

**Installation****1.0 Unpacking**

Save all shipping documents upon arrival of the HTC 4000. To ensure a complete package, the following should be checked before acceptance:

- Inspect the condition of the crate for any broken parts or shell damage. If any damage has occurred during shipment, make a notation on the shipper's sign-off form and have the shipper sign the document.
- Remove the system from the crate and inspect it for broken parts and cabinet damage. Inspect the electrical compartment for loose or disturbed items.

A complete package should include:

- One HTC 4000 in acceptable condition.
- Two part baskets (one multi-basket and one wafer carrier basket).
- Two Systems Manuals (one on bond paper; one on clean room paper).
- One DI water filter element.
- One blank EPROM.
- Any options ordered.

**2.0 Moving**

The HTC 4000 can be moved by sliding a properly rated pallet jack underneath the entire unit from either the front or the rear. The approximate weight of the unit is 500 lbs.

Be certain all front panel doors are closed, locked and/or taped shut while moving the HTC 4000.

**3.0 Facilities Requirements****Electrical System**

208 VAC, 3 phase, 150 Amps

**Exhaust**

1.5 - 2.5" H<sub>2</sub>O

**Clean Dry Air**

40 to 60 psi regulated

**Deionized Water**

20 psi, 6 gpm flow capacity

**Drain**

6 gpm, gravity flow

**Installation  
(continued)****4.0 Installation Procedures**

*See Figure 2*

**4.1 Leveling**

The performance of the HTC 4000 requires proper leveling.

Tools required:

- 10" crescent wrench
- Carpenter's liquid level

Procedure:

- Place the liquid level inside the process chamber on the lower spray arm shaft.
- Adjust the leg levelers with the crescent wrench until the liquid level indicates proper horizontal and vertical alignment.

**4.2 Liquid Connections**

Deionized Water Connection:

- Located in the rear lower left of the unit is a 1/2" NPT PFA water valve (see Figure 2). A flexible deionized water line regulated @ 20 psig with a regulated flow rate of 6 gpm is required. Once the optimum incoming DI water pressure is determined by a Fluoroware service engineer, record this pressure. Proper system operation requires that the DI water pressure be adjusted to this value after any maintenance work is performed on the unit.

Drain Connection:

- Located in the rear lower right of the unit is a 1-1/4" stub (see Figure 2). Connect this stub to a flexible line and route to a city or industrial waste drain. A 6 gpm gravity flow is required.

**4.3 Clean Dry Air (CDA) Connection**

At the rear of the unit is a 1/4" flexible air line that is approximately 12 feet long (see Figure 2). Connect the line via a regulator to the CDA supply line. Adjust the air pressure to 20 to 40 psi. Filtering is not required.

**4.4 Exhaust Ventilation Connection**

At the upper rear of the HTC 4000 is an 8" diameter exhaust collar (see Figure 2). Connect this to the house exhaust system. (Since the exhaust can reach temperatures of over 200°F, metal exhaust ducting is recommended for this connection.) The required exhaust vacuum is 1.5 - 2.5" H<sub>2</sub>O.

**Installation  
(continued)**

4.5 Electrical Connection

A load center and safety panel box are provided with the HTC 4000. These are on a flexible cable conduit and can be remote-mounted. Knock-outs are provided around the perimeter of the safety panel box. The power requirements for the HTC 4000 are as follows:

208 VAC 3 phase 150 Amps 60 Hz

**Note:** Exercise extreme caution while working around high power electrical supplies.

Do not install the EPROM into the Omron controller prior to start-up by an approved Fluoroware representative. The enclosed EPROM is blank and requires burn-in after all fluid delivery and drain times have been optimized for your unit.

5.0 Installation Checklist

Review the following items to ensure installation has been completed:

<u>Item</u>	<u>Date Completed</u>
Leveling	
DI water record:	
pressure	
flow rate	
Drain	
CDA	
Exhaust	
Electrical	