

QUARTZ J I G

S P E C I F I C A T I O N

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This list is representative. In case of preparing quartz, we will provide  
customer approval drawing and reliable list.  
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The quartz ware should be prepared, as follows.  
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GE 214, TOSHIBA CERAMICS T-1630S,  
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SHIN-ETSU HX-LA, or Equivalent  
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## IV QUARTZ JIG RELATED ITEMS

N <sup>o</sup>	Name of Part	Drawing No.	Quantity	Remarks
1	Quartz Outer Tube	110530162311	1	
2	Quartz Inner Tube	110530162411	1	
3	Quartz Boat (126SL)	110510093511	1	
4	Quartz VARIABLE FIN FEDESTAL	110520098511	1	
5	Quartz VARIABLE FIN	110530178011	40	
6	Quartz Cap Cover	110530178111	1	
7	Quartz Guide T/C	110540118111	1	
8	Quartz Injector (600mL)	110540118211	1	Back-N <sub>2</sub>
9	Quartz Injector (Straight)	110540118511	4	NH <sub>3</sub> , ClF <sub>3</sub> , H <sub>2</sub> , O <sub>2</sub>
10	Quartz Injector (45mL)	110540118411	1	SiH <sub>2</sub> Cl <sub>2</sub>
11	Quartz Injector (100mL)	110540118311	1	SiH <sub>4</sub>
12	Quartz Shutter	110530177911	1	
13	Quartz Manifold Cover	110530178211	1	

ADDITIONAL

PROVISIONS

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## V SUPPLEMENTARY CONDITIONS

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### 1. Nature and Standards of Basic Performance Confirmation Tests (Source Inspection)

#### (1) Gas supply system leak check:

The N<sub>2</sub> gas sealed in at a pressure of about 2 kg/cm<sup>2</sup>, must be confirmed that the pressure fall rate is less than 0.1% per hour over a period of 12 hours.

#### (2) Vacuum check : Base pressure : less than 0.05 Torr (at Pirani sensor) Leak rate : less than 0.5 lusec (at room temp.)

#### (3) Operating tests of various actuators

The MFCs and valves shall be tested for their normal operation.

#### (4) Alarm input check

All the sensors shall be checked for their normal operation.

#### (5) Interlocked operation of the automechanism

Confirm that the transfer unit and the recipe make a coordinated movement.

### 2. Delivery to the installation site

#### (1) Ceiling height : 3400mmH (Its height for building the I/O frame is 2900mmH)

#### (2) Entrance door size : ( mmW × mmH × — mmD )

#### (3) Floor condition : a) Furnace unit position ( ) U/BOX position ( ) P/BOX system position ( )

b) A step on the floor plane  
(exist or not exist:  
if exist at what height in mm)

#### (4) Elevator height : mmH

#### (5) Furnace unit will be divided at delivery. height : Furnace unit ; 2100mm U/BOX ; mm F/BOX ; mm P/BOX ; mm PW/BOX ; mm C/BOX ; mm

#### (6) Others

In case of air transport delivery, the height shall be within 2910mm at the maximum including the crate.

3. Extent of the work shared between your company and ours upon the installation of the system on the site:

- (1) Tokyo Electron Ltd shall deliver and install the system.
- (2) The works related to the interfacing of primary source lines (power, water, gas, and exhaust, etc.) as well as the partition and scaling works shall be executed by your company.

4. Warranty

(1) Period covered:

The warranty is valid for a period of one full year from the date the equipment is accepted by your company.

- (2) TEL will not warrant a component or material supplied by your company for integration into the equipment, or consequence attributable to such an item.
- (3) TEL will not warrant a specific component or material you have instructed TEL to procure and build into the equipment, or consequence attributable to such an item.
- (4) TEL will not warrant any consequence resulting from the equipment retrofitted at your sole discretion without consulting with TEL.
- (5) The consumable articles such as quartz ware shall be exempted from the warranty.
- (6) For further details of the warranty clauses, please refer to the "Supplementary Conditions to the Estimates and Specifications" prepared by Tokyo Electron Ltd.
- (7) For Acceptance criteria, please consult with us.

VI GLOSSARY AND ABBREVIATIONS USED IN THIS MANUAL

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- (1) FNC ..... furnace
- (2) F/U ..... filter unit
- (3) E/L ..... elevator
- (4) B/T ..... boat transfer
- (5) A/D ..... auto-door
- (6) A/S ..... auto-shutter
- (7) T/C ..... thermocouple
- (8) U/BOX ..... utility box
- (9) PDU ..... plasma display unit
- (10) EMO SW ..... emergency off switch
- (11) C/R ..... clean room
- (12) U/R ..... utility room
- (13) H.C.T. .... handy communication terminal
- (14) RCU ..... rapid cool down unit
- (15) P/BOX ..... pump box