

Advanced Measurement Labs., Inc.

Sun Valley, CA

Cincinnati, OH

1 800 2 CMM LAB

(1-800-226-6522)

CUSTOMER NAME
PART # 12345 REV XX
NAME OF PART CASTING

SAMPLE "A"

REPORT # 1234
DATE
PAGE 1 OF 3

REPORT SUMMARY

ITEM	DMENSION	TOL.	ZONE	ACTUAL	DEV.	REMARKS
1	.570	± .010	1A2	0.5711		MINIMUM
				0.5715		MAXIMUM
				0.5713		AVERAGE
				0.0004		RANGE
				0.00014		STDEV
				23.00		Cp
				19.99		Cpk
2	Ø 1.053	± .030	1B2	1.0572		MINIMUM
				1.0589		MAXIMUM
				1.0580		AVERAGE
				0.0017		RANGE
				0.00062		STDEV
				16.03		Cp
				13.38		Cpk
3	R .05 (4)	± .010	1B2	0.0500		TYPICAL, S/N: 1 - 10
4	R 1.0	± .03	1B1	1.0000 TYP.		TYPICAL, S/N: 1 - 10
5	3.871	± .005	1D1	3.8755		MINIMUM
				3.8760		MAXIMUM
				3.8758		AVERAGE
				0.0005		RANGE
				0.00021		STDEV
				8.06		Cp
				0.40		Cpk
6	3.683	REF	1D2	REF. DIMENSION		
7	.732	± .005	1E2	0.7330		MINIMUM
				0.7338		MAXIMUM
				0.7333		AVERAGE
				0.0008		RANGE
				0.00027		STDEV
				6.21		Cp
				4.58		Cpk

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		Deviation	
Item Number:	1	Minimum	0.5711
Blueprint Dimension:	.570	Maximum	0.5715
Blueprint Tolerance:	± .010	Average	0.5713
USL	0.580	Range	0.0004
LSL	0.560	STDEV	0.00014
		Cp	23.00
		Cpk	19.99

S/N	Actual	Dev.	Remarks
1	0.5711		
2	0.5713		
3	0.5715		
4	0.5714		
5	0.5713		
6	0.5711		
7	0.5715		
8	0.5714		
9	0.5713		
10	0.5712		

		Deviation	
Item Number:	2	Minimum	1.0572
Blueprint Dimension:	Ø 1.053	Maximum	1.0589
Blueprint Tolerance:	± .030	Average	1.0580
USL	1.083	Range	0.0017
LSL	1.023	STDEV	0.00062
		Cp	16.03
		Cpk	13.38

S/N	Actual	Dev.	Remarks
1	1.0589		
2	1.0576		
3	1.0572		
4	1.0574		
5	1.0584		
6	1.0574		
7	1.0585		
8	1.0584		
9	1.0574		
10	1.0585		

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				Deviation
Item Number:	5	Minimum	3.8755	
Blueprint Dimension:	3.871	Maximum	3.8760	
Blueprint Tolerance:	± .005	Average	3.8758	
USL	3.876	Range	0.0005	
LSL	3.866	STDEV	0.00021	
		Cp	8.06	
		Cpk	0.40	

S/N	Actual	Dev.	Remarks
1	3.8755		
2	3.8760		
3	3.8755		
4	3.8759		
5	3.8759		
6	3.8758		
7	3.8756		
8	3.8755		
9	3.8758		
10	3.8760		

				Deviation
Item Number:	7	Minimum	0.7330	
Blueprint Dimension:	.732	Maximum	0.7338	
Blueprint Tolerance:	± .005	Average	0.7333	
USL	0.737	Range	0.0008	
LSL	0.727	STDEV	0.00027	
		Cp	6.21	
		Cpk	4.58	

S/N	Actual	Dev.	Remarks
1	0.7330		
2	0.7338		
3	0.7334		
4	0.7331		
5	0.7330		
6	0.7335		
7	0.7331		
8	0.7333		
9	0.7336		
10	0.7333		

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ABC COMPANY
123456-001 REV X
PART NAME

SAMPLE "B"

REPORT # 1234
DATE
PAGE 1 OF 1

ITEM	DMENSION	TOL.	ZONE	ACTUAL	DEV.	S/N	REMARKS
1	ALL UNSPECIFIED CORNERS SHARP		NOTE 3	COMPLES			TYPICAL
2	PART CLEAN PER B/P NOTE 2		NOTE 2	COMPLES			TYPICAL
3	.005 FLASH	MAX	NOTE 8	0.0037 0.0037 0.0041		1 2 3	
4	.010 GATE	MAX	NOTE 9	COMPLES			TYPICAL
5	.005 P/L MISMATCH	MAX	NOTE 10	COMPLES			TYPICAL
6	ENERGY DR. FLUSH		NOTE 11	COMPLES			TYPICAL
7	FLAT W /IN .002		NOTE 13	0.0007 0.0008 0.0007		1 2 3	
8	.004 BURRS	MAX	NOTE 14	COMPLES			TYPICAL
9	E P N LOC.		NOTE 15	COMPLES			TYPICAL
10	.005 (21) E P N	MAX	NOTE 15	0.0058 0.0036 0.0056 0.0037 0.0057 0.0038	0.0008 0.0006 0.0007	1 2 3	21 PL.RANGE
11	LOGO POCKET LOC.		NOTE 18	COMPLES			TYPICAL
12	.012 RECESSED	± .003	NOTE 18	0.0124 0.0123 0.0120		1 2 3	
13	5.0° DFT	MAX	SEC T-T	COMPLES			TYPICAL

SAMPLE D

SAMPLE INSPECTION REPORT

CUSTOMER: ABC COMPANY					PART NO XXXXXXXX DESC. PARTS IS PARTS								REV. B	REPORT # 12345		DATE		REQUESTOR: MR. QUALITY
ITEM #	BLUEPRINT DIMENSION	TOLERANCE		B/P ZONE	METHOD OF INSPECTION	ACTUALS	OUT OF	ACTUALS	OUT OF	ACTUALS	OUT OF	ACTUALS	OUT OF	ACTUALS	OUT OF	REMARKS		
		PLUS	MINUS			SIN: 1	TOL.	SIN: 2	TOL.	SIN: 3	TOL.	SIN: 4	TOL.	SIN:	TOL.		CAV.	TOL.
1	NO DRAFT			NOTE 4	CMM	NO DRAFT												
2	0.005	0	0.005	NOTE 5	VIDEO (CMM)	COMPLIES											FLASH HIGH (MAX)	
3	0.005	0	0.005	NOTE 5	VIDEO (CMM)	COMPLIES											FLASH HIGH (MAX)	
4	0	0	0.03	NOTE 6	DROP INDICATOR	0.0112	0.0112	0.0098	0.0098	0.0117	0.0117	0.0091	0.0091			GATE SUB-FLUSH		
5	NOT USED			N/A		NOT USED												
6	0.090	0.005	0.005	D8	DROP INDICATOR	0.0920		0.0945		0.0924		0.0914						
7	32	1	1	D7	OPT. COMPARATOR	32.00		32.00		32.00		32.00				ANGLE		
8	1.125	0.004	0.004	C7	VIDEO (CMM)	1.1243		1.1235		1.1224		1.1222				DIAMETER		
9	20	1	1	C7	OPT. COMPARATOR	20.00		20.00		20.00		20.00				ANGLE		
10	0.010	0.005	0.005	C7	VIDEO (CMM)	0.0113		0.0110		0.0117		0.0114						
11	0.012	0.005	0.005	C8	DROP INDICATOR	0.0138		0.0136		0.0128		0.0139						
12	45.00	1	1	C8	OPT. COMPARATOR	45.00		45.00		45.00		45.00				ANGLE		
13	0.004	0.005	0.005	C8	OPT. COMPARATOR	0.0027		0.0041		0.0028		0.0037						
14	1.060	0.005	0.005	E5	VIDEO (CMM)	1.0553		1.0542	-0.0008	1.0562		1.0543	-0.0007			DIAMETER, @ MMC		
15	0.967	0.004	0.004	E5	CMM	0.9635		0.9642		0.9637		0.9637				DIAMETER		
16	30	1	1	E5	OPT. COMPARATOR	30.00		30.00		30.00		30.00				ANGLE		
17	0.02	0.015	0.015	E5	RADIUS GAGE	0.0200		0.0200		0.0200		0.0200				RADIUS, (2X)		
18	0.050	0.005	0.005	D5	OPT. COMPARATOR	0.0500		0.0500		0.0500		0.0500				RADIUS		

FIRST ARTICLE INSPECTION REPORT

CUSTOMER ABC COMPANY		DESCRIPTION CASTING				DATE 3/29/02	PAGE NO. 1 OF 1		
PART NO. 1098765432-1	REV B	INSPECTOR AML REPORT # 8614	CAD FILE NAME/NUMBER		REV	P.O. NUMBER	SERIAL #S 1 THRU 3		
PRINT NO. 1098765432	REV B	PRODUCT ENGINEER	WAX:	AS-CAST:	FINAL: X	OTHER:	100%: X PARTIAL:		
Code	B/P Zone	B/P Specification	Tolerance	Actual Measurement PART 1	Actual Measurement PART 2	Actual Measurement PART 3	OUT OF TOLER.	INSPECT METHOD	Comments
1		PARTS FREE OF CRACKS, PITS VOIDS & CORROSION		COMPLIES	COMPLIES			VIS	
2		.010 FLASH	MAX	COMPLIES	COMPLIES			OC	
3		ALLOWABLE GATE REMNANTS		GATE PRESENT	GATE PRESENT			VIS	LOC. NOT SPECIFIED
4		R .045 (8)	± .005	0.0469 TYP.	0.0469 TYP.			RG	
5		0.1 B D E		(+) 0.179	(-) 0.175		X	CMM	2ND OPENING (TOP & BOTTOM)
6		0.05	± .005	0.0370	0.0290			CMM	
7		.100 (2)	± .005	0.0960 0.0985	0.0975 0.0990			DI	
8		R .015 (2)	± .005	0.0200 TYP.	0.0200 TYP.			RG	
9		0.225	± .005	0.2261	0.2233			CMM	
10		R .070	± .005	0.0700	0.0700			RG	
11		R .375	± .005	0.3750	0.3750			RG	
12		R FULL		FULL R	FULL R			VIS	

METHOD OF MEASUREMENT

CMM = COORDINATE MEASURING MACHINE
OC = OPTICAL COMPARATOR

M = MICROMETER
C = CALIPERS

HG = HEIGHT GAGE
R = RADIUS GAGE

P = PIN
O = OTHER(EXPLAIN)

ALL PROFILES REPORTED AS MATERIAL CONDITION. (-) = MINUS MATERIAL / (+) = PLUS MATERIAL

LMC=LEAST MATERIAL CONDITION

SP=PROFILE OF A SURFACE

LP=PROFILE OF A LINE

TP= TRUE POSITION

RFS=REGARDLESS OF FEATURE SIZE

MMC=MAXIMUM MATERIAL CONDITION

