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Test Protocol Commissioning   (ve - com. after move)

Laser System: _OBS2   H2 ⇒ H1_

Check all installed System Components:

IL: _ODS 2 - IL_

PSL-PC: _PSL_

PS1: _100 41 613_   DB1: _OBS 2 - DB1_

PS2: _100 41 608_   DB2: _OBS 2 - DB2_

PS3: _100 41 604_   DB3: _OBS2 - DB3_

PS4: _100 41 614_   DB4: _OBS2 - DB4_

TEC1: _100 41 606_   TEC2: _100 41 611_

CB: _OBS2 - CB_

FE-DB: _OBS2 - FE - DB_

LH: _OBS 2_

Test after Rack installation:

Switch ON the PSL computer, the fiber switches, the interlock box, the control box and the frontend box.

	first comm..	re-comm.
First functionality check		
Go to Stat> and check Beckhoff-COM (all boxes green)	☐	☑
VISU showing updated values	☐	☑
Safety Logic running		
Check key lock switch and emergency stop (IL)	☐	☑
Check key lock switch and emergency stop (CB)	☐	☑
Check laser pushbutton	☐	☑

Safety Interlock checking procedure:

All interlocks must be green before starting this procedure. Make sure that the diode boxes are still short cut protected. Check System Status for Interlock checking by open the individual circuits. To include cabling and connectors open the circuits at the described position.

		first comm..	re-comm.
DB1 (open on DB side)	Interlock open	☐	☑
DB2 (open on DB side)	Interlock open	☐	☑
DB3 (open on DB side)	Interlock open	☐	☑
DB4 (open on DB side)	Interlock open	☐	☑
FE-DB (open on DB side)	Interlock open	☐	☑
Chiller x-tal (open on chiller side)	Interlock open	☐	☑
Chiller diode (open on chiller side)	Interlock open	☐	☑
TEC (Switch off TEC 1)	Interlock open	☐	☑
TEC (Switch off TEC 2)	Interlock open	☐	☑
External interlock	Interlock open	☐	☐
Safety Switch @ IL	Interlock open	☐	☑
Safety Switch @ CB	Interlock open	☐	☑

Switch ON all components (this includes running chillers, make sure that the horses are connected properly and check for water leakage) and RESET all errors. After Reset the interlock relay should be switched ON, ATTENTION this allows Laser operation. If all interlock inputs working properly check the function of the interlock if all critical components will be switched off.

Choose an interlock event and check stopping the system:

		first comm..	re-comm.
NPRO	System stopped	☐	☑
DB-FE	Laser Diodes stopped	☐	☑
PS1-4	Power Supply Stopped	☐	☑

Test laser diode control (DB needs to be bridged)
Test laser diode drive by set 1 A to DB 1-4 and readout the current ☑
Test laser diode temperature control for DB 1-4 ☑

Comments:

Op.Hrs. DD1-4 ; 4850h. FEDD 5375h ;
Chiller 4265h ;

Controller: Date:

M   30. 04. 2012

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Test Protocol Laser-Head

	first comm..	re-comm.
Frontend		
Lid Functionality	☐	☑
Lid Override	☐	☑
Check Frontend water flow sensors	☐	☐
Oscillator		
Lid Functionality	☐	☑
Lid Override	☐	☑
Check water flow sensors laser head	☐	☑ OP
Check water flow power meter	☐	☑ OP
LRA functionality test	☐	☑
LRA range warning	☐	☑
Check Externer Shutter functionality	☐	☑
Check Interner Shutter functionality	☐	☑
Temperatursensors	☐	☑
Temp-/ Humidity	☐	☑
Fiber switch (checked with test tool first)	☐	☐
Fiber switch (checked with switch)	☐	☑
PD Power distribution	☐	☑
Power Meter 1-3 functionality	☐	☑
Photo Diode functionality	☐	☑
Fieldbox interface	☐	☑

Comments:

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Controller: Date:

_____ m f _____   _____ 01. 05. 12 _____

Prepare for shipping

Measure diode slopes and compare to first measurement
(values needs to be in +/-5% range)   ☐
Check is diodes are shorted   ☐
Empty water circuit   ☐

First Commissioning:

Comments:

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Controller: Date:

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RE-commissioning:

Comments:

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Controller: Date:

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