector
Options include: frequency - length - connector - drop length - bent shaft angle

STRAIGHT



P/N	SHAFT	CONNECTOR	FREQUENCY	SHIELDING
AXTPN-5	0.072	TRIAx	50 KHZ - 500 KHZ	SHIELDED
AXPN-5	0.072	MICRODOT	50 KHZ - 500 KHZ	SHIELDED
ASTPN-5	0.093	TRIAx	50 KHZ - 500 KHZ	SHIELDED
ASPN-5	0.093	MICRODOT	50 KHZ - 500 KHZ	SHIELDED
ATPN-5	0.125	TRIAx	50 KHZ - 500 KHZ	SHIELDED
APN-5	0.125	MICRODOT	50 KHZ - 500 KHZ	SHIELDED
APNU-5	0.125	MICRODOT	50 KHZ - 500 KHZ	UNSHIELDED

ANGLE SHAFT (45°)



P/N	SHAFT	CONNECTOR	FREQUENCY	SHIELDING
AXTPN-45-5	0.072	TRIAx	50 KHZ - 500 KHZ	SHIELDED
AXPN-45-5	0.072	MICRODOT	50 KHZ - 500 KHZ	SHIELDED
ASTPN-45-5	0.093	TRIAx	50 KHZ - 500 KHZ	SHIELDED
ASPN-45-5	0.093	MICRODOT	50 KHZ - 500 KHZ	SHIELDED
ATPN-45-5	0.125	TRIAx	50 KHZ - 500 KHZ	SHIELDED
APN-45-5	0.125	MICRODOT	50 KHZ - 500 KHZ	SHIELDED
APNU-45-5	0.125	MICRODOT	50 KHZ - 500 KHZ	UNSHIELDED

90°



P/N	SHAFT	CONNECTOR	FREQUENCY	SHIELDING
AXTPN-95-5	0.072	TRIAx	50 KHZ - 500 KHZ	SHIELDED
AXPN-95-5	0.072	MICRODOT	50 KHZ - 500 KHZ	SHIELDED
ASTPN-95-5	0.093	TRIAx	50 KHZ - 500 KHZ	SHIELDED
ASPN-95-5	0.093	MICRODOT	50 KHZ - 500 KHZ	SHIELDED
ATPN-95-5	0.125	TRIAx	50 KHZ - 500 KHZ	SHIELDED
APN-95-5	0.125	MICRODOT	50 KHZ - 500 KHZ	SHIELDED
APNU-95-5	0.125	MICRODOT	50 KHZ - 500 KHZ	UNSHIELDED



FLEXSHAFT

The flexible shaft of these probes can be shaped to perform inspections of areas that are very difficult to reach, Excellent for small defect detection and areas inaccessible to standard probes.



ROTARY COUNTERSINK

Used for testing of fastener holes. Plastic tips that automatically compress to their original size after being expanded to fit inside larger bolt holes. Available in absolute or differential configuration.

LOW FREQUENCY PROBES

SPOT BRIDGE



Used for discovering flaws on and below surfaces. Their large coil diameter & low frequency operation provide an increased detectable flaw size. Typically supplied with a triax fischer connector.

OPTIONS

- » Top or side mount
- » Right angle or straight
- » Connector

RING PROBES



Made to fit various fastener head diameters. Mostly used for subsurface crack detection with the fastener in place. Typically supplied with a triax fischer connector.

OPTIONS

- » Bridge or reflection
- » Connector

CABLES & ADAPTORS

CONNECTOR	PROBE TYPE	PROBE CONNECTION	
		UNIVERSAL	RECHII
4-PIN FISCHER	UNIVERSAL ROTOR	--	AUR-RA
4-PIN STEP	RECHII ROTOR	RA-UR	--

INSTRUMENT	PROBE CONNECTOR	
	MICRODOT	TRIAX FISCHER/LEMO
NORTEC 500-2000 SERIES	ACN16-MD6/50-500K	ACN16-TF6-B ACN16-TF6-R
ELOTEST B1, B2	ACB1-M-6/50-500K	ACB1-CF-6/50-500K
GE/HOCKING PHASEC SERIES	ACP2D-MD6	ACP2D-TF6-B ACP2D-TF6-R

MISCELLANEOUS

BLADE PROBES

Designed to work in areas with limited access such as narrow slots or gaps between structures for detection of surface abnormalities.

OPTIONS

- » Angle (30°,45°,90°)
- » Connector
- » Working length

STANDARD



ANGLE	THICKNESS	MICRODOT 50-500 KHZ	TRIAX 50-500 KHZ
STRAIGHT	0.030"	ABL-.030-6	ATBL-.045-6
STRAIGHT	0.045"	ABL-.045-6	ATBL-.045-6
STRAIGHT	0.060"	ABL-.060-6	ATBL-.060-6
STRAIGHT	0.090"	ABL-.090-6	ATBL-.090-6



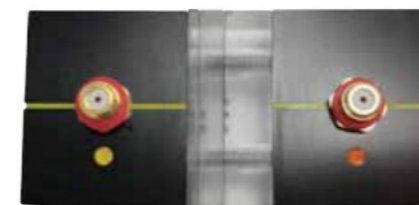
SLIDING PROBES

Directionally sensitive and feature engraved lines to assist scan orientation to expected direction of cracks. Specifically designed to inspect rows of fuselage fasteners.

STANDARD

- » Material: Plastic
- » Coil type: Reflection

MICRODOT



TRIAX FISCHER



ULTRASONIC TRANSDUCERS

Traditionally used to determine material thickness, non-conductive coating thickness, conductivity and plating measurement, and cracks.

CONTACT

DUAL ELEMENT

Improves near surface resolution. Couples well on rough or curved surfaces

		ELEMENT DIAMETER	
		0.250	0.500
FREQUENCY	5 MHZ	ADL-525	ADL-550
	10 MHZ	ADL-1025	--
	15 MHZ	ADL-1525	--



REPLACEABLE DELAY

Designed specifically for use with a replaceable delay line. Standard tip length: 0.390".

		ELEMENT DIAMETER		
		0.125	0.250	0.500
FREQUENCY (MHZ)	1	--	--	ARD-150
	2.25	--	ARD-225	ARD-250
	5	--	ARD-525	ARD-550
	10	ARD-1012	ARD-1025	ARD-1050
	15	ARD-1512	ARD-1525	--
	20	ARD-1220	--	--



STRAIGHT BEAM/FINGERTIP

Provides high sensitivity and constructed for service under the toughest conditions, Low profile for difficult-to-access surfaces.

FREQUENCY	SIDE MOUNT	TOP MOUNT
5 MHZ	AFC-518S	AFC-518T
10 MHZ	AFC-1018S	AFC-1018T
15 MHZ	AFC-1518S	AFC-1518T
ELEMENT: 0.187" CASE: 0.250" OD		
5 MHZ	AFC-531S	AFC-531T
10 MHZ	AFC-1031S	AFC-1031T
15 MHZ	AFC-1531S	AFC-1531T
2.25 MHZ	AFC-231S	AFC-231T
ELEMENT: 0.250" CASE: 0.312" OD		
5 MHZ	AFC-525S	AFC-525T
10 MHZ	AFC-1025S	AFC-1025T
15 MHZ	AFC-1525S	AFC-1525T
2.25 MHZ	AFC-225S	AFC-225T
ELEMENT: 0.375" CASE: 0.375" OD		
5 MHZ	AFC-550S	AFC-550T
10 MHZ	AFC-1050S	AFC-1050T
15 MHZ	AFC-1550S	AFC-1550T
2.25 MHZ	AFC-250S	AFC-250T
1 MHZ	AFC-150S	AFC-150T
ELEMENT: 0.500" CASE: 0.625" OD		



SHEARWAVE/ANGLE BEAM

X-SMALL-Excellent signal to noise ratios-ideal for difficulty acces inspections

LARGE-For wide area scans and deep penetrations

SMALL-Excellent signal to noise rations-ideal for medium-difficult access inspections

MEDIUM-For wide area scans and deep penetrations



5 MHZ

10 MHZ

		ANGLE	ALUMINUM	STEEL	ALUMINUM	STEEL
X-SMALL	45		AFX-545AS	AFX-545SS	AFX-1045AS	AFX-1045SS
	60		AFX-560AS	AFX-560SS	AFX-1060AS	AFX-1060SS
	70		AFX-570AS	AFX-570SS	AFX-1070AS	AFX-1070SS
ELEMENT: 0.187" CASE: 0.375" X 0.260" 0.375						
SMALL	45		AFS-545AS	AFS-545SS	AFS-1045AS	AFS-1045SS
	60		AFS-560AS	AFS-560SS	AFS-1060AS	AFS-1060SS
	70		AFS-570AS	AFS-570SS	AFS-1070AS	AFS-1070SS
ELEMENT: 0.187" CASE: 0.550" X 0.260" X 0.450"						
MEDIUM	45		AFM-545AS	AFM-545SS	AFM-1045AS	AFM-1045SS
	60		AFM-560AS	AFM-560SS	AFM-1060AS	AFM-1060SS
	70		AFM-570AS	AFM-570SS	AFM-1070AS	AFM-1070SS
ELEMENT: 0.250" CASE: 0.750" X 0.370" X 0.500"						
LARGE	45		AFL-545AS	AFL-545SS	AFL-1045AS	AFL-1045SS
	60		AFL-560AS	AFL-560SS	AFL-1060AS	AFL-1060SS
	70		AFL-570AS	AFL-570SS	AFL-1070AS	AFL-1070SS
ELEMENT: 0.375 CASE: 1.0"X 0.500" X 0.625"						

REFERENCE STANDARDS

Our standards are available in almost every alloy with hole diameters to suit your application. Notch configuration & fastener type can all be specified. Below are a few of our offerings:

AIRCRAFT STANDARDS

- » Airbus
- » ATR
- » Bombardier
- » Boeing
- » McDonnell Douglas
- » Military (Airforce & Navy)



oil-protective coating to prevent corrosion

HOLE STANDARDS

Economical way to provide several hole and notch configurations on the same plate or several plates comine



SURFACE STANDARDS

Surface standards provide a reference point before the start of any inspection procedure



STANDARD MATERIALS

TYPE	ALLOY
ALUMINUM	2024-T3
	6061-T6
	7075-T6
	7075-T7
	AS4340
TITANIUM	AS4130
	6AL4V
STAINLESS STEEL	AISI 304L
	AISI 303L
	15-5PH
INCONEL	17-7PH
	600
	625
MAGNESIUM	718
BRONZE-ALUMINUM	13%IACS

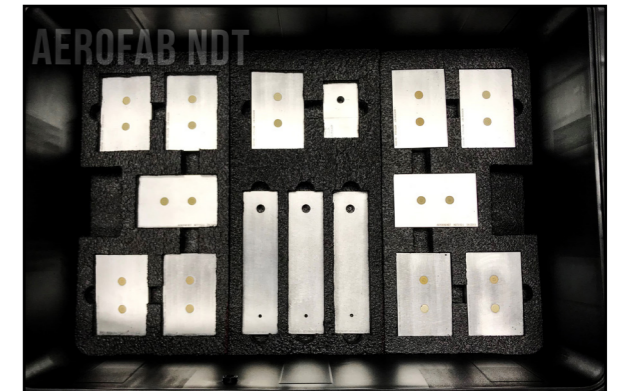
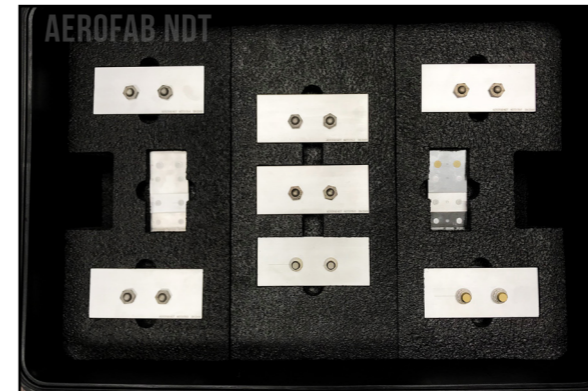
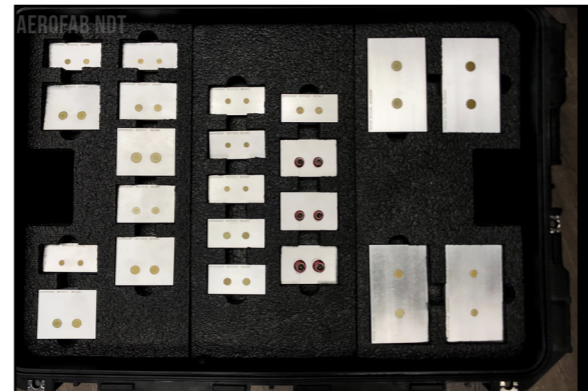
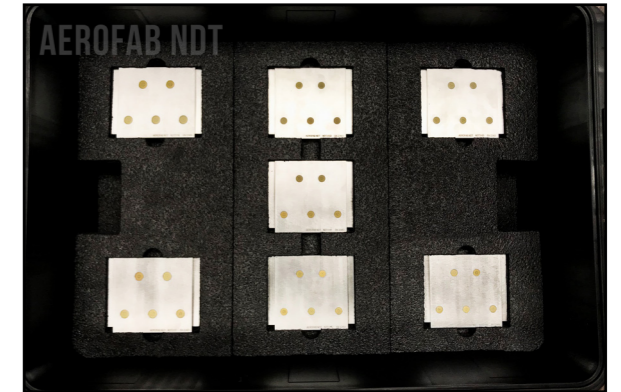
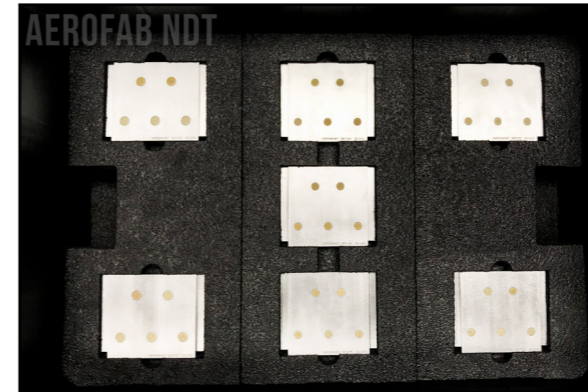
CUSTOM KITS

BOEING 737NG SDI WING INSPECTION

- 6 layer kit with custom foam cutouts for all parts
- Ships in SKB iSeries case - gasket sealed, water and dust tight, submersible design that is resistant to corrosion and impact
- Case features molded-in hinge, trigger release latch system, snap-down rubber over molded cushion grip handle, and automatic ambient pressure equalization valve
- **Procedure reference:** 57-10-05, 57-10-06, 57-10-07, 57-10-09, 57-10-13, 57-10-17, 57-10-53, 57-10-54, 57-10-55, 57-10-58, 57-10-59, 57-10-60, 57-10-62

TO ORDER:

AFK-7374



STAINLESS STEEL SCANNER PROBE KIT

Stainless steel rotating scanner probe kit includes 12 stainless steel rotating scanner probes in a waterproof case. Sizes range from 0.125" to 0.750" - all with a 2" working length. Supplied with a 4-pin fischer connector.

BOEING 767 UT INSPECTION KIT PART 4 57-20-04

UT front spar pitch-load fittings inspection kit for PART 4 57-20-04. Includes one each of the following in a waterproof Pelican 1150 case: AFS-1036, AFX-545AS, NDT6036, NDT6036P1, NDT6036P2, ABNC-MD6 cable, 4 oz bottle of couplant.

RECHII BOLT HOLE SCANNER PROBE KIT

Rechii universal rotary hole kit. Includes 8 of the following split-end probes in a waterproof case: ARR-.156-.187, ARR-.187-.218, ARR-.218-.250, ARR-.250-.281, ARR-.281-.312, ARR-.312-.375, ARR-.375-.437, ARR-.437-.500.

BOEING 737 HORIZONTAL STABILIZER KIT PART 4 55-10-13

Rear spar termination fitting inspection kit. Includes one each of the following in a waterproof Pelican 1150 case: AFS-1346, AFS-1346-SC, NDT3141, NDT3141G1, 4 Oz. bottle of couplant, ABNC-MD6.

TO ORDER:

AFK-AUR12SS

TO ORDER:

AFK-6036

TO ORDER:

AFK-AAR-.156-.500SE

TO ORDER:

AFK-1005

TEST REPORT & COC

All manufactured parts are supplied with a test report (when applicable) & COC at no extra charge



Certificate of Conformance

Customer Name: Dated:

Customer PO #: Quantity:

Part Number: Serial Number:

Description: Equivalent:

We certify that these parts shipped to you of domestic manufacture and conform to all requirements of the Purchase Order. The parts have been manufactured in accordance with all required specifications, instructions, and drawings.

Date: Signed: _____ Inspected By: _____
QA Manager

CERTIFICATION REPORT

Customer: Date: _____

Serial Number: Item: PO No: _____

Material: Size:

Applicable Specifications: Boeing Reference Standard 767 Part 4 54-50-17 Page 5 Figure 2

Measuring Technique Used: NIST TRACEABLE EQUIPMENT USED/TEST NO. 10916
 Replication Video Measurement System
 Direct Measurement Micro-Vu Model # M321 S/N 4683 89353
 Calibration: 2/14/19


Manufactured in accordance with Quality Assurance Program Revision 2 dated 1/15/08 that complies with MIL-Q-9858A, Mil-4-45208A

Notch	Type	Depth			Length			Width		
		Nom	Tol	Actual	Nom	Tol	Actual	Nom	Tol	Actual
1	Corner Through				0.100	±.005	0.1001	0.010	MAX	0.0063


Dimensions in inches

IT IS CERTIFIED THAT THIS REFERENCE STANDARD HAS BEEN MANUFACTURED IN ACCORDANCE WITH APPLICABLE SPECIFICATIONS AND INSPECTED WITH INSTRUMENTS CALIBRATED ANSI/NCSL 2540.3 (2006)

Inspected by: _____
QA Manager



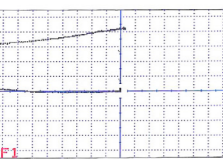
8629 S 212th St. Kent, WA 98031 USA T 253 395-8706 WWW.aerofabndt.com



Inspection Tools for Safer Skies

Setting Value Setting Value
 GAIN X 33.0 dB : Y 43.0 dB PHASE 311.0 deg
 FREQ 1.00 KHz FILTER BP RATIO
 HP/LP HP DC Hz: LP 30.00 Hz INPUT GAIN High
 PROBE Reflection ANALOG O/P 1 Y1
 ANALOG O/P 2 Y1 ACTIVE None
 ACTION Off SHAPE Sector
 START/END S1 Off: E1 Off IN/OUTER I1 Off: O1 Off
 DISPLAY Spot GRATITUDE Grid 2
 SPOT XY X 84 : Y -5 SPOT INFO None
 PERSIST 20.0 s SWEEP 10.0 s
 STRETCH 50 ms SAVE All
 RECALL Setup TRACE RECORD Off
 MODE NormalSingle PROBE ID Unknown
 LOAD uH 120 uH DRIVE 0
 BAL/CLR MODE Single P/DOWN Off
 KEY/CLICK Off COLOURS 3
 LANGUAGE English TIME 10:14
 DATE 16 Oct 19 CODE 165=1.12
 CODE prb=00.13 CODE kyd=01.01
 CODE dsp=01.20 CODE enc=00.00
 CODE brd=02 CODE prm=401011

NS-Full 23328 16 Oct 2019 10:14



ARP-30/80/7L(922237) SN 23405
TESTED BY Q.NGUYEN

Aerofab NDT
8629 S. 212TH ST. KENT, WA. 98031
Tel: 253-395-8706

Transducer Evaluation

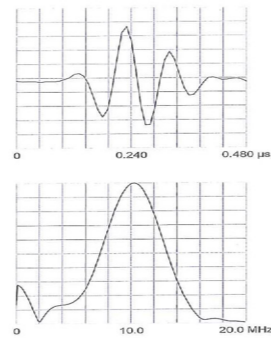
Frequency Spectrum Analysis

Transducer: Straight Beam
 Frequency: 10 MHz
 Equivalent: SUS 1020
 Size: .250" x .100"
 Model: AFS-1000A
 Reference Block: IIV TYPE2
 Probe S/N#: 23649
 Reference Block S/N: 4329

PR/AD: Us/Ultratek
 Damping: 60 ohm
 Type: PCI-3100
 Gain db: 35.8 db
 Pulse Voltage: 300 V
 Sampling Rate: 100 MHz
 Pulse Width: 87 ns
 PRF: 100 Hz

Measured Data

Peak Frequency: 10.156 MH.
 Center Frequency: 10.170 MH.
 Upper Frequency: 13.091 MH.
 Lower Frequency: 7.249 MH.
 Bandwidth(-6dB): 57.440 %



Inspected By: _____
Nathan Parker

LIMITED WARRANTY

WE STAND BEHIND THE QUALITY OF OUR PRODUCTS

All of our items go through several stages of quality control before it reaches the end user and are guaranteed to be free of defects at the time of shipment. Our limited warranty covers any defects in workmanship under normal use. Negligence, unauthorized modifications, accidents, theft or misuse of a product do not qualify as *defects*. All items are subject to our inspection prior to repair or replacement.

COVERAGE

AeroFab's limited warranty only applies to items purchased directly or through authorized resellers and are covered under a one-year warranty from date received. If we are unable to perform a functional repair, we will happily replace the item at no charge.

REQUESTING A RETURN AUTHORIZATION (RMA)

Claims are required for returns. Please email sales@aerofabndt.com for assistance with your order.

CONTACT:

sales@aerofabndt.com
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 +1 (253) 395-8706

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