



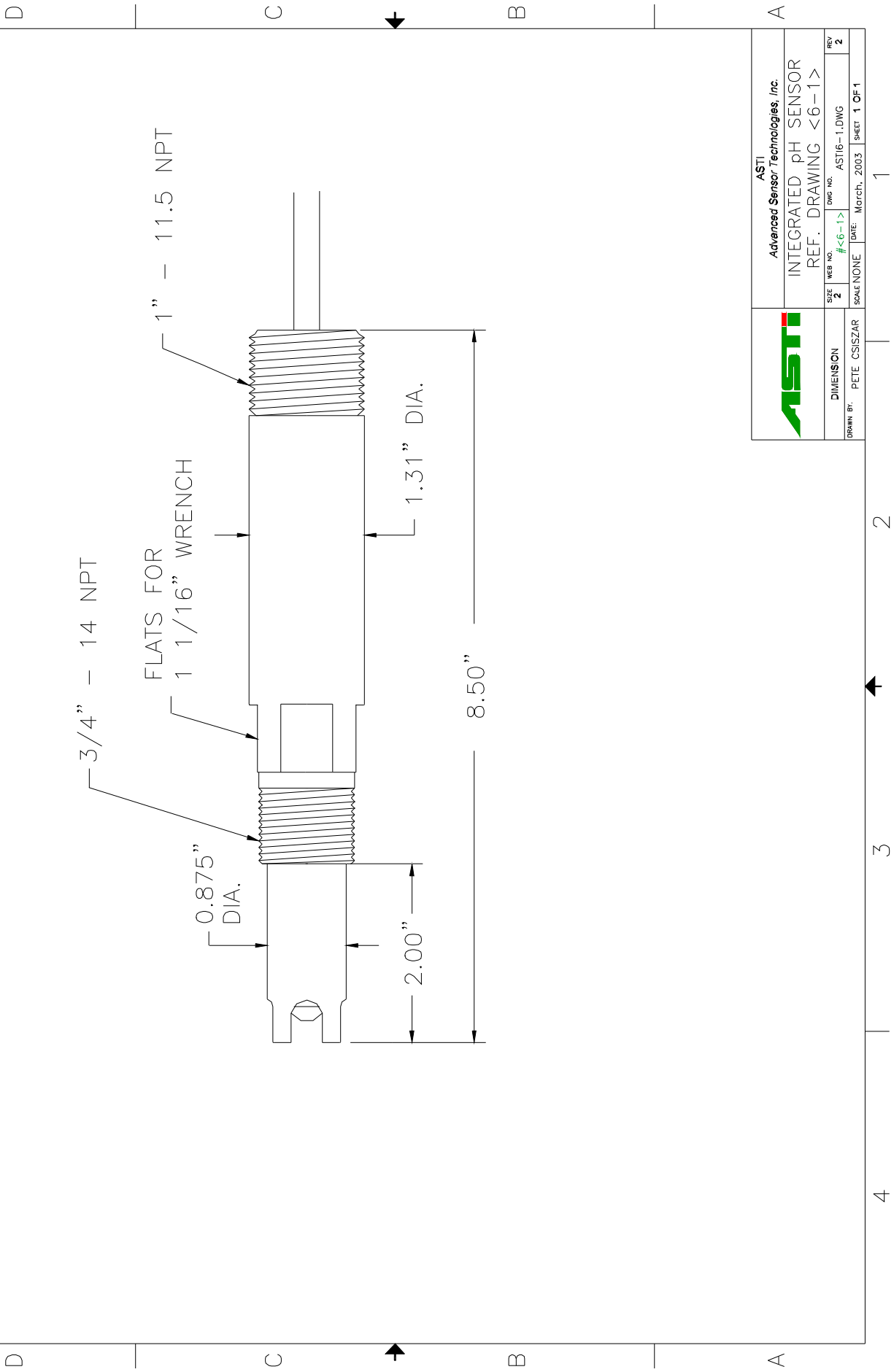
IOTRON™ SENSORS

INTEGRATED pH SENSOR SPECIFICATIONS

<u>Part Number:</u>	6541
<u>Configuration:</u>	3/4" – 1" MNPT Integrated, Paper/Pulp Resistant pH Sensor
<u>General Specifications:</u>	
<u>pH Range:</u>	0 to 14 pH
<u>Temperature Range:</u>	-5 to 105 ° C
<u>Pressure Range:</u>	1 to 150 psia (6.9 to 1,035 kPa absolute)
<u>Body Material:</u>	PEEK (Poly-Ether-Ether-Ketone)
<u>Junction Material:</u>	Kynar (Poly-Vinylidene-Fluoride)
<u>Dimensions:</u>	Drawing <6-1>
<u>Cable:</u>	RG 174/U Coaxial (without preamplifier)
<u>Connector:</u>	BNC (unless otherwise specified)
<u>pH Sensor Specifications:</u>	
<u>Measuring Glass Type:</u>	Hemispherical, Green Glass (MUGG)
<u>Dimensions:</u>	0.310, (7.8 mm) DIA
<u>Initial Impedance:</u>	Less than 800 M Ohms @ 25 ° C
<u>Sodium Ion Error:</u>	Less than 0.15 pH in 1.0 M Na ⁺ Concentration at pH 14.00
<u>Acidic Error:</u>	Less than 0.05 pH in 1.0 M HCl @ 0.00 pH
<u>Reference System Specifications:</u>	
<u>Type:</u>	Double Junction
<u>Reference Half Cell:</u>	Ag/AgCl, Saturated KCl
<u>Primary Junction:</u>	Porous Ceramic, Saturated KCl in crosslinked polymer
<u>Secondary Junction:</u>	Porous Kynar, Saturated with KCl in crosslinked polymer
<u>Surface Area:</u>	366,000 mil ² (236 mm ²)
<u>Special Features:</u>	Body (PEEK) and reference junction materials (Kynar) and crosslinked polymer are extremely resistant to heat, solvents and to most chemicals. Sensor holds an excess of KCl, assuring saturation at all temperatures and extending in situ sensor life. The reference system holds a generous supply of aqueous saturated KCl, eliminating effects of intruding contaminants and permits the sensor to be left in dry condition for extended periods of time. A reference electrode surface specifically crafted for the paper/pulp flow characteristics, the abrasive resistant Kynar surface combined with an extremely rugged, dome shaped pH electrode surface make up the successful combination of features to create the most resilient pH sensor in its field.
<u>Recommended Applications:</u>	Paper/pulp processing, abrasive slurries, slurries with high solid content.
<u>Storage and Shelf Life:</u>	At room temperature with closed protector cap, 1 year from date of manufacture.
<u>Standard Hook-Up Options:</u>	No Preamp - BNC Connector + TC lead wires With Preamp – Multiconductor Lead Wires – See Hook Up Schematics

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ZONE		REV		DESCRIPTION		DATE		APPROVED	
2	1								



ASTI Advanced Sensor Technologies, Inc.		INTEGRATED pH SENSOR	
DIMENSION		REF. DRAWING <6-1>	
SIZE	WEB NO.	DWG NO.	REV
2	#<6-1>	ASTI6-1.DWG	2
SCALE NONE		DATE: March, 2003	SHEET 1 OF 1
DRAWN BY: PETE CSISZAR			