

|                 |            |  |                          |             |
|-----------------|------------|--|--------------------------|-------------|
| Sold-to party   |            |  |                          |             |
| Material        |            |  | RTP HELIOS SYSTEM REL. 1 |             |
| Quantity        | 1.000      |  | EA                       | Item 000010 |
| Req. deliv.date | 05-01-2007 |  |                          |             |

**MTT-1432**

|                                |             |
|--------------------------------|-------------|
| QUOTATION NUMBER               |             |
| 609                            |             |
| FIRST TOOL IN LINE             |             |
| YES                            | FTL1        |
| PROCESS APPLICATION STD        |             |
| RTA                            | RTA         |
| RTO                            | RTO         |
| PROCESS APPLICATION SILICIDES  |             |
| YES                            | PAS1        |
| CONTROLLER SELECTION SILICIDES |             |
| CoSi                           |             |
| FOUP LOADPORTS                 |             |
| CES REQUIRED                   | FL3         |
| FOUP LOADPORTS CES             |             |
| TDK TAS300 E4 ADVATAG READER   | F_L_H_CES_4 |
| AUTOMATION SEMI E84 1          |             |
| HOKUYO 5M FOR OHT              | AS3         |
| POWER FREQUENCY                |             |
| 60 Hz                          | PF2         |
| TRANSFORMER                    |             |
| NO TRANSFORMER                 |             |
| DISTANCE PML POWERRACK         |             |
| CABLE LENGTH 15 METER          | DPP3        |
| DISTANCE PML BLOWER            |             |

|                                |       |
|--------------------------------|-------|
| HOSE LENGTH 4 x 15 METER       | DPBH3 |
| DISTANCE BLOWER POWERRACK      |       |
| CABLE LENGTH 15 METER          | DBP3  |
| FRONTSIDE GUI CABLE LENGTH     |       |
| CABLE LENGTH 5 METER           | FGC1  |
| EXTERNAL UPS                   |       |
| YES                            | EU1   |
| SIGNAL TOWER                   |       |
| FRONT                          | SIT1  |
| SIGNAL TOWER CONFIGURATION     |       |
| SPECIAL                        | STC2  |
| INSTALLATION TEMPLATE 2D       |       |
| NO                             |       |
| CALIBRATION WAFER SET          |       |
| YES                            | CWS1  |
| EARTHQUAKE PROTECTION          |       |
| YES                            | EPI   |
| SMOKE DETECTORS                |       |
| YES                            | SDH1  |
| SERVICE LAPTOP                 |       |
| INCLUDED IN STANDARD           |       |
| HANDL OVER PRESSURE MONITORING |       |
| YES                            | HOPM1 |
| REARSIDE MAINTENANCE CONSOLE   |       |
| YES                            | RCM1  |
| SYSTEM SOFTWARE VERSION        |       |
| LATEST                         | SSV1  |
| GEM                            |       |

|                       |      |
|-----------------------|------|
| ETHERNET ( HSMS )     | GH2  |
| REMOTE CONTROL SYSTEM |      |
| YES                   | RCS1 |
| DOCUMENTATION         |      |
| CD1                   | DOC1 |

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|                                    |       |
|------------------------------------|-------|
| GAS CONFIGURATION HELIOS           |       |
| GAS SYSTEM                         |       |
| TOXIC GASES                        |       |
| 2 LINES                            | TOX2  |
| MFC TYPE                           |       |
| STEC METAL SEALED                  | MT4_H |
| TOXIC GASES N2O                    |       |
| NO                                 |       |
| TOXIC GASES H2                     |       |
| YES                                |       |
| LINES 1 NH3 / H2                   |       |
| H2 50 SLM                          |       |
| LINES 2 NH3 / H2                   |       |
| NH3 30 SLM                         |       |
| AMBIENT CONTROL KIT                |       |
| YES                                | YES   |
| KIT SELECTION                      |       |
| Ar NON STD MFC                     | KIT4  |
| PROCESS APPLICATION USJF           |       |
| YES                                | YES   |
| CONTROLLER SELECTION               |       |
| FC FAC AMBIENT 2LIN NONSTD MFC FC2 |       |
| GAS PRESSURE DISPLAY               |       |

Torr

D4

-----  
CES

YES

C1

CES LIST

GAS DETECTOR ALARM OUTPUT CESH11

LEAK CHECK PORT GAS BOX CESH16

CHILLER CESH24

LIGHT TOWER RIGHT SIDE CESH26

ADDITIONAL GAS LINE O2 200SCCM CESH37

3D TEMPLATE SPECIAL V1 HY CESH47

MFC INSITU CALIBRATION CESH57

VCR GASKET UNPLATED NI

ABATEMENT INTERFACE SYSTEM CESH60

MODE SWITCHING CESH63

WARRANTY EXTENSION 1YR. CESH64

NON STD PAYMENT TERMS CESH65

SINGLE FACILITY CONNECTION CESH86

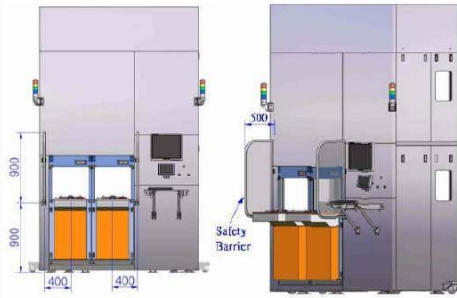
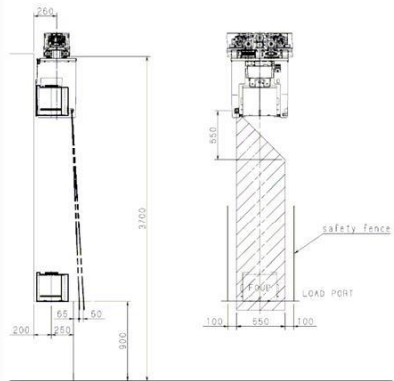
OHT BARRIER COMPLETE CESH91

IDEC EMO BUTTOM CES120

HOKUYO DMG HB1 - 1 - ZO3 CESH122 (Change this type to following  
reference TAS)

1. This clarification will update information and in place of the same items of TAS document.

2. 5.3.3.7.2  
NTC adds new requirement: NTC provided limitation illustration for safety fence installation as follows. The safety fence must base on the limitation illustration.



3. 5.3.3.8.1  
NTC update E84 sensor type to DMG-GB1 series or DMJ-GB1 series (Head-On), vendor must comply.

【final version】

**E84 Compliant Parallel I/O Interface Installation Requirement**

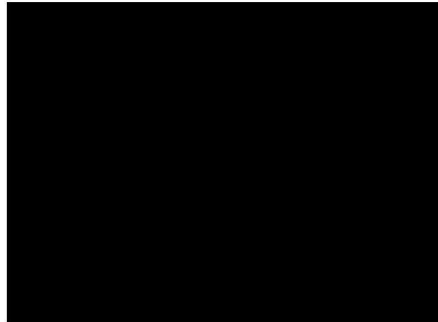
██████████ will be using OHT intrabay equipment.

Parallel I/O interface is used as a handshake interface between the equipment and OHT intrabay system, which controls the handoff of a FOUP to and from equipment load port by the intrabay system.

Equipment vender must provide an E84 compliant parallel type optical data transmission device for each load port as following.

Hokuyo Optical Data Transmission Device

[DMJ-GB1 or DMG-GB1 series \(Head On\) and passive mode](#)



Hokuyo Automatic Co., LTD.  
2-1-12 Sonezaki, Kita-ku, Osaka, Japan  
<http://www.hokuyo-aut.co.jp>

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**GAS BOX CONFIGURATOR:**

| Toxic gases

|  |     |         |
|--|-----|---------|
| Gas#1  | H2  | 50slm   |
| Gas#2  | NH3 | 30slm   |
| Inert gases  |     |         |
| Gas#3  | N2  | 20slm   |
| Gas#4  | N2  | 150slm  |
| Gas#5  | Ar  | 150slm  |
| Gas#6  | Ar  | 20slm   |
| Process gases  |     |         |
| Gas#7  | O2  | 150slm  |
| Gas#8  | O2  | 20slm   |
| Gas#9  | O2  | 2slm    |
| Gas#10   | O2  | 200sccm |
| Gas#11   | O2  | 20sccm  |
| Gas#12   | O2  | 3sccm   |
| REMARK:  |     |         |
| Additional Gas Line needed for O2 MFC with 3 sccm has been |     |         |
| change to 200sccm since CESH37                             |     |         |

chambers should be standard Chambers w/o Whited Coated Chamber though  
needed FC FAC AMBIENT 2 LINE NON-STD MFC

LIGHT TOWER CONFIGURATOR:

| Color         | Status                  | Description  |
|---------------|-------------------------|--|
| <b>RED</b>    | Flash + alarm buzzer on | Equipment trouble happens (including communication error) and immediate attention required. Must be able to silence alarm buzzer but maintain flash until failure can be corrected |
|               | On                      | Host sends remote command to turn on   |
|               | Off                     | All troubles of Equipment trouble happen are eliminated  |
| <b>BLUE</b>   | Flash                   | Host sends remote command to turn flash  |
|               | On                      | Host sends remote command to turn on   |
|               | Off                     | Host sends remote command to turn off or when Equipment is in Offline  |
| <b>YELLOW</b> | Flash                   | Host sends remote command to turn flash  |
|               | On                      | Host sends remote command to turn on   |
|               | Off                     | Host sends remote command to turn off or when equipment is in Offline  |
| <b>GREEN</b>  | Flash                   | Host sends remote command to turn flash  |
|               | On                      | Host sends remote command to turn on   |
|               | Off                     | Host sends remote command to turn off or when equipment is in Offline  |

Note: When equipment is in offline, turn Blue/Yellow/Green Color off.

Table 33. Host Control Signal Tower Definition tables

20.1.1 The color sequence of the signal tower is Red, Blue, Yellow and Green. (From top to bottom). Signal be mounted on the Operator I/O port side. (2.0 m height from grating raised floor). The position of the tower should not interfere with OHT operation. The one Signal Tower shall be clearly visible from a 2 distance over an angle of 180° Please see Figure 3 Signal Tower.

20.1.2 The alarm buzzer volume shall be adjustable. The alarm buzzer shall be easily enabled/disabled.

20.1.3 E84 module error conditions will trigger an alarm condition on the Signal Tower.

Date: \_\_\_\_\_

Print name: \_\_\_\_\_

Signature: \_\_\_\_\_