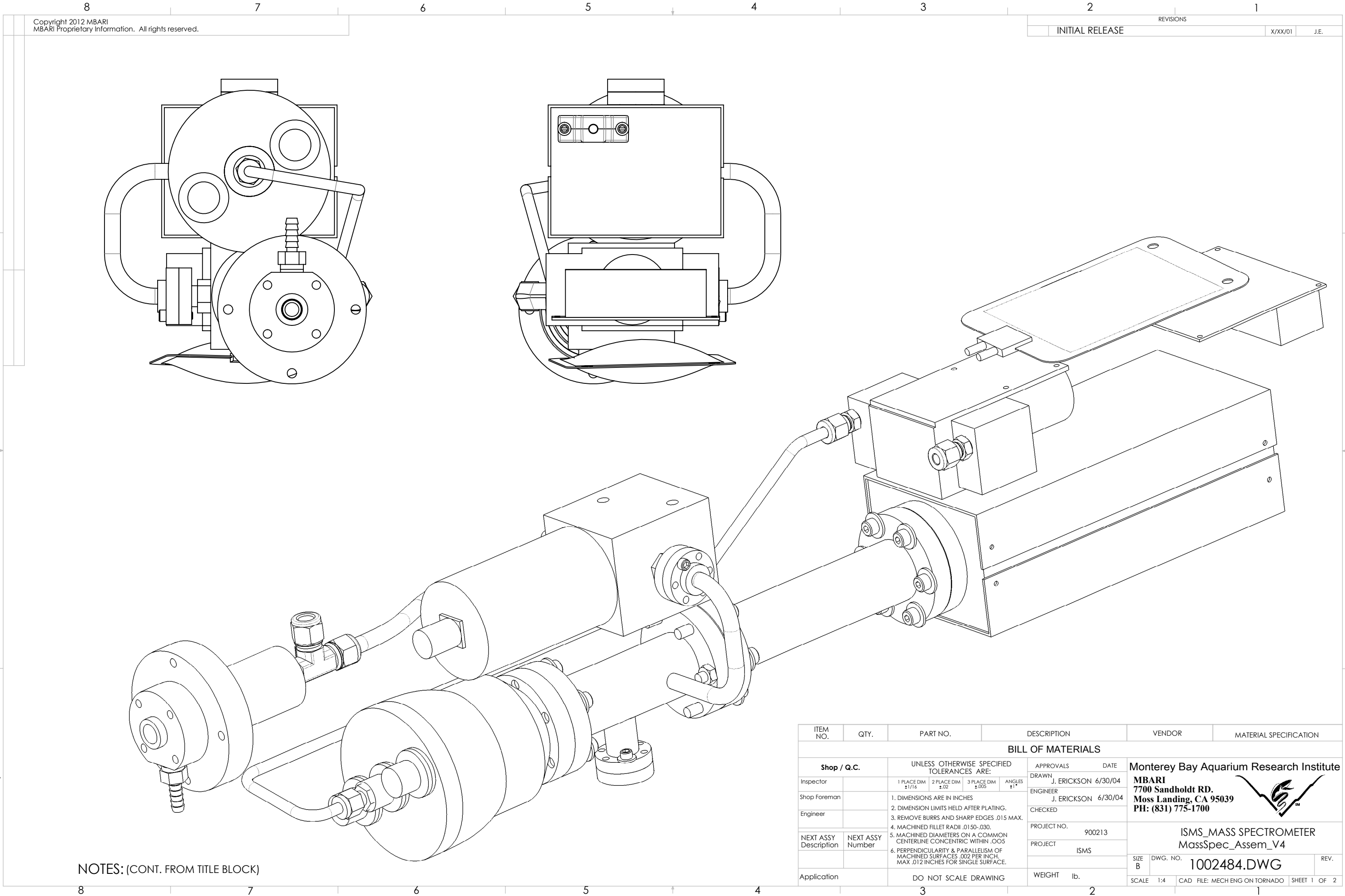




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REVISIONS

INITIAL RELEASE

X/XX/01

J.E.

NOTES: (CONT. FROM TITLE BLOCK)

ITEM NO.	QTY.	PART NO.	DESCRIPTION	VENDOR	MATERIAL SPECIFICATION
BILL OF MATERIALS					
Shop / Q.C.		UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		APPROVALS	DATE
Inspector		1 PLACE DIM ±1/16	2 PLACE DIM ±.02	3 PLACE DIM ±.005	ANGLES ±1°
Shop Foreman		1. DIMENSIONS ARE IN INCHES		DRAWN	J. ERICKSON 6/30/04
Engineer		2. DIMENSION LIMITS HELD AFTER PLATING.		ENGINEER	J. ERICKSON 6/30/04
		3. REMOVE BURRS AND SHARP EDGES .015 MAX.		CHECKED	
		4. MACHINED FILLET RADII .0150-.030.		PROJECT NO.	900213
NEXT ASSY Description	NEXT ASSY Number	5. MACHINED DIAMETERS ON A COMMON CENTERLINE CONCENTRIC WITHIN .005		PROJECT	ISMS
		6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH. MAX .012 INCHES FOR SINGLE SURFACE.		WEIGHT	lb.
Application		DO NOT SCALE DRAWING		Monterey Bay Aquarium Research Institute	
				MBARI	
				7700 Sandholdt RD.	
				Moss Landing, CA 95039	
				PH: (831) 775-1700	
					
				ISMS_MASS SPECTROMETER	
				MassSpec_Assem_V4	
				SIZE B	DWG. NO. 1002484.DWG
				SCALE 1:4	REV.
				CAD FILE: MECH ENG ON TORNADO	SHEET 1 OF 2

Monterey Bay Aquarium Research Institute
MBARI
7700 Sandholdt RD.
Moss Landing, CA 95039
PH: (831) 775-1700



ISMS_MASS SPECTROMETER
MassSpec_Assem_V4

87654321

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REV. DESCRIPTION DATE APPROVED

INITIAL RELEASE X/XX/00 J.E.

ITEM NO.	QTY.	DESCRIPTION	Vendor	MATERIAL	PART NUMBER
1	1		SANFORD RESEARCH		MassSpec_SRS-xxx
	1	Electronics			SRS-xxx
	1	QuadraPole			QuadraPole
2	1	PLUG			DB15
3	1	HYBRID TURBOMOLECULAR PUMP	ALCATEL		Alcatel ATH31+
4	6	SOC HD CAP SCRESW	MCMaster-CARR	316 SS	[948] 1/4 -20 UNC x 1 1/4
5	18	SAE FLAT WASHER	McMaster-CARR	316 SS	[18] 1/2" SAE
6	3	XXXXXXXXXX			A&N_DN16-ISO-KF
7	1				SpliceTubeAssem3
	1	3/8 TUBE		316 SS	SpliceTube3
8	1	XXXXXXXXXX			Circle Seal_SV400
9	1	TUBE ADAPTOR	A&N CORP	316 S.S.	A&N_QF16x25-SWG
10	1	1/4 TUBE		316 S.S.	Pump-Tube
11	1	DIAPHRAM VACUUM PUMP	KNF Neuberger		KNF_N84.3ANDC
12	2				SS-400-1-2
13	1				BAG
14	1	XXXXXXXXXX			SS-600-2-6ST
15	1	XXXXXXXXXX			Alcatel PumpController
16	1				Adaptor-Assem
	1	XXXXXXXXXX			SS-600-1-6ST_V2
	1				A&N_Mini-CF-133-000-T
17	2	SOC HD CAP SCRESW	MCMaster-CARR	316 SS	V744] #8 -32 UNC x 0.625
18	6	SOC HD CAP SCRESW	MCMaster-CARR	316 SS	[947] 1/4 -20 UNC x 1
19	1				MembraneBulkHd_Assem1
	1	XXXXXXXXXX		316 SS	MembraneBulkHd_Adaptor
	1				SS-600-3TST
	1	O-RING		BUNA - N	2-132
	1	O-RING		BUNA - N	2-140
	1	1/2 FRIT 2.0 MICRON	UPCHURCH SCIENTIFIC	316 SS	Frit_Disk
	1	O-RING		BUNA - N	2-017
	1	O-RING		BUNA - N	2-012
	1	O-RING		BUNA - N	2-023
	1	RND. BAR		316 S.S.	Pump_Frit-Cover_V3
	1	HOSE BARB FITTING			NPT-M_HOSEBARB
20	1				Ionizer_CF-Long Tee Assem
	1	XXXXXXXXXX			A&N_275x133-RDT_Tee
	1	3/8 TUBE		316 SS	375x065_Tube
	1	Mini-CF-Flange-Rotatable	A&N Corp	304 SS	A&N_Mini-CF-133-000-R-WNB
21	1				A&N_Mini-CF-133-000-T
22	1	Zinc-Plated Steel	McMaster-CARR	316 SS	[15] #8 SAE
23	6	SOC HD CAP SCRESW	MCMaster-CARR	316 SS	[949] 1/4 -20 UNC x 1 1/4
24	1	18-8 Stainless Steel	McMaster-CARR		[30] 1/4" -20

NOTES: (CONT. FROM TITLE BLOCK)

UNLESS OTHERWISE SPECIFIED
TOLERANCES ARE:

1 PLACE DIM ±1/16

2 PLACE DIM ±.02

3 PLACE DIM ±.005

ANGLES ±1°

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6. PERPENDICULARITY & PARALLELISM OF MACHINED SURFACES .002 PER INCH, MAX .012 INCHES FOR SINGLE SURFACE.

DO NOT SCALE DRAWING

APPROVALS DATE

DRAWN J. ERICKSON 6/30/04

ENGINEER J. ERICKSON 6/30/04

CHECKED

PROJECT NO. 900213

PROJECT ISMS

WEIGHT

Monterey Bay Aquarium Research Institute

MBARI
7700 Sandholdt RD.
Moss Landing, CA 95039
PH: (831) 775-1700



ISMS_MASS SPECTROMETER
MassSpec_Assem_V4

SIZE B

DWG. NO. 1002484.DWG

REV.

SCALE 1:4 CAD FILE: MECH ENG ON TORNADO SHEET 2 OF 2