

**JWS - 7500E / 7700E**

*Wafer Inspection Systems*

**Installation Facilities Requirements**

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### Installation Room: Environment

1. Room size.....1968mm (78")x 2900mm (115") diagram on page 4
2. Entrance.....1.2m (48") wide x 1.7m (67") high
3. Room temperature.....20 - 22 degrees C. (68 - 72 degrees F.)
4. Humidity.....60% or less
5. Stray magnetic fields.....3 mGauss or less (60 Hz)
6. Floor vibration.....3  $\mu$ M P-P or less (3.5 Hz or higher)
7. Floor loading.....see drawing on page 5

\*Note room layout shows right side console option.

\*Note OSHA standard 29CFR1910.303I requires a 4 foot space around the instrument for safety.

## Power Requirements

208 VAC, three phase, 40 amp maximum, 20 amp under normal operation.  
Earth ground requirements.....100 ohms or less

NOTE: A disconnect box is recommended for the basic installation. It should be fused and located at least 6 feet from the pump console and electron optical column.

Different EDS manufacturers power requirements may vary, please consult with your EDS manufacturer.

## Dry nitrogen requirements

2 nitrogen lines (1 for venting and 1 for valving). Venting line should be ultra pure dry nitrogen.

70-100 PSI Flow rate of 300 liter/min (10.6 CFM) -- see drawing on page 6 for connections

## House vacuum requirements

Used for wafer auto loading mechanism:

1. Vacuum source 0.26 Kg/cm<sup>2</sup> (190 torr) or less
2. Pumping speed 12 liter/min (.4 CFM) or more--see drawing on page 6 for connections.

## Water requirements

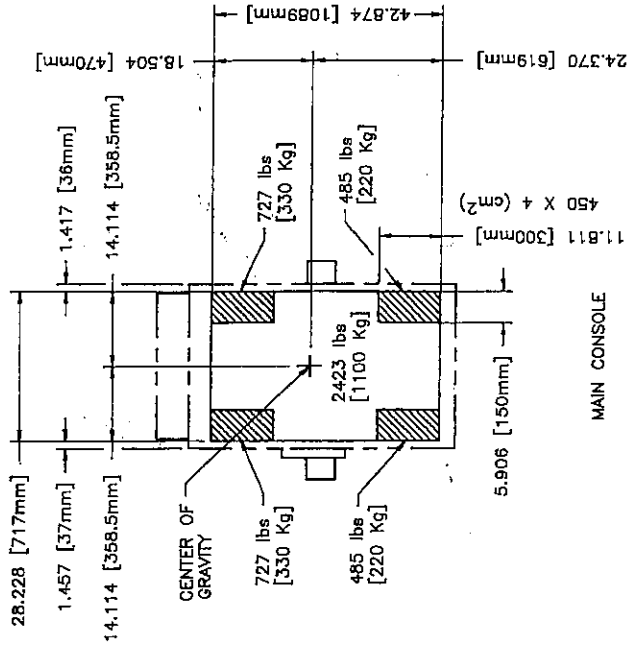
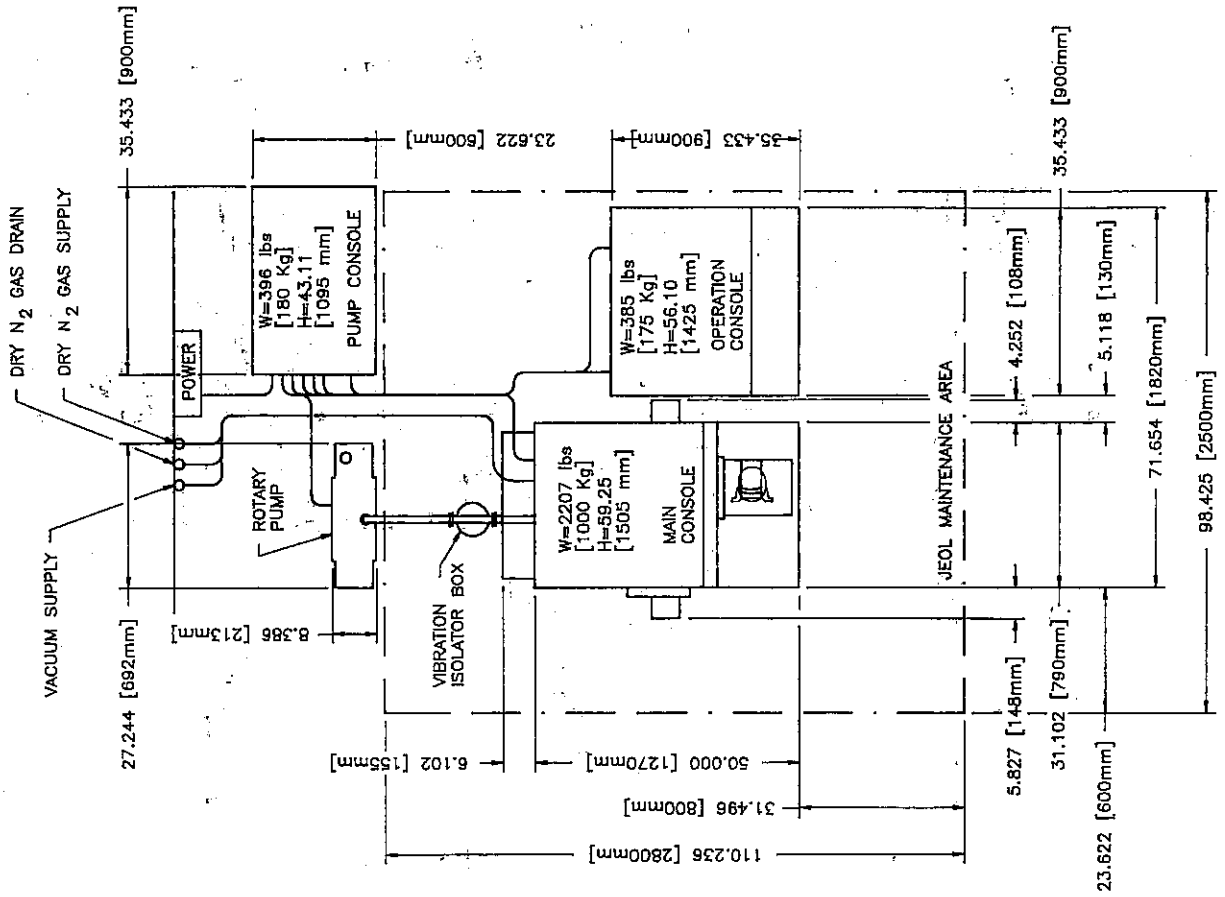
The JWS-7500 in it's standard configuration does NOT require water. Some EDS detectors do require water, if applicable, please check with your EDS manufacturer.

## Rotary Pump

1. RP exhaust flow rate  $.83\text{m}^3/\text{minute}$  (2.75 CFM) or more with the standard rotary pump (765 liter/min or 27 CFM)
2. NW 40 fitting used on stainless steel bellows.
3. Stainless steel bellows 30 inches long for standard RP.
4. If pump configuration is to be changed from the standard Alcatel model 2033 installed within 30 inches, please ensure that a minimum vacuum level of 50 millitorr and a pumping speed of 75 liters/min (2.6 CFM) is available at the input to the main console.

## Heat load to room

1. Main console - 4,000 BTU/hour
2. Operation console - 4,000 BTU/hour
3. Pump console - 4,000 BTU/hour
4. RP - 3,200 BTU/hour



REV	DESCRIPTION	DWN	DATE	APPD
A	INITIAL RELEASE	RAP	11/13/95	MM

APPD BY	DATE	TITLE
SCALE	1:18	JWS-7500/7700
DD, NOT SCALE PRINT		

DWN BY	DATE	SIZE	DWG NO	REV
RAP	NOV '95	C	00855-02	A

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