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Table of Contents

1.0	Document Applications	2
2.0	Prerequisites	2
3.0	Configuration of CALYPSO for the NZDI Interface	2
4.0	Troubleshooting	9

1.0 Document Applications

CALYPSO 5.6 CALYPSO 2014 CALYPSO 2015 CALYPSO 2016

This document applies to the following Non-ZEISS CMMs

- Brown & Sharpe LEITZ protocol
- Brown & Sharpe SHARPE protocol
- Mitutoyo
- Sheffield
- LK/Metris
- FARO
- ROMER
- CIMCORE

2.0 Prerequisites

The following must be complete before following this configuration instructions.

- 1. Installation of CALYPSO software and latest Service Pack
- 2. Installation of a Non-ZEISS Driver
- 3. For FARO, ROMER, or CIMCORE; Installation of the OEM Driver
- 4. Configuration of Non-ZEISS Driver
- 5. Ensure you have the CALYPSO option; nonCZcontrol

To confirm open the Miscellaneous window with the pull down menu;

Extras -> Settings -> Miscellaneous...

Name	Activated	No license	License type
myCALYPSOMacros			Dongle
Navigator			Dongle
Non-CZ Control	v		Dongle
Autout in DMIS format			Donale

- Machine must be calibrated and within OEM accuracy specifications. ZEISS Metrology does not offer a calibration service for Non-ZEISS machines. CALYPSO software will read existing and future calibration data.
- 7. Machine must be fully operational and in good working order.

3.0 Configuration of CALYPSO for the NZDI Interface

3.1. Setup CALYPSO for a NZDI interface.

Open a **CMM Configuration** window with the pull down menu; Extras -> Settings -> CMM...

3.2. Define a new CMM Configuration

In the "Measuring Sys" tab create a new configuration by typing a new name of your choice to describe the Non-ZEISS machine (i.e. Sheffield or NZDI) and press <enter>.

🥽 System Set Up		
File Menus		
CMM Configu	uration	
Device Administration	Add Delete	Control Machine Dual arm Probe Stylus system Rotary Table Panel Temperature Interface
	Rename	Light Signal
	Edit	Measuring Sys Movement
NZDI Simulation	OK Canc	el Apply

Then the "Add" button.

3.3. Define the NZDI controller

In the "Control" tab define the controller as *NonCZControl* If there is no *NonCZControl* option available, then the proper license is not installed. Please contact ZEISS at 1-800-327-9735 for support to enable this license.

Uncheck Simulation only to allow a machine connection.

Check *Reconnect during system start* to allow an automatic connection to this configuration when CALYPSO starts.

C, System Set Up File Menus	- • ×
CMM Configuration	
NonCZControl	ontrol Jachine Dual arm Probe Stylus system Rotary Table Panel Interface Light Signal AAI Measuring Sys Movement
OK Cancel	Apply

3.4. Define the Machine parameters

In the "Machine" tab define the OEM machine type by selecting the appropriate machine interface from the dropdown list under NonCZControls.

C. System Set Up		
File Menus		
	figuration	Control Machine Dual arm Probe Stylus system Rotary Table Panel Temperature Interface
Measuring Volume Default X 9999.0000 mm Y 9999.0000 mm Z 9999.0000 mm	Z 0.0000 mm	
	OK Cano	el Apply

Enter X, Y, Z measuring volume of the OEM machine.

3.5. Define the Probing System

In the "Probe" tab define the OEM sensor type and properties. Refer to the CALYPSO manual for more information on probe system parameters.

For FARO, ROMER, or CIMCORE; select PH FIX ->TPxx as the probing system regardless of what probe you are actually using (Solid probe, TP2 or TP200).

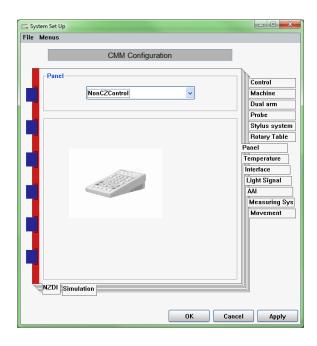
		_
CMM Config	uration	
Sensors PH10 Diameter Max 100.00 mm Upon Probing V Acoustic signal V PC acoustic signal Angle for Home Position Tr Rotate to Angle A 0.0 B 0.0 ''		Control Machine Dual arm Probe Stylus system Rotary Table Panel Temperature Interface Light Stan Ad Messuring Sys Movement

3.6. Define the Stylus System

There is no need to adjust values in the "Stylus System" tab.

3.7. Define the Control Panel

In the "Panel" tab define the panel as NonCZControl



3.8. Define the Temperature parameters

If the CMM does not have temperature probes for the scales, the operator must input the scale temperatures manually. Consult the machine documentation for the proper values for each axis.

If the CMM has built in automatic temperature probes for the scales, set the coefficients to 0. The temperature compensation of the scales are handled by the controller automatically, although you must also setup the proper fuhler.kmg file as follows;

 A) CMM with 3 scales and 2 hand held part temperature probes; Copy file "tempfuehler_b.nonCZ_part_and_scales" from: \config\equip

To:

\Calypso\Home\OM\Config\Equip Rename the file to fuehler.kmg

 B) CMM with 2 hand held temperature probes only.
 Copy file "tempfuehler__b.nonCZ_part_only" from: \config\equip

To:

\Calypso\Home\OM\Config\Equip Rename the file to fuehler.kmg C) CMM without hand held part temperature probes.

No action is needed, and CALYPSO must not have a fuehler.kmg file in the Equip directory.

System Set Up		
File Menus	MM Configuration 7.80000 μ/c 7.80000 μ/c 7.80000 μ/c	Control Machine Dual arm Probe Stylus system Totary Table Panel Temperature
	7.80000 μ/C	
NZDI Simulation	ОК	Cancel Apply

3.9. Define the Interface parameters

In the "Interface" tab define the interface type for the Control and Panel as LAN, TCP/IP-Protocol. Enter "localhost,nonCZcontrol" in the Address field. There are no spaces in the address, and characters are not case sensitive.

Confirm IP address found is 127.0.0.1

C System Set Up		- • ×
File Menus		
CMM Con	nfiguration	
Interface Type for Control Panel IP address found: NZDI Simulation	LAN, TCP/IP-Protocol	Control Machine Dual arm Probe Stylus system Rotary Table Panel Temperature Interface Light Signal Al Messuring Sys Movement
	OK Cano	el Apply

3.10. Connect Interface to the Machine

Turn on machine and engage drives. Homing the machine is not necessary. Return to the "Control" tab and press Connect CALYPSO will prompt to create a new MasterProbe.

🚅 System Set Up	
File Menus	
CMM Configuration	
Control Type	<u>lh. </u>
	Control Machine
n Simulation only (Off-line)	Dual arm Probe
	Stylus system Rotary Table
	Panel
	Temperature
Connect	Interface
	Light Signal
Reconnect during system start	AAI
Service	Measuring Sy
For service personnel only. Access is protected by password.	Movement
Service	
NZDI Simulation	
OK Cance	el Apply
formation	
INFORMATION: The MasterProbe will be created by type TP20	
ОК	

Upon a successful startup and connection the NZDI interface may warn user that CALYPSO is not managing the CAA (Computer Aided Accuracy). This warning is normal.

For some interfaces, a *Interface* window will be generated.

Sheffield Interface	
L	

Do not close this window (downsizing is OK). Doing so will disable CALYPSO and stop communications with the machine.

This window will close automatically when CALYPSO is closed.

3.11. For manual Arms, allow flexibility to measure the number of points per feature

Open the **Measurement Methods** window with the pull down menu;

Extras -> Settings -> Measurement...

In the "Man Run" tab, uncheck "Automatically to next feature in the measurement plan"

C, System Set Up	
File Menus	
Measurement Methods	
Features Automatically to next feature in the measurement plan Beep when minimum number of points reached Manual Scan of Plane Tolerance Beep on Contact Counter Activate Base Alignment during Start Automatically Activate New Base Alignment Activate Position Assistant automatically from measures NZDI Simulation	Travel Features Methods Point density SCAN Limits Nominal Start angle Form Datum Optics MMC / LMC Navigator Simulation VCMM
OK Cancel	Apply

3.12. Confirm Connection and recommend functional acceptance

To confirm connection, simply touch probe a work piece. CALYPSO will create a point. For general acceptance, complete the following task;

- Qualify Master Probe.
- Rotate to various angles and qualify additional styli.
- Align tool changers and perform styli change.

4.0 Troubleshooting

4.1. NonCZInterface.dll Version Errors!



For unknown reasons the nonCZInterface.dll is not in the correct folder.

For Windows 7 (32 bit) move nonCZInterface.dll from:

C:\Program Files\Zeiss\CALYPSO x.x\bin\nonCZInterface.dll

To:

•

C:\Program Files\Zeiss\<machine>Interface

• For Windows 7 (64 bit) move nonCZInterface.dll from:

C:\Program Files (x86)\Zeiss\CALYPSO x.x\bin\nonCZInterface.dll

To:

C:\Program Files (x86)\Zeiss\<machine>interface

4.2. Joysticks do not work

If your CMM cannot be moved by joystick, CALYPSO failed to return your CMM into manual mode. To resume manual mode;

- Switch the CALYPSO traffic light to red
- Then switch the CALYPSO traffic light to green

4.3. "gethostbyname failed"

If this error message appears, the address in the Interface parameters of CALYPSO CMM configuration is incorrect.

- Open a CMM Configuration window with the pull down menu; Extras -> Settings -> CMM...
- Open " Interface" tab
- Correct the value "localhost, nonCZcontrol" in the Address field. There are no spaces in the address, and characters are not case sensitive.
- Confirm IP address found is 127.0.0.1

4.4. "getservbyname failed"

				_
À	getservbyname f	ailed		
			ОК	_

If this error message appears, the address in the Interface parameters of CALYPSO CMM configuration is incorrect.

• Open a CMM Configuration window with the pull down menu; Extras -> Settings -> CMM...

- Open "Interface" tab
- Correct the value "localhost,nonCZcontrol" in the Address field. There are no spaces in the address, and characters are not case sensitive.
- Confirm IP address found is 127.0.0.1

4.5. "connect failed"

If this error message appears, review all configuration settings.

- Open Machine Configuration under CALYPSO pull down Extra ->Settings -> CMM
- Review all settings.

4.6. Getting log files to the developer

To capture the log files and configuration of the system create a CALYPSO error report. All the interface log files and configuration settings will be captured in the error report.