

Calypso



Release-Info



Documentation on Release 5.0

Release Info - Calypso 5.0

Overview of Contents:

[Click here for German version](#) 

[1 About Calypso 5.0](#)

[1.1 Notes on Application and Familiar Problems](#)

[1.1.1 Important Information](#)

[1.1.2 Notes on the Application](#)

[1.2 Contents of the DVD and latest changes](#)

[2 New Features in 5.0](#)

2.1 New Features – Measurement Method

[2.1.1 New Feature – Stepped Cylinder](#) AF-00156

[2.1.2 Step Point](#) AF-00154

[2.1.3 Pipe Measuring Program \(Option\)](#) AF-073/60

2.2 New Features – Evaluation and Result

[2.2.1 Subsequent Evaluation of Measured Points](#) AF-00170

2.3 New Features - Operation

[2.3.1 Importing and Exporting myCalypso Macros \(Option\)](#) AF-00149

[2.3.2 Optimized 'Free Form Surface' Feature](#) AF-00164

[2.3.3 Space Mouse](#) AF-00183

[2.3.4 New Rotary Table RT-AB](#) AF-017/94

[2.3.5 Display of Rotary Table Angles and RDS Angles](#) AF-00177

[2.3.6 Warning Function for Manual Form&Location Measurements](#) AF-00147

2.4 New Features – Stylus Systems and Qualification

2.4.1 Free Selection of Probe Number	AF-00176
2.4.2 New Probes VAST XDT and RTP20	AF-00160
2.4.3 SSP Configuration for F25	AF-00049

2.5 New Features - Curve Option

2.5.1 Enhanced Best Fit Functions	AF-00135
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2.6 New Features - PCM Option

2.6.1 JT Open Interface	AF-00163
2.6.2 Form&Location Tolerances from PROE and UG Models	AF-00137

2.7 New Features METROTOM

2.7.1 CT Nominal-Actual Comparison	AF-00140
2.7.2 Advanced 'Pattern' Function	AF-00167
2.7.3 64bit Application for Metrotom	AF-00141

2.8 New Features O-Inspect

2.8.1 Flight Function - CMM Control per Mouse	AF-00159
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3 Installation Instructions

- 3.1 Installing the Calypso Basic DVD**
- 3.2 Installing Calypso ServicePacks and Patches**
- 3.3 Installing Additional Languages**
- 3.4 Installing the ViScan Driver**
- 3.5 Data Backup**

4 Compatibility

- 4.1 CMM Validity**
- 4.2 Controllers & Sensors**

4.3 PC System

4.4 CAD Interfaces

[5 Contact Addresses](#)

1 About Calypso 5.0

1.1 Notes on the Application and Familiar Problems

Please read the following notes before installing this software!

1.1.1 Important information:

Calypso Upgrade

Earlier Calypso versions must be removed from your computer prior to installing a newer version of Calypso.

Manipulation of Installed Files and Folders

Installed Calypso files must not be manipulated! By renaming or removing files that are installed in the Calypso folder (including installed user data!), you can cause malfunction of your application. By doing so the Windows Installer autorepair function might be launched unsuccessfully. Inserting program files manually (via Windows Explorer) can also cause faulty operation.

Duplex operation

Calypso 5.0 does not support the operation in Duplex mode! This will be corrected with a Calypso ServicePack.

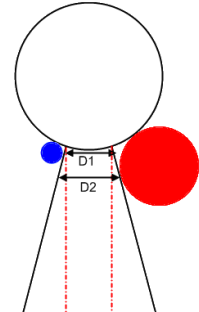
Shaft Radius of the Reference Sphere

The Shaft Radius of the Reference Sphere on the 'Reference sphere management' page must be set to a value large enough to cover all of the stylus diameters in use:

Sphere No. 1	
Sphere Radius	14.987000
X Offset	444.490399
Y Offset	-621.797261
Z Offset	-405.041239
S	0.000352
Roundness Deviation	0.000000
Update Stylus	
Shaft Radius	6.000000
Shaft Length	0.000000
Tip...	125.000000

In order to prevent collision during probe qualification the 'Shaft Radius' setting must be increased to a value that sufficiently takes into consideration the largest stylus radius in use (see D2 for the red sphere illustrated).

However, increasing the radius will also reduce the amount of possible angular positions for qualification (RDS,DSE etc.). A workaround to this situation is achieved by saving multiple copies of one and the same reference sphere with a varying shaft radius and selecting the sphere according to the requirements for probe qualification.



RCCAA

RCCAA qualified stylus systems must not and need not be re-qualified using the list qualification method.

Sphere Coverage Angle for qualification of passive sensors

The Sphere Coverage angle for a full qualification of passive sensors (XXT, SP25) is limited to a minimum of 180°, values lower than 180° are ignored. In order to qualify smaller styli a reference sphere with a smaller diameter (e.g. a stylus of which the radius is known) is required. Following a full qualification it is possible to re-qualify a stylus using the regular reference sphere. For this a lower sphere coverage angle may be selected and a 6-point qualification is performed.

Device Administration

Please ensure that all CMM connections are closed (by closing traffic light windows) before removing a device from the 'Measuring-Systems' page under 'Extras', 'Workroom', 'CMM'.

64bit Windows – System restrictions

Operation of the **ViScan** Sensor is only permissible with 32bit Windows systems!
Operation of the **LineScan** Sensor is only permissible with 32bit Windows systems!
Operation via **HP-IB** interface is only permissible with 32bit Windows systems!

ViScan Upgrade

After upgrading from older versions to Calypso 4.10 or higher the ViScan sensor must be re-qualified using the chrome template and the reference sphere after installing! LN_653.

ViScan – Manual CNC Mode

After focussing during manual CNC-runs the optical probing method must be manually re-selected. This will be corrected with a ServicePack.

ViScan - Template measurement

Template measurement in combination with ViScan is currently only available for manual measurements. Templates can be displayed incorrectly or not at all In CNC-mode. This will be corrected with a ServicePack.

ViScan - Graphics Adapters

The Graphics adapters ATI FireGL 8800 and NVIDIA Quadro FX1100 are not compatible with Calypso 4.10 in combination with the ViScan sensor. The camera image is not displayed correctly in the graphics window.

ViScan - Windows 7 Compatibility

The ViScan Sensor can only be used with Windows 7 in combination with a suitable Framegrabber card (32bit only). Please refer to chapter 3.4.

Stylus System Data Import

Styli data exported with version 4.4.04.xx from systems with Zeiss or Renishaw index head (e.g. RDS, DSE, MIH, PH9 and PH10) may not be imported into newer versions! The useability of imported styli when used on a CMM is different than usage in simulation mode (without CMM). For use on a CMM re-qualification is required, in simulation the styli can be used without re-qualifying.

CNC-Qualification Interruption

Interrupting a CNC-qualification of a VAST-XXT, will result in undefined probe data! In this case the stylus must be re-qualified manually completely before using it for measurement or re-running the CNC-qualification. Please use "Qualify passive stylus", the selection "Geometry Re-qualification" is not sufficient.

Special characters in Stylus System Names

Special characters must not be used in stylus names and stylus system names! Under no circumstances may apostrophes (' ') or quotation marks (" ") be used in names for styli or stylus systems nor may these names begin with a special character (e.g. Ø) or end with a dot! Underscores ('_') may be used as separators.

ProDC Stylus Systems

Stylus systems which were last used with the Calypso release 4.0.xx.xxProDC or the CMM-OS release 3.0.xx.xxProDC must be completely re-qualified.

myCALYPSO- Language Selection

myCALYPSO can be used in German and in English. When switching from one language to the other, the following changes must be carried out by the user:

1. Depending on the language selected, the respective 'myCalypso.arn' file must be saved under ...\\Calypso\\home\\om\\workarea\\myCALYPSO_Macros\\autorun\\. Use the Windows Explorer to copy the desired file from the \\de subfolder (for German) or the \\en subfolder (for English).
2. The language dependent Macro files for macro 121 must be copied to the folder ...\\Calypso\\home\\om\\workarea\\myCALYPSO_Macros\\inspections\\1_macro_a\\121\\. Use the Windows Explorer to copy the desired files from the \\Macro_121_de subfolder (for German) or the \\Macro_121_en subfolder (for English) to this location.

Windows 7 - Aero Mode

Use of the Aero Mode with installations on Windows 7 systems cause malfunction of the landscape view of the graphics window in the custom printout. This can be corrected temporarily by switching off the Aero Mode. A final correction will be supplied with a Calypso ServicePack.

.pdf Output – Merge Function

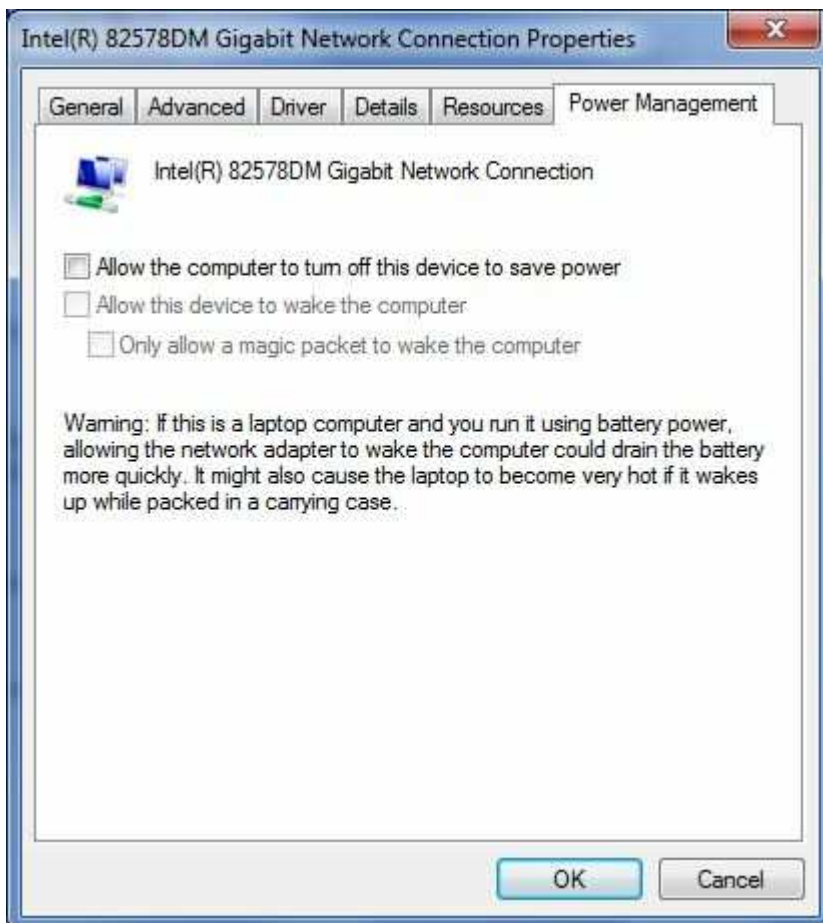
GhostScript is required for merging .pdf results, version 8.56 or newer is required for error free application.

Zeiss License Manager

Installing Calypso Release 4.10 or newer will also upgrade the Zeiss License Manager to version 1.8.0.01. This is carried out automatically, as long as the Zeiss License Manager does not yet exist on your computer or an older version than 1.8.0.01 is already installed.

Windows 7 - Setting Properties for Network Cards

In Windows 7, the NIC Power Management must be set so that the operating system cannot be switched off. To do this the following setting must be made in the Device Manager for the respective network card:

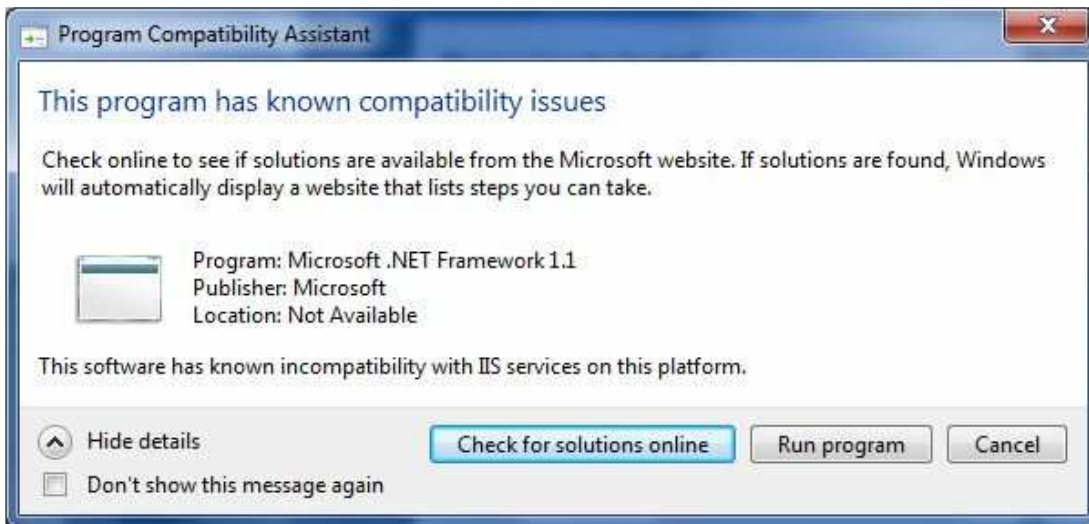


The "Allow the computer to turn off this device to save power" box must not be checked.

Recommendation: In addition, set the power mode to "Never" and the performance to "High Performance" in the system power management.

.NET Framework 1.1 on Windows 7

Due to compatibility problems the following warning message can be displayed while installing the dotNET Framework 1.1 on Windows 7 systems:



Click on "Proceed" to carry on with the installation.

.NET Framework 1.1 on 64bit Systems

Due to compatibility problems the following warning message can be displayed while installing the .NET Framework 1.1 on Windows 64bit systems:



Should the IIS services be required for other applications, please carry out the procedure as described.

[Back to overview](#)

1.1.2 Notes on the Application

Calculating the alignment

When calculating an alignment, the evaluation setting ISO 5459 is not taken into consideration if the compatibility mode "Calculate Alignment as Base Alignment" is set to "On".

Importing dimension tolerances from ProE

Importing data from ProE is still faulty. Dimension tolerances have no reference and no coordinates. This problem will be resolved with a Calypso ServicePack.

Selecting 'CMM System Setup' for search path to nominal position

This setting is used for using the respective CMM default value for the probing search path. Previously the value '5' (with **) was displayed as suggestion when selecting the default setting in the editor. However this was not effective because of a limiting value prompt; the current CMM default value applied. Without changing the measurement plan, "CMM System Setup" is now displayed as default setting (suggestion), the performance does not change. If a numerical value is now given as search path, this value is effective even if it is smaller than the previous limiting value. Too small a value should be avoided.

'Missing Bore' function with probing problems in bores

Difficult probing conditions for individual bores can make finishing CNC measurements difficult and delay their completion. To avoid this, **starting from Calypso 4.10**, the 'Missing Bore' function can be activated. If an incorrect probing leads to a cancellation, the bore is recognized as 'Missing Bore' and is omitted with a renewed CNC Start (with 'Reset Old Results'). If measurement of the bore is to be tried again, then the actual values for this bore have to be deleted beforehand.

Sample Plans on the DVD

From **Calypso 4.8 onwards** the Measurement Plans samples are installed in a single compressed file '**inspections.exe**' under Calypso\home\om\workarea\inspections. To use these measurement plans, the contents must be unzipped by double-clicking the file. Adapt the installation path if necessary. The Service and Acceptance Measurement Plans are installed in a single compressed file 'service_plans.exe' under Calypso\home\om\workarea\service. To use these measurement plans, the contents must be unzipped by double-clicking the file. Adapt the installation path if necessary.

Probing Point Distribution in Slot Features

The distribution of points in slot features changed from **Calypso 4.6 onwards**. Now the same logic as for circles is used. Should an evaluation of a slot feature not be possible using an odd number of probings, an additional probing point should be added in order to have an even number of probing points.

Measurement Plan Compatibility using Multiple-Strategy

Application of the multiple-strategy function in new measurement plans created with **Calypso 4.4.04 or newer** or opening and saving existing measurement plans with Calypso 4.4.04 or newer will prevent the usability of these plans with older Calypso versions!

Optimized Articulating Probes

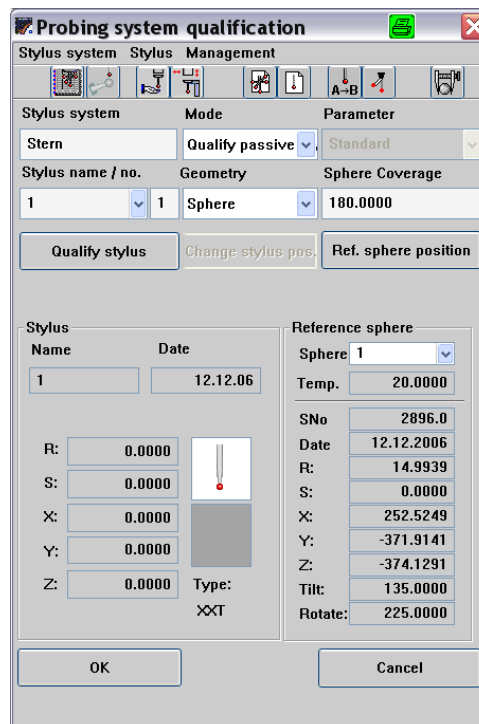
A software enhancement was introduced with Calypso 4.4.04 for coordinate measuring machines equipped with articulating probes (e.g. RDS, DSE, MIH, PH9 and PH10. This enables the usage of all tactile probes as MasterProbe. The definition of the RDS probe holders was simplified.

Side Styli and List Qualification

With the RDSCAA or DSECAA option, side styli can now also be qualified semi-automatically (except for XXT sensors!). Please note: List qualification cannot be applied for stylus systems with side styli! However as a result, on CMMs with articulating probes after a software update to **Calypso 4.4.04 or newer**, all the styli have to be subsequently completely re-qualified! If you are using the RDSCAA or DSECAA option, it is imperative that the MasterProbe can be used for the qualification of the fitting position. Passive sensors such as XXT and SP25 cannot be used for this. To facilitate this, the List Qualification can be used (not for stylus systems with side styli!). The procedure is described on the following pages.

[Back to overview](#)

1. Open the 'Probing system qualification' window

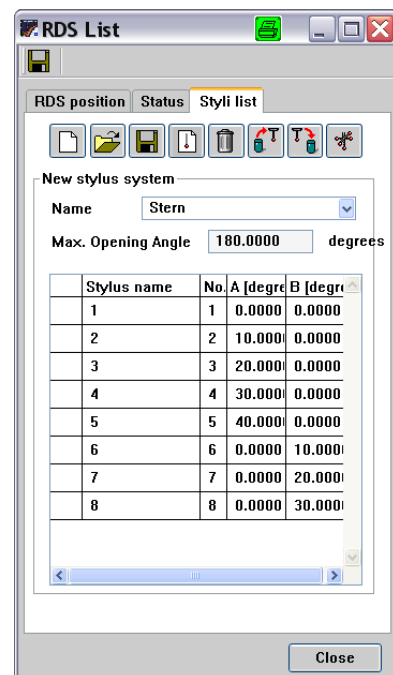
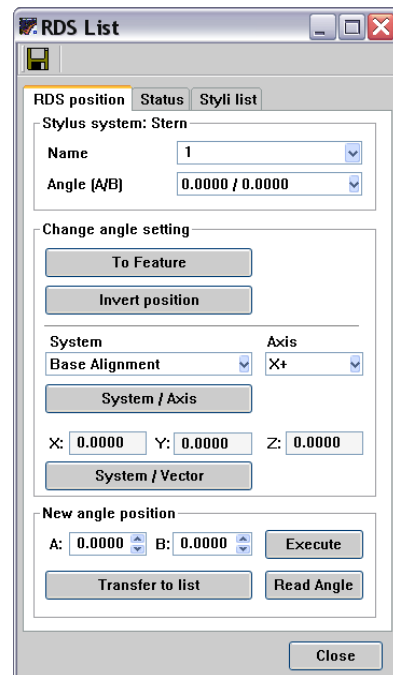


2. By clicking on the icon, the dialog for setting the RDS axis is opened.



[Back to overview](#)

3. Select the 'Styli list' tab:

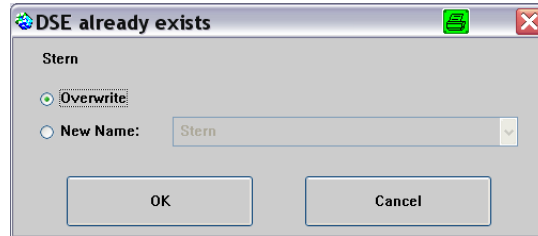


4. By clicking on the



icon, the message displayed on the right will appear.

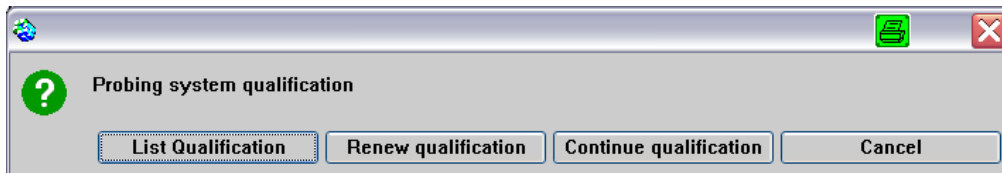
Select 'Overwrite' and click 'OK'.



5. Close the window for setting the RDS axis with 'Close' and in the "Probe system qualification" window start the List Qualification using the caliper icon.



6. In the following dialog, please select 'List Qualification':



You are prompted to set the index holder to the angle A 0° B 0°. You are then prompted to make a probing at this angle position. This process also takes place if you have not defined a stylus in the angle position 0°. Using this position, the lengths of all the other styli in this stylus system are calculated and automatically qualified.

Measurement Plan Compatibility 'Sphere' with Circular Sections

Measurement plans created with versions older than **Calypso 4.4** which contain spheres with circular sections should be checked for the correct start angle in these features!

Distance to Proberack

The preset default value for the distance to the proberack during stylus system changing of XXT and SP25 (for empty probe) was increased from 0 mm to 70 mm with **Calypso 4.4**. All holders which are created new for XXT and SP25 are now preassigned with 70 mm. This can be adapted subsequently for each holder by the 'Master' user.

[Back to overview](#)

1.2 Contents of the DVD and latest changes

Contents of the DVD:	Calypso 5.0
Default Languages:	German, English, French
Additional Languages:	-
Instruction manuals:	German, English
Latest changes:	-

[Back to overview](#)

2 New Features in 5.0

2.1 New Features – Measurement Method

2.1.1 New Feature – Stepped Cylinder

AF-00156

Application:

With the new 'Stepped Cylinder' feature, coaxially arranged inside and outside cylinders can be evaluated together with regard to diameter and position. The result is recorded clearly in a table.

D	Nominal	Actual
D 1	15.1000	15.0540
D 2	30.2000	30.1859

Sigma	Form	Points
0.0147	0.0392	16

Min	Point no	Point no	Max
-0.0153	12	11	0.0238

Call:

'Stepped Cylinder' is selected via the menu 'Features', 'Special Geometries' or in the Workroom.

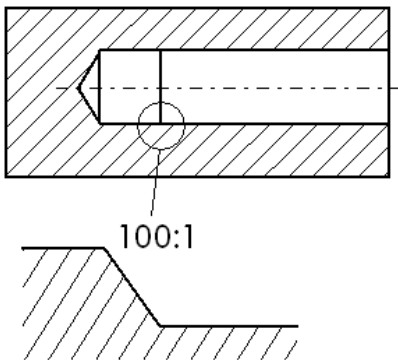
[Back to overview](#)

2.1.2 Step Point

AF-00154

Application:

The Step Point function is used during the exact positioning of small and really small edge transitions, e.g. to check the reamed depth of reamed bores.

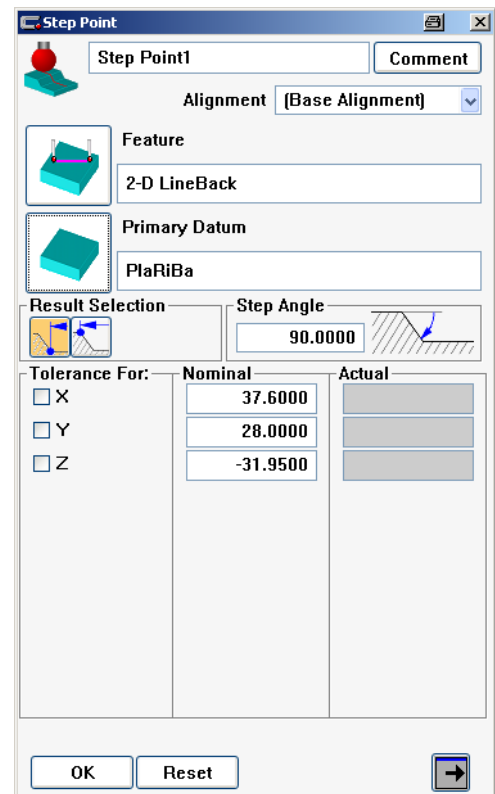


Call:

First the position looked for is scanned using as small a probe as possible with the highest point density as possible with a 2D line.

Evaluation is made using the 'Construction', 'Step Point' menu. Previously measured 2D lines are selected as well as the reference required.

The result is output as a 3D point.



[Back to overview](#)

2.1.3 Pipe Measuring Program (Option)

AF-073/60

Application:

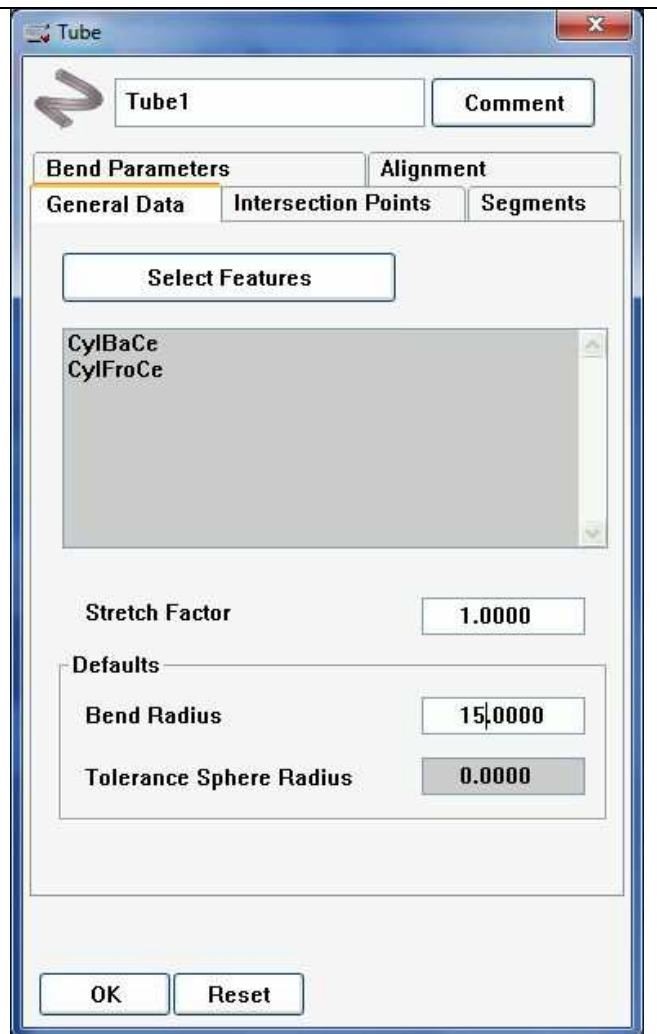
With the CALYPSO Pipe Measuring Program you can measure bent pipes, wires, hinged brackets, tubes etc..The pipes are defined using features which have been constructed in a special way.

You can extract the features and nominals from an existing CAD model or enter these manually from drawings. The nominals can also be determined by probing a master part using automatic feature recognition. This is worthwhile, for example, if you want to determine bend parameters for programming an automatically controlled bending machine.

Call:

To define a pipe:

1. Generate the feature from which you want to make the pipe:
 - e.g. two planes for defining the start and end of the pipe
 - several cylinders for the straight sections of the pipe
2. Start the Pipe Measuring Program using **Size -> More -> Pipe Evaluation**. The **Pipe** is inserted in the measurement plan. This appears both in the characteristics list and well as the features list.
3. Open the Pipe definition template by double-clicking the **More** icon.



[Back to overview](#)

2.2 New Features – Evaluation and Result

2.2.1 Subsequent Evaluation of Measured Points

AF-00170

Application:

It is often not until the printouts are analysed later and more exactly is a problem found that requires the evaluation to be changed or extended and to be recalculated. Previously this was only possible as long as the measurement plan for the current measurement had not been closed.

This function now enables subsequent evaluation (changing and adding characteristics) of measurements already finished (part no longer on CMM, CALYPSO terminated). The 'Subsequent Evaluation' corresponds to a CNC run (similar dialog) for which the points were not measured by the CMM, but instead points that are currently available or have been previously loaded are used for the evaluation. The features and characteristics are re-calculated.

Due to the unique assignment of the stored points to a measurement (done by default via the part no.) different part measurements in the same measurement plan can be accessed.

Call:

Saving points automatically after CNC measurement::

Pull down menu > 'Resources' 'Results to File' > 'Measured Points'

'Load Measured Points' function ... (Pull down menu > 'File')

After selecting the directory, loads the points from a previous measurement

'Subsequent Evaluation' function

Pull down menu > 'CNC' > 'Subsequent Evaluation'

'Save Measured Points' function (Pull down menu > 'File')

Saves the current measured point with the current part number.

[Back to overview](#)

2.3 New Features - Operation

2.3.1 Importing and Exporting myCalypso Macros (Option)

AF-00149

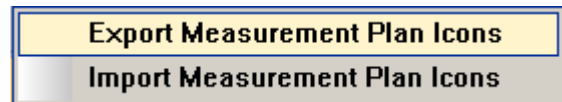
Application:

With this function, one or several measurement plans can be exported from the myCalypso interface, exchanged with other computers and re-imported.

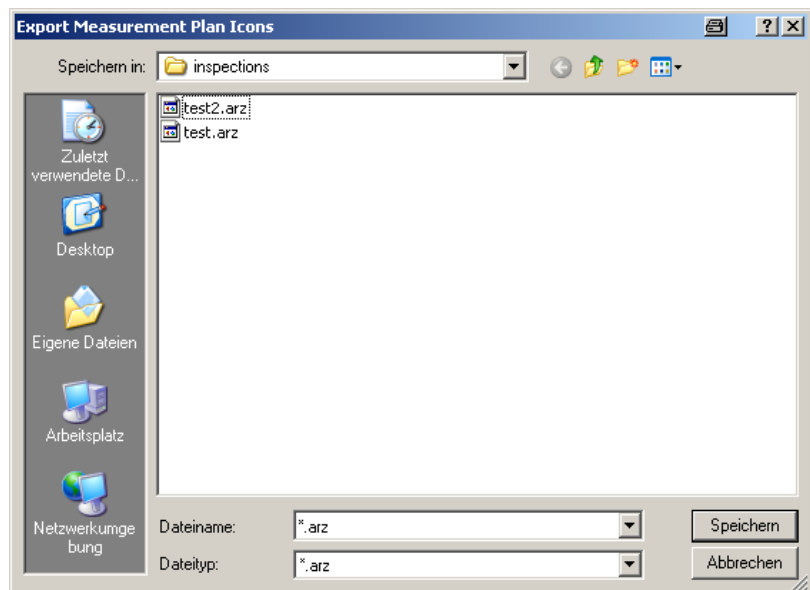
Call:

'Export myCalypso Macro' or 'Import myCalypso Macro' is selected via the 'File' menu or the context menu of a measurement plan icon. The export function is described in the following:

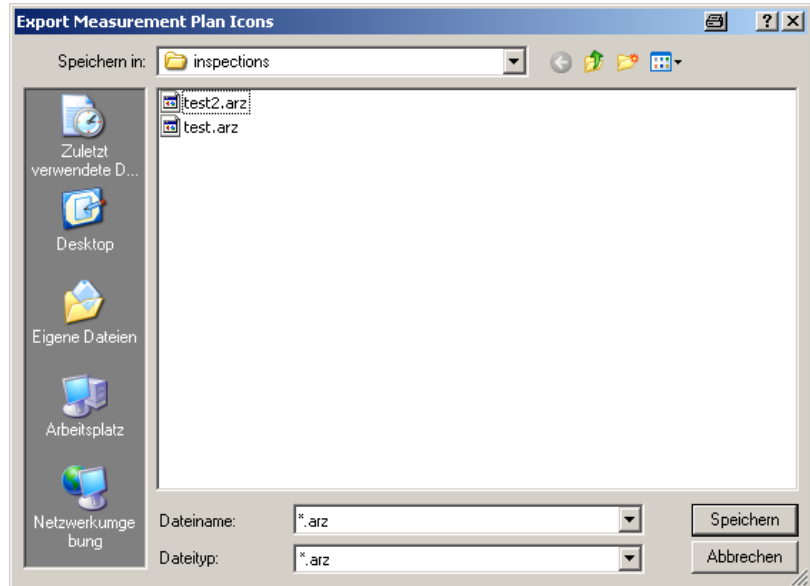
1. Select one or several measurement plan icons and click with the right mouse button.



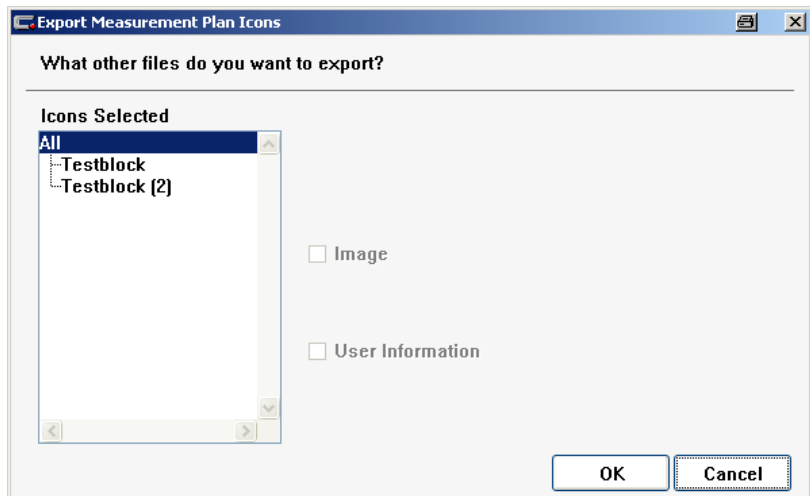
2. Select the 'Export myCalypso Macro' menu.



3. Select a path and enter a filename. Confirm with 'Save'.



4. Determine whether additional information such as image file or measuring run information is to be exported together with the measurement plan and confirm with OK.



[Back to overview](#)

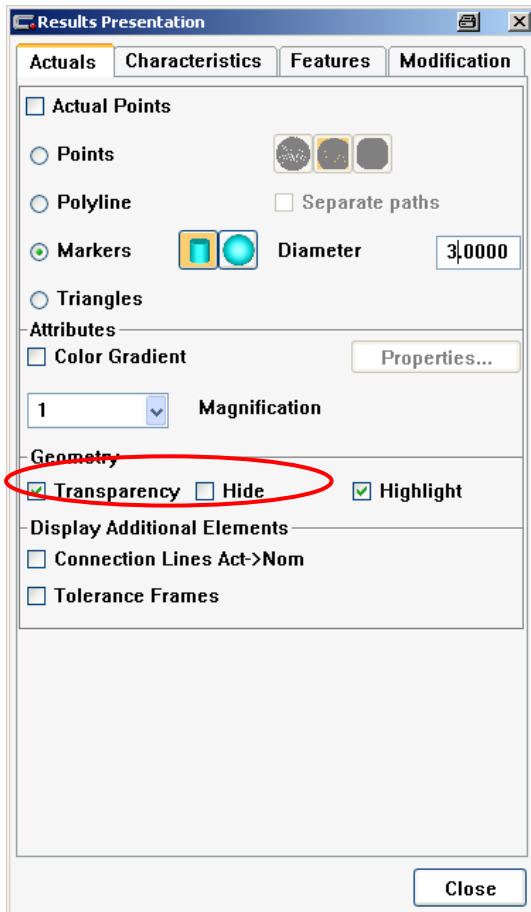
2.3.2 Optimized 'Free Form Surface' Feature

AF-00164

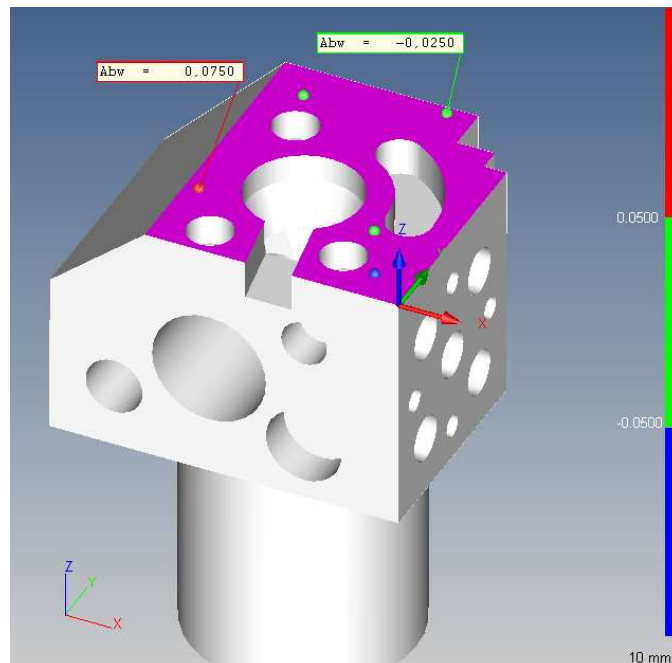
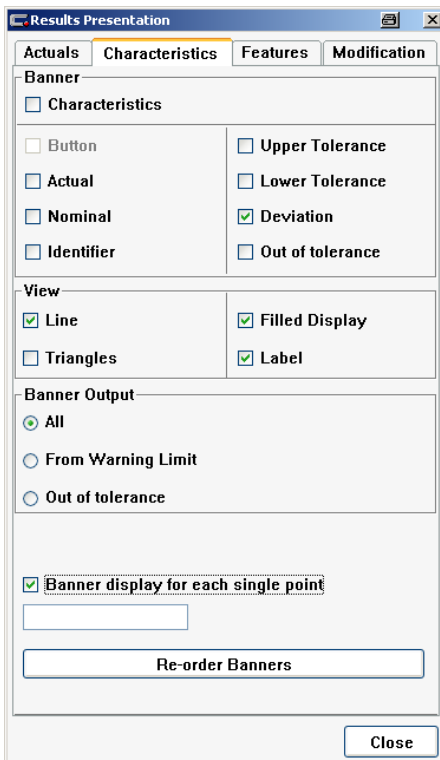
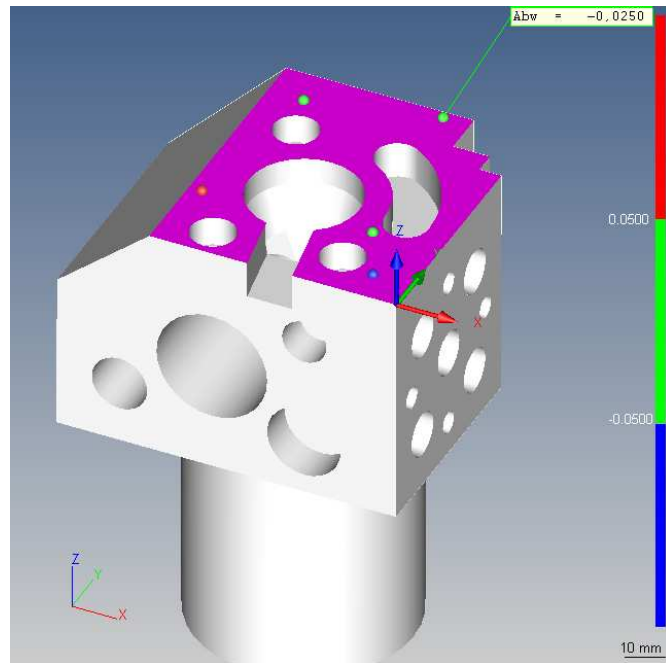
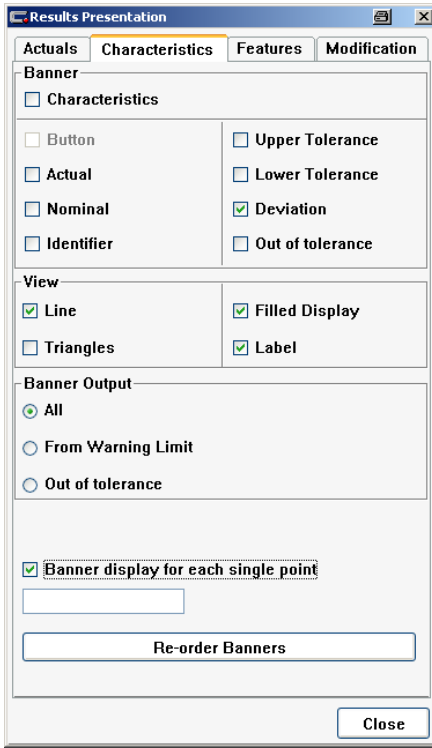
Application:

Various improvements have been made for handling free form surfaces.

- If the tolerance is changed in a characteristic, the graphic result is updated immediately.
- With the point recall, the result is recalculated only when the dialog is closed and not after every input.
- The graphical display of the results is not covered by surfaces if these are transparent or completely hidden.



- Point deviations interactive by clicking with the left mouse button if 'Banner display for each single point' is set.



[Back to overview](#)

2.3.3 Space Mouse

AF-00183

Application:

In addition to a normal mouse, a 3D mouse can also be used. You can use a 3D mouse, so-called space mouse, for easy rotation and moving of three dimensional objects in a CAD window.

Call:

User interface is based on the 3D mouse SpaceNavigator from 3Dconnexion.

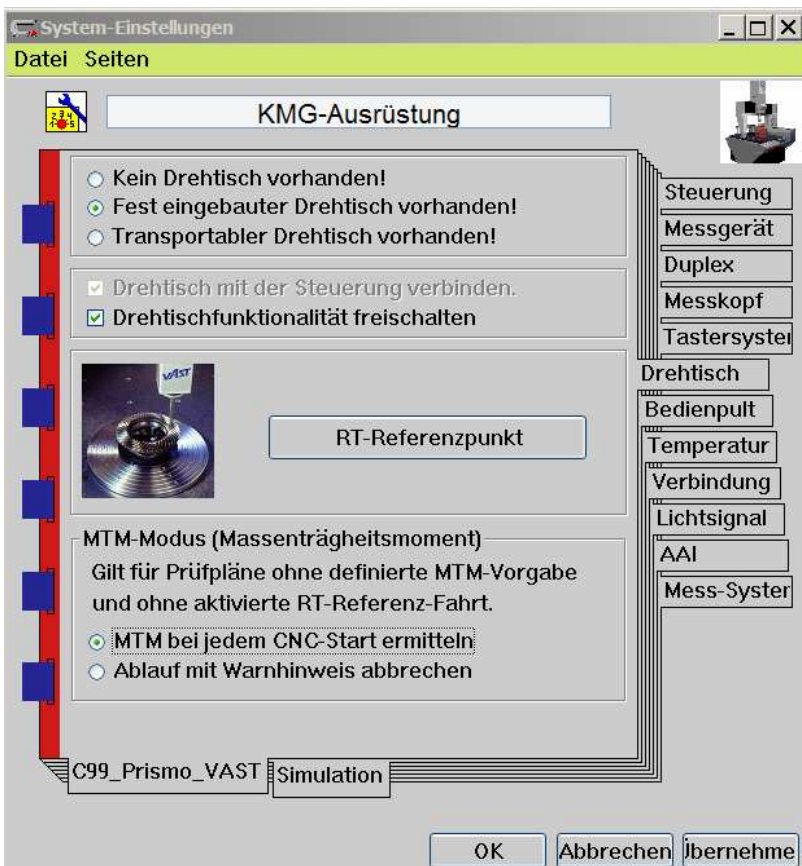
[Back to overview](#)

2.3.4 New Rotary Table RT-AB

AF-017/94

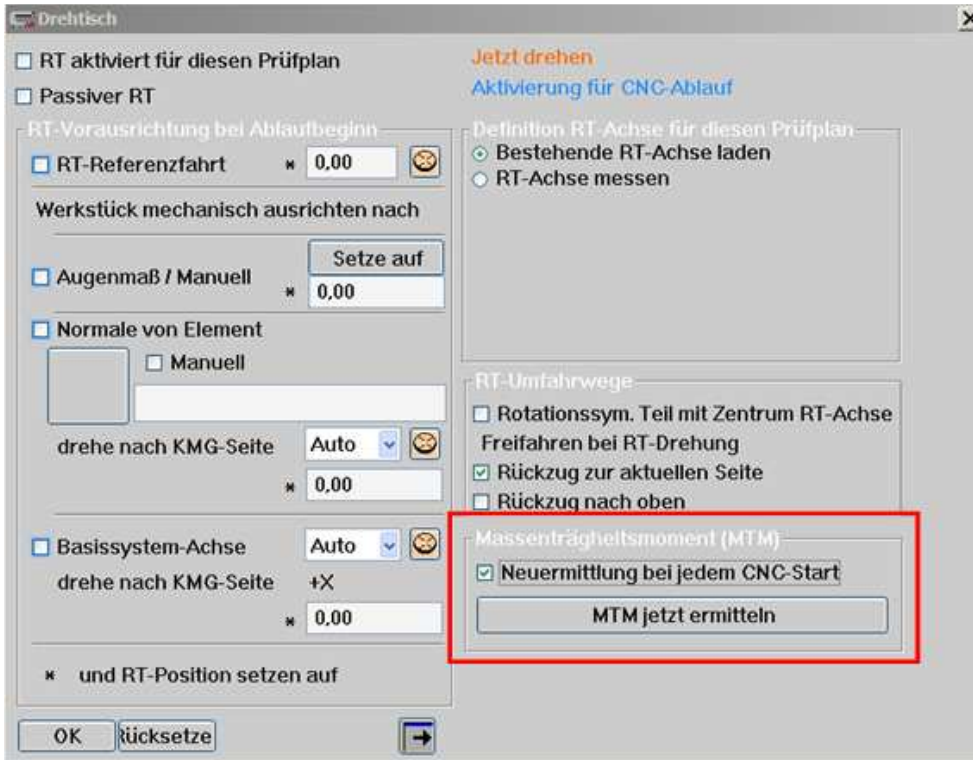
Application:

- Increasing the measurement speed by determining the current mass moment of inertia.
- Automatic determination of the mass moment of inertia by Calypso.
- Current mass moment of inertia is given by the application.
- Load display for centric alignment of the part on the RT-AB.



Call:

Use 'Resources', 'Rotary Table' for measurement plan specific input of mass moment of inertia (MMI):



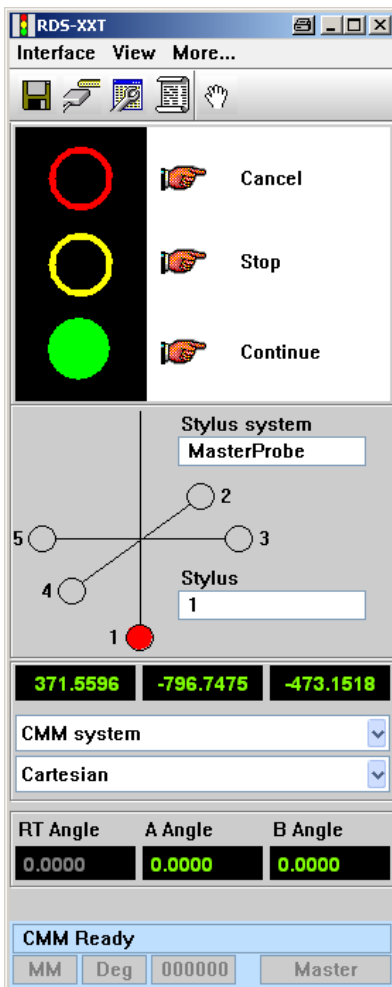
[Back to overview](#)

2.3.5 Display of Rotary Table Angles and RDS Angles

AF-00177

Application:

Enhances the traffic light window by the display of the rotary table angle as well as the A and B angles for a rotating carrier.



Call:

In the traffic light window, the extended coordinate display can be opened under 'View', 'Position Display Extension'.

[Back to overview](#)

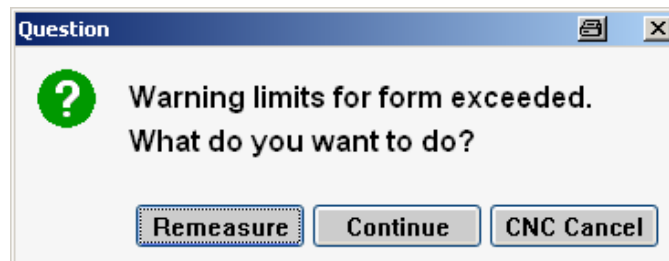
2.3.6 Warning Function for Manual Form&Location Measurements

AF-00137

Application:

In the Features Settings Editor, you can define a warning limit for sigma and the form deviation. The user is then made aware if a warning limit is reached during a manual measurement. The user can then recognize a possible error during the measurement and correct this.

If you have activated the warning limits in the Features Settings Editor, Calypso then reports probings which may not have been made exactly in the manual run. Calypso also evaluated the values for dispersion and form after a feature has been measured. If a warning limit has been exceeded, the **Query** window opens.



Call:

In the Features Settings Editor.

[Back to overview](#)

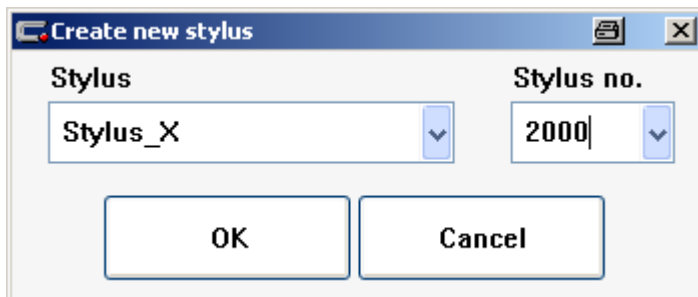
2.4 New Features – Stylus Systems and Qualification

2.4.1 Free Selection of Probe Number

AF-00176

Application:

When creating a new stylus or stylus system, you no longer have to choose the stylus number from a list but can allocate any number.



Call:

You can create a new stylus using the **'Stylus' 'New'** menu in the **'Probing System Qualification'** dialog.

[Back to overview](#)

2.4.2 New Probes VAST XDT and RTP20

AF-00160

Application:

Support of new sensors

With Version 5.0, the passive measuring sensor VAST –XDT and the RTP20 probe head from Renishaw are supported.

The RTP20 is an automated indexing probe head. The probe can be rotated in 15-degree increments using both the A and B axis and moved to 168 repeatable positions. The RTP20 does not have its own motor so that the angle setting of the probe can only be changed manually or semi-automatically.



[Back to overview](#)

2.4.3 SSP Konfiguration for F25

AF-00049

Application:

For 3D micro styli which are used on Type F25 CMMs for measuring micro technical components, the maximum permissible probing forces are very low. Correspondingly high is the risk that a 3D micro stylus will be damaged or destroyed. CALYPSO optimizes the probing force using a stylus-specific correction vector. When qualifying a 3D micro stylus of the type SSP, CALYPSO prompts you to enter or select the sensitivity factor of the stylus.

Empfindlichkeitsfaktor

Bitte wählen Sie ihren Taster aus:

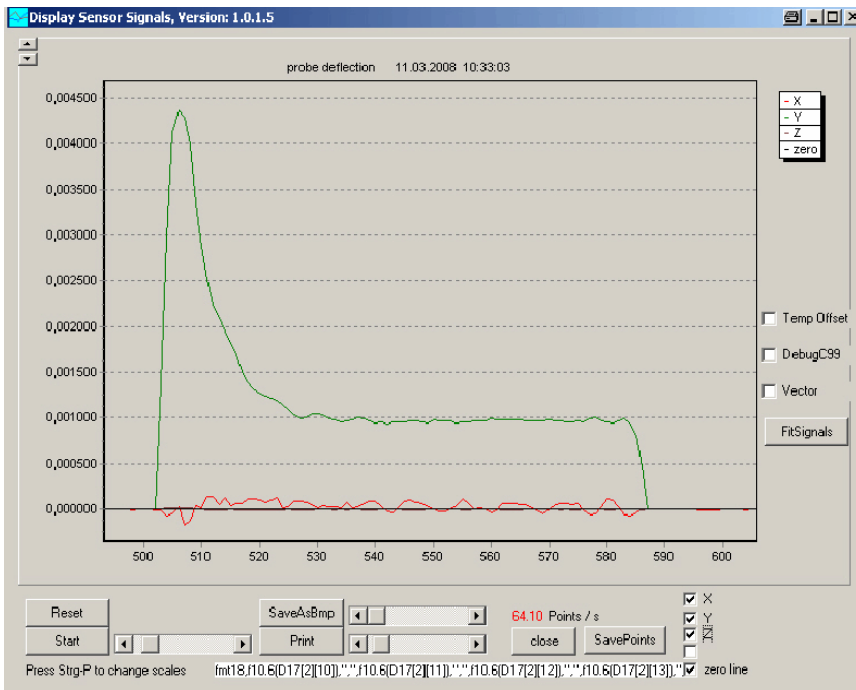
120µm-Taster X 0,2000 Y 0,2000 Z -0,0070

300µm-Taster X 0,0600 Y 0,0600 Z -0,0060

Sondertaster X 0,0000 Y 0,0000 Z 0,0000

OK Abbrechen

In addition, CALYPSO also automatically checks the function capability of the 3D micro stylus during the stylus change and informs you of a defect in the **Results** window.



Using the sensor signal monitoring, you can monitor the deflection of the stylus.

Call:

If the CMM is connected, the sensor monitoring can be opened using 'View' in the traffic light window.

[Back to overview](#)

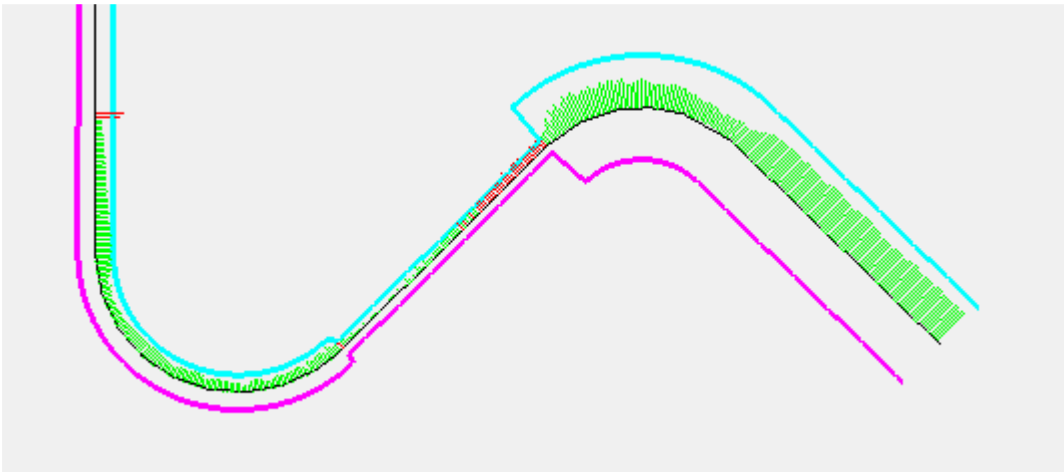
2.5 New Features – Curve Option

2.5.1 Advanced Best Fit Functions

AF-00135

Application:

Defaults on the accuracy of profiles are often not the same in all areas. In order to cope with the various tolerance ranges, this new tolerance best fit tries to fit the contour as well as possible to the tolerance band. As well as the tolerance best fit, a Tschebyscheff and a L1 best fit have also been integrated.



Call:

The function is selected using the evaluation menu for the 2D curve. Apart from the Gauss best fit, the settings now have a Tschebyscheff, L1 and a tolerance best fit.

[Back to overview](#)

2.6 New Features - PCM Option

2.6.1 JT Open Interface

AF-00163

Application:

JT can now also be imported as CAD format.

Restriction: Only Versions 8.0 and 8.1 are supported at present.

[Back to overview](#)

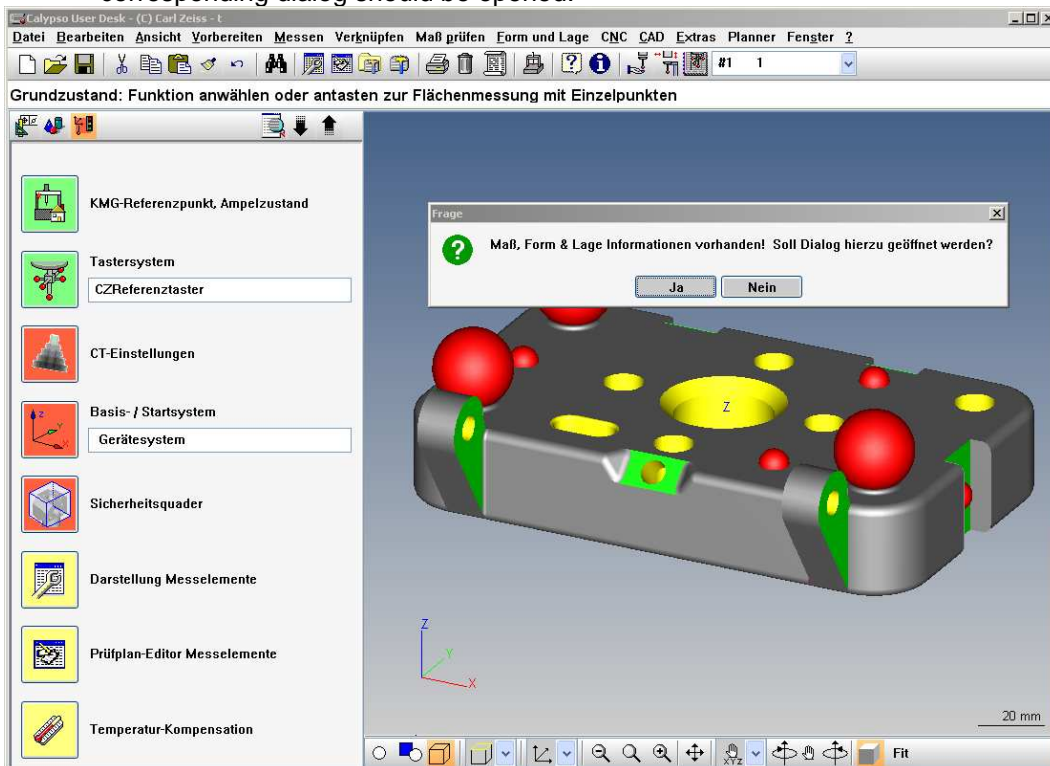
2.6.2 Form&Location Tolerances from ProE and UG Models

AF-00137

Application:

Extension of the import of dimension, form&location information from the UG and ProE format a few new functions.

- After importing a CAD model where there are form&location tolerances, you are asked whether the corresponding dialog should be opened.



- Any characteristic can be replaced by another one
- Features can be assigned to a blank characteristic
- If a characteristic cannot be created correctly during automatic generation, this is recorded in the default printout.
- Under the 'Create' tab, you can select between 'Number', 'Name' and 'Number and Name' when generating a measurement plan
- The current editing status is saved and after saving and re-opening a measurement plan, you can start where you left off.

Note: Importing data from ProE is still faulty. Dimension tolerances do not have a reference or coordinates. This problem will be resolved with a Calypso ServicePack.

[Back to overview](#)

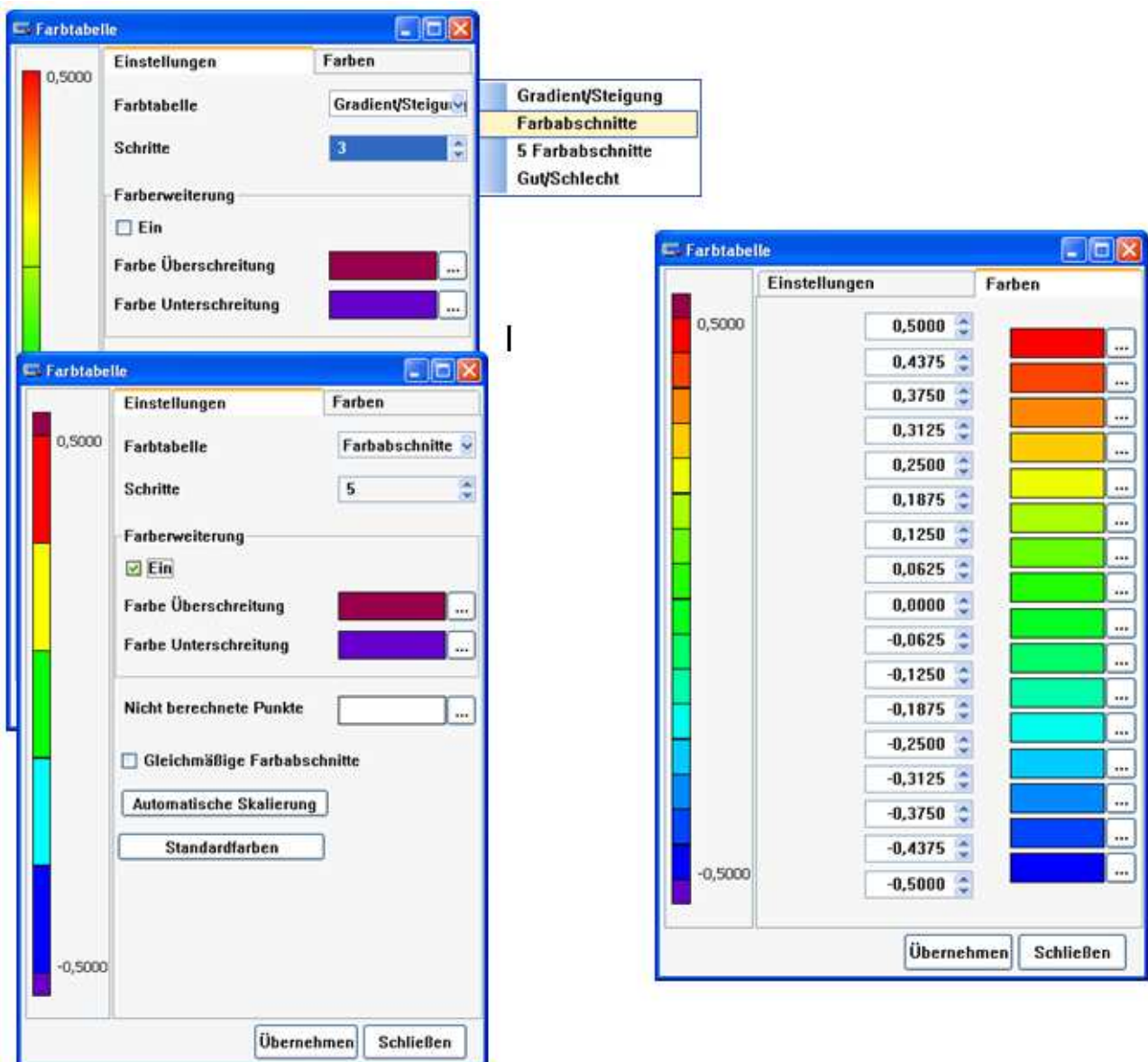
2.7 New Features METROTOM

2.7.1 CT Nominal-Actual Comparison

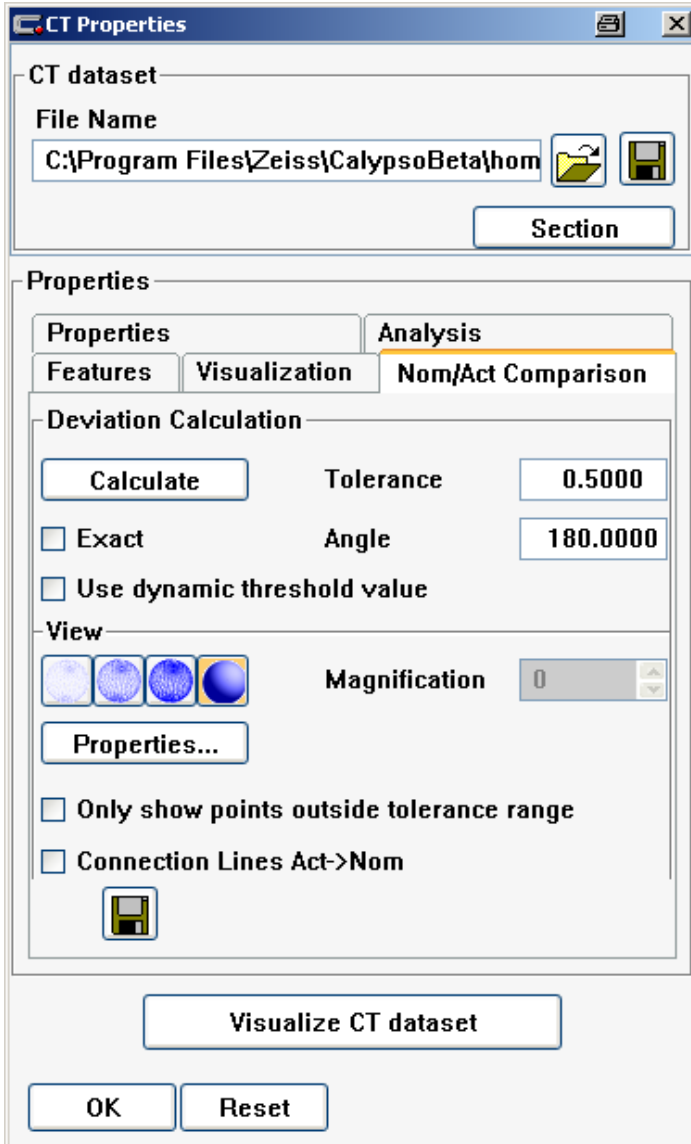
AF-00140

Application:

The color gradient can be set individually:



Call:



[Back to overview](#)

2.7.2 Advanced 'Pattern' Function

AF-00167

Application:

With this function 2D and 3D curves can be used with Pattern.

Call:

Using the nominal definition in the curve surface and selecting 'Pattern'.

[Back to overview](#)

2.7.3 64 bit Application for Metrotom

AF-00141

Application:

The data generated by the METROTOMs continue to increase in size. With the current systems, file sizes in the range of 10GB can be generated. It is not possible to edit this data on a 32 bit system. With the new 64 bit METROTOM application, the scope of a 64 bit operating system is used and it is possible to work with very large voxel files.

[Back to overview](#)

2.8 New Features O-Inspect

2.8.1 Flight Function – CMM Control per Mouse

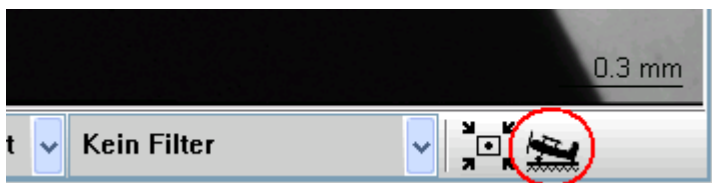
AF-00159

Application:

During manual or semi-automatic optical measurement, the user can reach the desired position on the part more quickly by using the Flight function, than by the control on the control panel.

Call:

Press the Flight button in the optical tool bar



Or in the CAD tool bar



If the camera is on and the SHIFT key is pressed, the Flight function is activated. The airplane is moved by clicking in the camera image or in the CAD view. They are three ways of moving this:

1. Clicking with the left mouse button positions the airplane to the desired position.
2. Clicking with the right mouse button and then dragging in the camera image moves the airplane in the camera image plane.
3. Clicking with the middle mouse button and then dragging in the camera image moves the airplane vertically to the camera image plane.

[Back to overview](#)

3 Installation Instructions

3.1 Installing the Calypso Basic DVD

In order to install Calypso you must have full local **Administrator rights**.

If you are performing an update of an existing Calypso installation, the existing installation has to be uninstalled first. Existing data such as measurement plans, probe data or other CMM-specific data will not be deleted by uninstalling Calypso. However we still recommend creating backup copies of your data at regular intervals.

Uninstall is performed using the Windows Uninstall function. In Windows, click on "Start" and select 'Calypso' via "Settings\Control Panel\Add or Remove Programs" and then click on "Remove".

When the DVD is inserted, the installation routine usually starts automatically. If this is not the case, use the Windows Explorer to select "Calypso.exe" on the DVD and start the installation by double-clicking.

Calypso 5.0 will automatically install *Windows Installer 4.5*, *dotNET Framework 3.5 SP1*, *SQL Server 2008*, a *PDF printer set* and the *Zeiss License Manager 1.8.0.0* as prerequisites should these not already be available on the target system. This usually requires several **system reboots** and can **take a long time** (especially the dotNET Framework).

Simultaneous installation of several Calypso versions on one computer is not supported! Error-free functioning of Calypso is only guaranteed if there is just one version installed!

Note:

Locally installed safety systems (firewall and/or intrusion prevention systems) can prevent access to the **SQL server** which is installed automatically as a prerequisite of Calypso 5.0. In such a case the setup will be cancelled. To adjust the configuration of your locally used firewall system please contact your IT department. The communication between the Microsoft Installer (msiexec.exe) and the SQL server (sqlserver.exe) processes must be assured.

The setup of the SQL server contains the package „MSXML 6“. On some systems the package „MSXML 6 Service Pack 2“ is already installed. This package can be incompatible with the package „MSXML 6“. If the SQL server setup is aborted during the installation of the „MSXML 6“ package „MSXML 6 Service Pack 2“ must be uninstalled first.

Important Note for all users of F25, O-Inspect and CMMs equipped with ViScan:

Please take note of the following information regarding existing optical probe data (F25, O-Inspect or ViScan camera data) created with Calypso 4.7.02 or older.

Any existing optical probe data originating from Calypso 4.7.02 or older **must be deleted** before using Release 5.0. The required camera data must be re-qualified with Release 5.0.

Trying to switch to older camera data with Calypso 5.0 will be denied and can result in output of various error messages.

[Back to overview](#)

3.2 Installing Calypso ServicePacks and Patches

If you have received a Calypso ServicePack or a Patch together with the Calypso Basic DVD, the ServicePack or Patch must be installed after the installation of the Basic DVD.

Make sure you do not accidentally install ServicePacks for older revisions as this would lead to an undefined status of your measuring software and can cause problems!

Prerequisite for the installation of a ServicePack is always an existing installation of the official release of a basic DVD. The release currently installed can be seen in Calypso in the 'Miscellaneous' menu. The revision currently installed is also automatically output in the "Error Report". You reach this via the "Extras" menu.

How to install a ServicePack:

1. First end Calypso if this is running.
2. If the ServicePack is on a CD:
The installation routine starts automatically. You only need to click once on the 'Install ServicePack' button and the installation is carried out in full. If the CD does not start automatically, open your Windows Explorer and start the 'Calypso_ServicePack.exe' by double-clicking.
3. If you have received the ServicePack per email (setup.exe):
Copy the setup.exe file to your local hard disk and start the file by double-clicking in the Windows Explorer.
4. After the installation has finished, Calypso has to be started and the changes are activated. You are then prompted to restart Calypso again.

Notes:

From 4.6.02 onwards, ServicePacks and Patches are no longer listed under 'Settings', 'Control Panel', 'Add or Remove Programs'.

How to carry out the installation of ServicePacks is described in detail in the Calypso manual in the 'Management' chapter.

For current **ServicePacks and Patches** concerning **Calypso** visit our website:

<http://www.zeiss.com/imt-servicepacks>

Please register in order to access the ServicePack download area and you will immediately receive your personal access code via eMail.

[Back to overview](#)

3.3 Installing Additional Languages

This is no longer necessary from Calypso 4.10 onwards. All languages available will be installed automatically with Calypso. Should additional languages become available they will be installed together with the following ServicePack for Calypso.

3.4 Installing the ViScan Drivers

Depending on the type of Framegrabber card in use, new hardware drivers are required. When the DVD is inserted the installation routine starts automatically. You then only have to select 'Installation' and 'ViScan Configuration'.



ViScan Dongle must be inserted (version 1 on the parallel port or version 2 on a USB port) and the dongle driver installed.

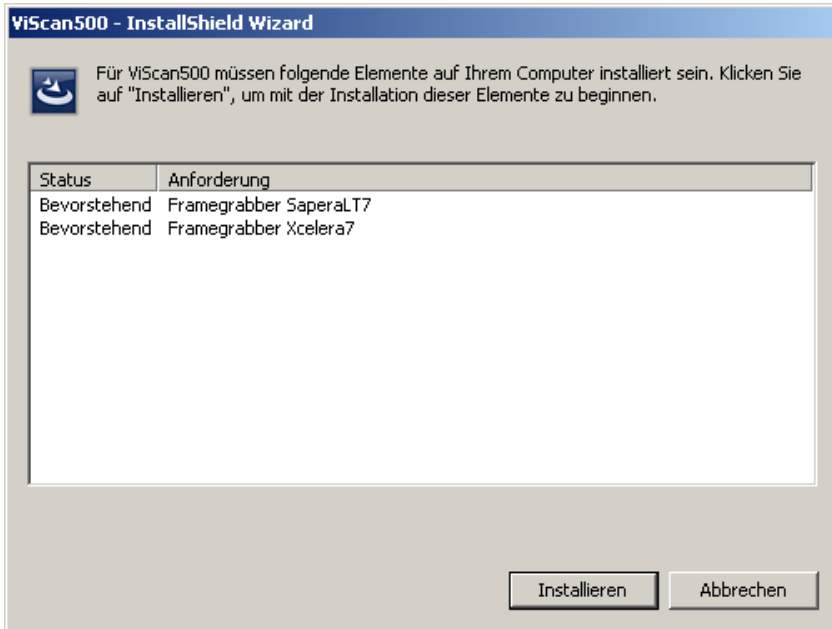
Framegrabber I is to be selected for the older card type (ill. left). This version is **for Windows XP only!**

Framegrabber II is to be selected for the newer card type (ill. right). This version is valid for **Windows XP** and **Windows 7!**

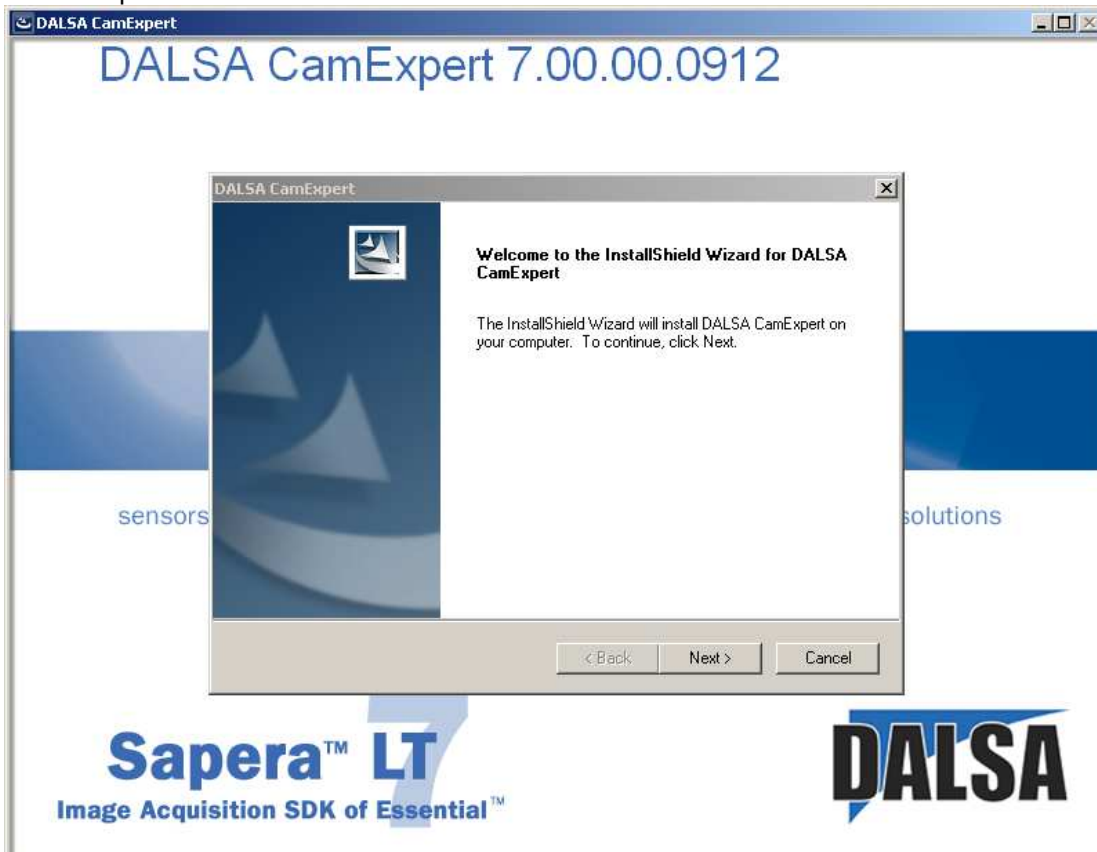
Please ensure that you select the correct drivers by comparing the card installed to the illustration shown.

The following is a step by step guide for Framegrabber II:

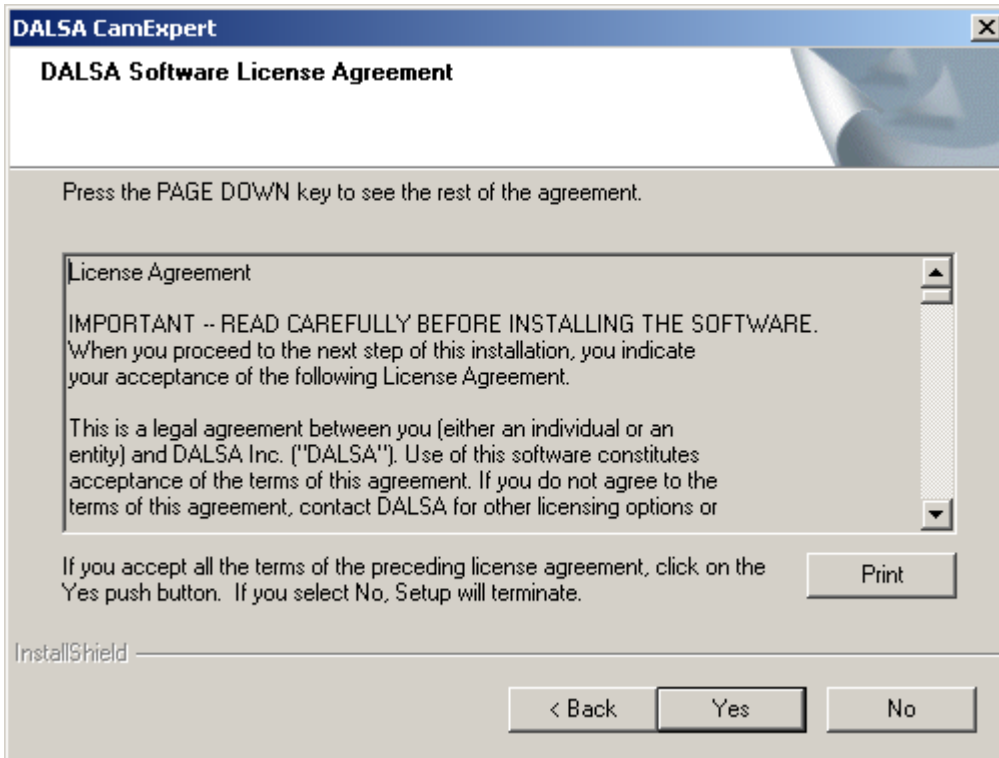
1. In the Calypso Setup select the 'ViScan Configuration' option.
2. Select 'Install Framegrabber II Driver' (see above).
3. Confirm the following dialog with 'Install'.



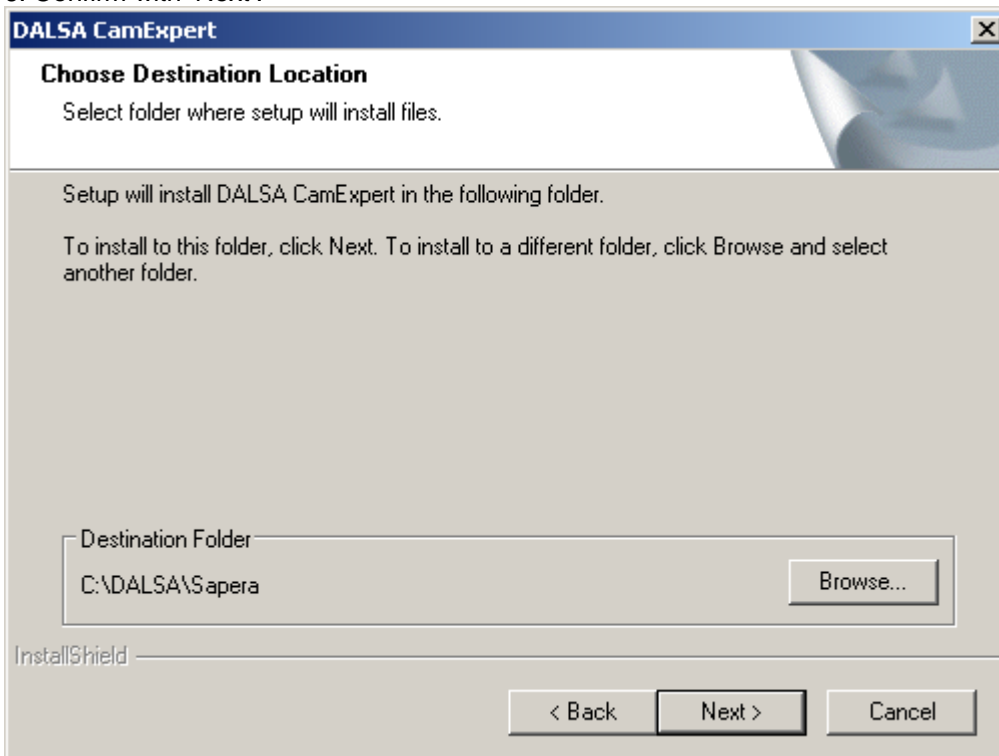
4. The Sapera framework will now be installed. Confirm with 'Next'.



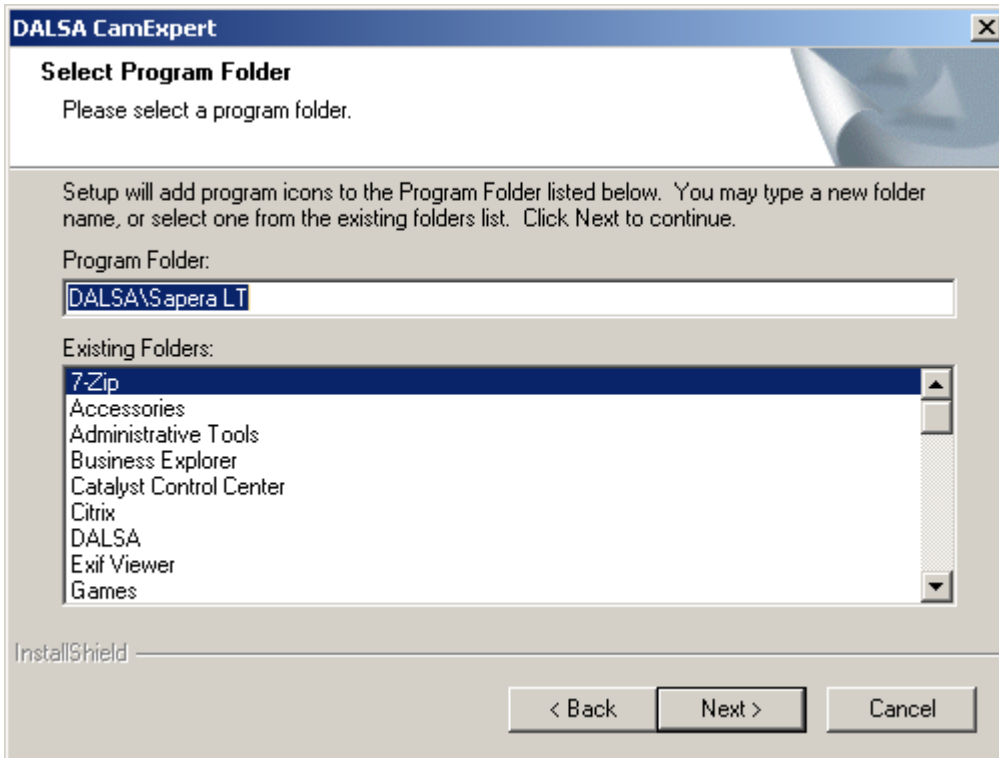
5. Confirm with 'Yes'.



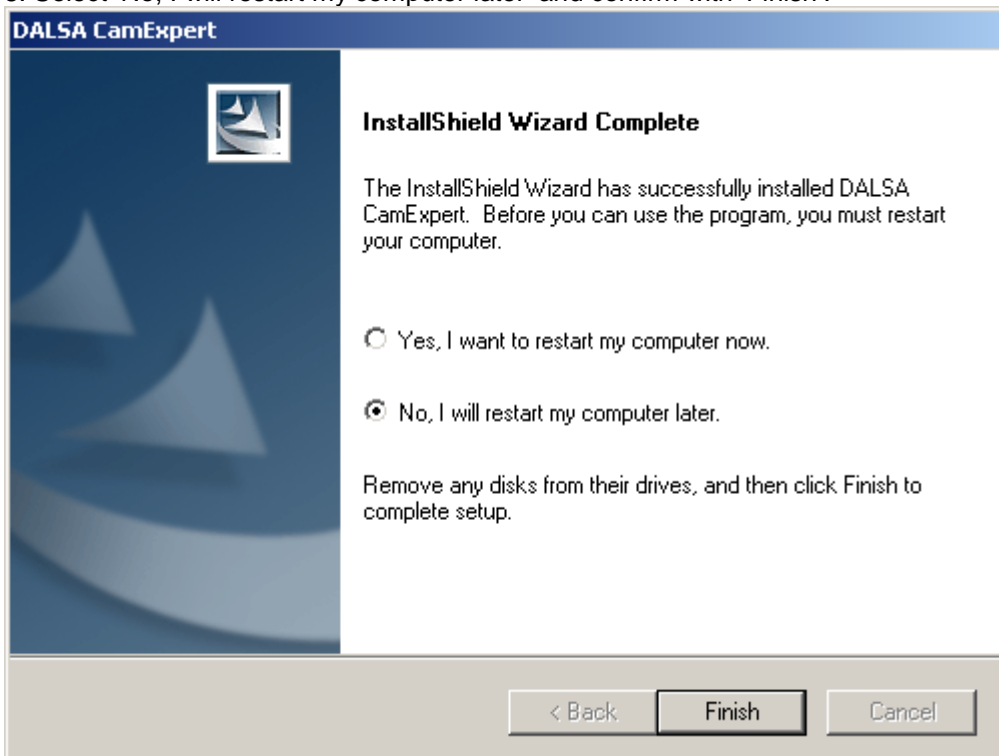
6. Confirm with 'Next'.



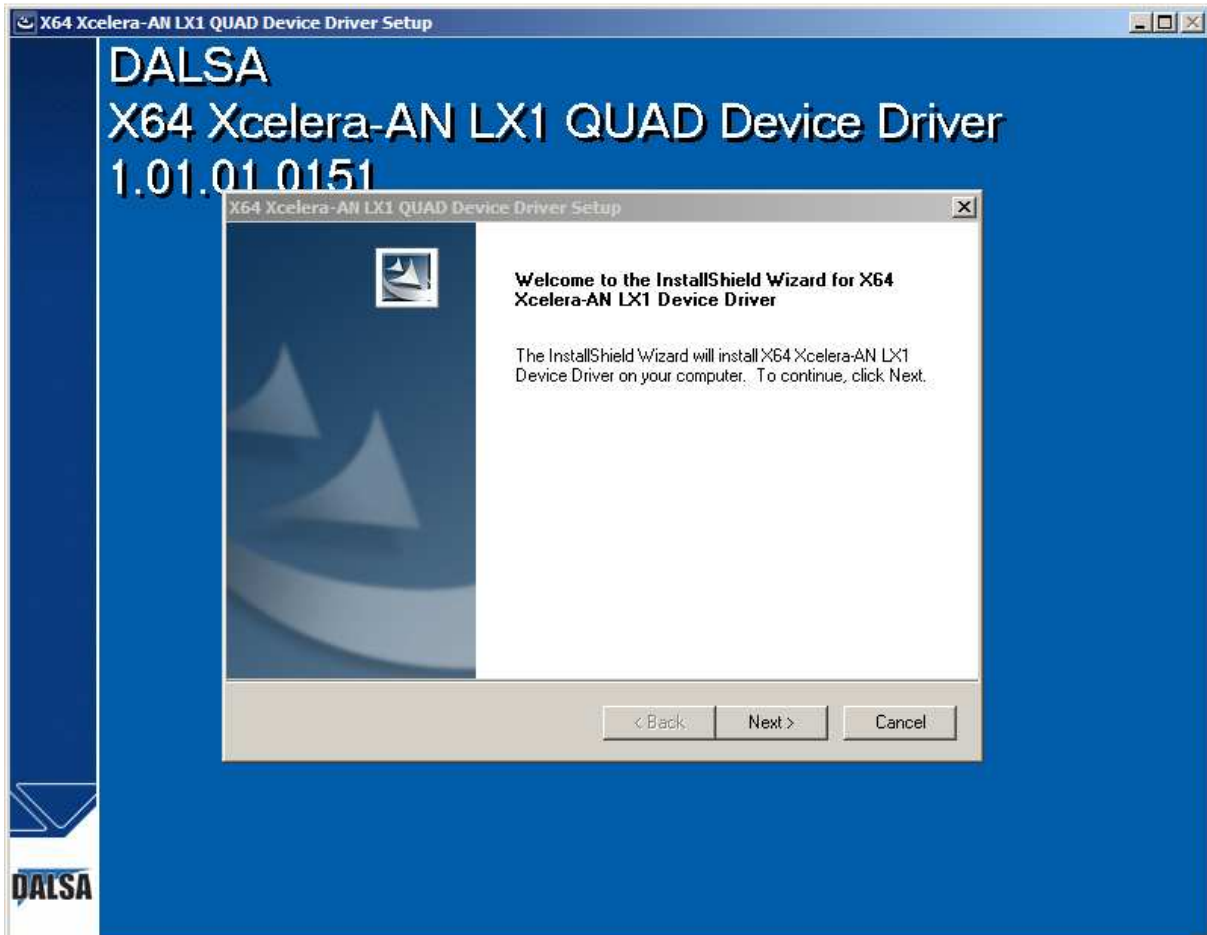
7. Confirm with 'Next'.



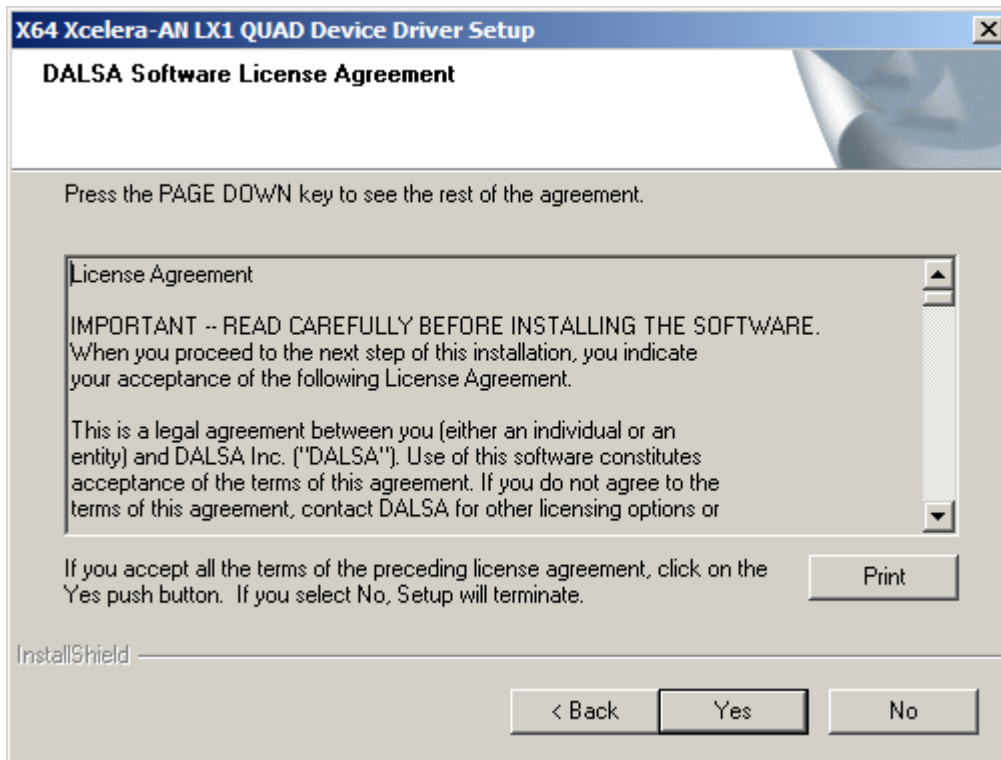
8. Select 'No, I will restart my computer later' and confirm with 'Finish'.



9. The driver for the Framegrabber will now be installed. Confirm with 'Next'.



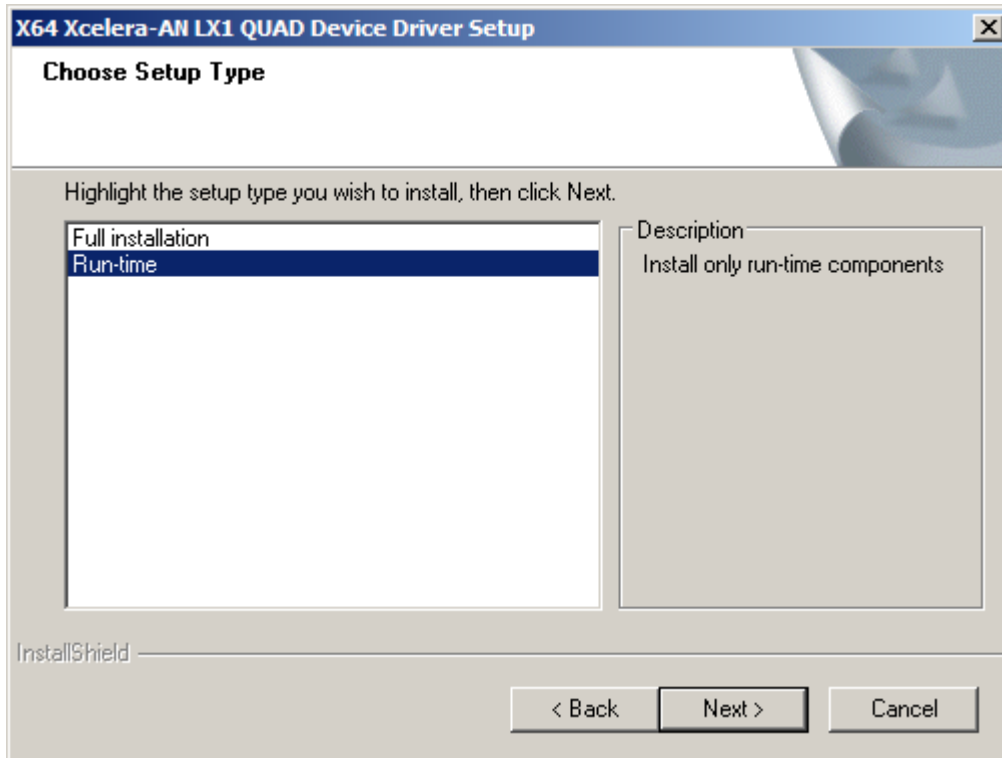
10. Confirm with 'Yes'.



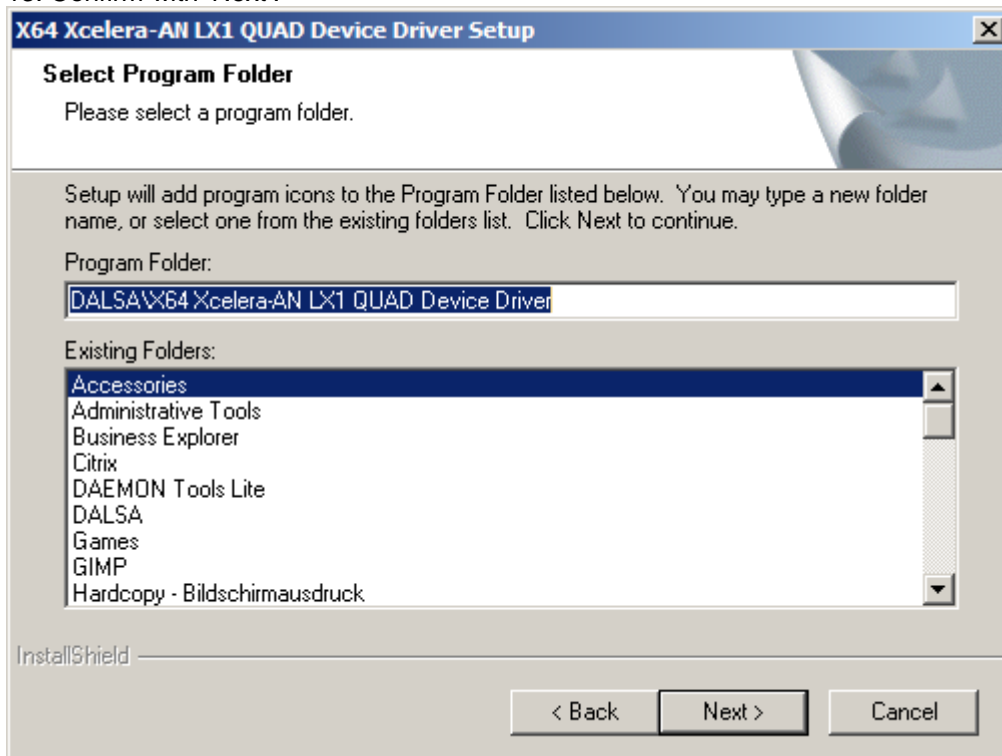
11. Confirm with 'Next'.



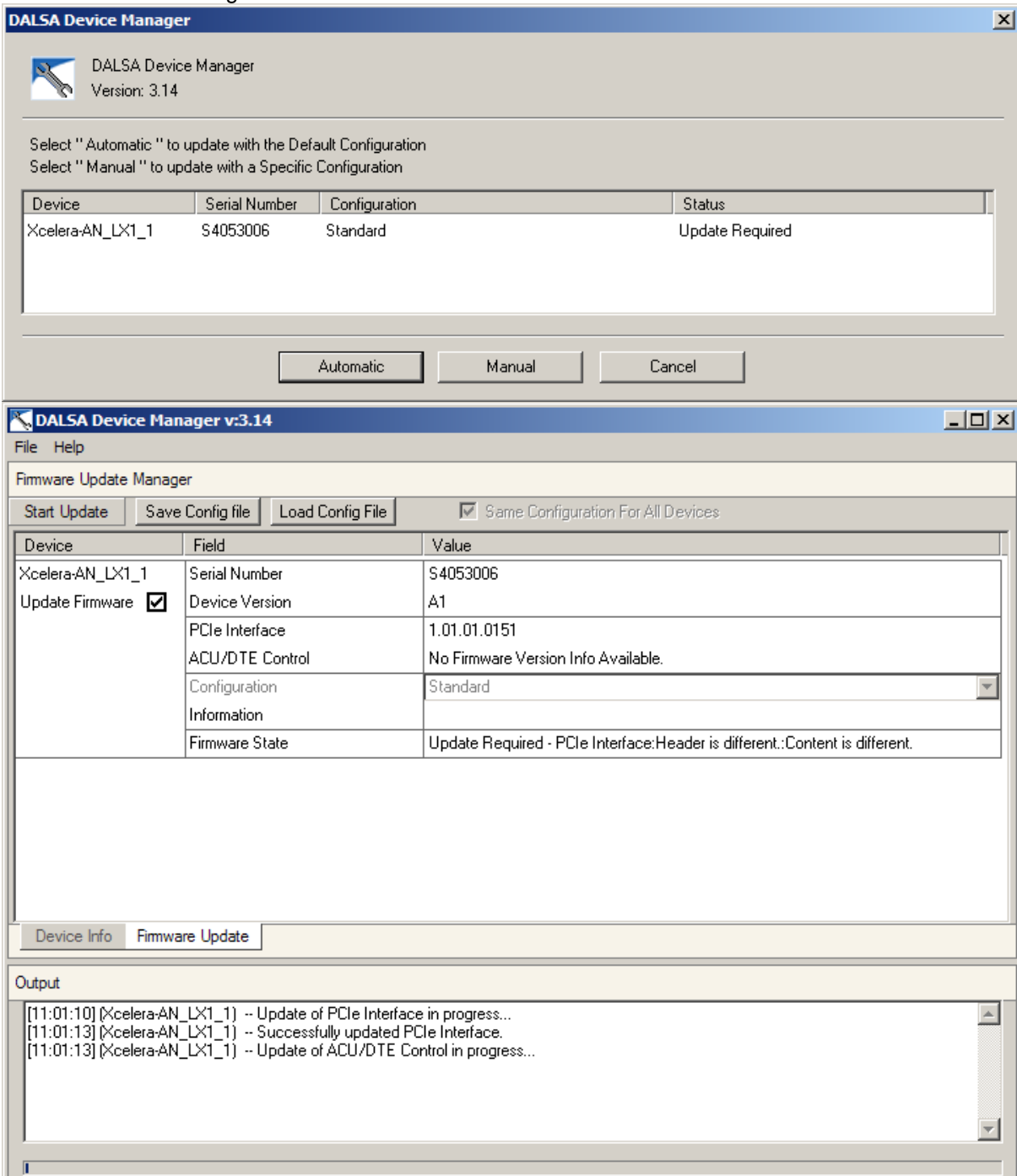
12. Select 'Run-time' and confirm with 'Next'.



13. Confirm with 'Next'.



14. The current Framegrabber Firmware will now be loaded. Confirm with 'Automatic'.



15. Close installation with 'Yes'.



... and „OK“



3.5 Data Backup

CMM-specific data can be saved and then reimported with the 'Save CMM Data' and 'Install CMM Data' functions. The data is saved with 'Save CMM Data' and burned on a CD (CMM data CD), which can then be installed at a later date with 'Install CMM Data'.

[Back to overview](#)

4 Compatibility

Please read the information on the **Application** and **Familiar Problems** before you use this software.

4.1 CMM Validity

Calypso Release 5.0 is intended for application on the following coordinate measuring machines:

Bridge measuring machines:	C400, C700 Eclipse Vista Contura Contura G2 Spectrum Accura Accura II Prismo MC, FC, WMM, PMC, ZMC UMC UPMC CenterMax GageMax
Horizontal arm measuring machines:	Carmet SMC USMC SMM PRO
Large measuring machines:	MMZ-T MMZ-G MMZ-E MMZ-B
Special measuring machines:	F-25 O-Inspect METROTOM DuraMax

4.2 Controllers & Sensors

Please refer to the [Compatibility list](#) in order to view the permissible combinations of machine types, controllers and firmware.

[Back to overview](#)

4.3 PC System

Recommended data systems:

ZEISS Power Workstation: HP Workstation xw4600, 3.16 GHz Core 2 Duo
 2x160 GB SATA-hard disc 10k
 4 GB RAM DDR2-800 ECC
 NVIDIA Quadro FX1700 grafic card 512Mbyte PCI
 1 x LAN Broadcom 10/100/1000
 1 x LAN Intel 10/100/1000
 DVD+/-RW drive, USB Scroll-Mouse

ZEISS Entry Workstation: HP Workstation xw4600, 2.83 GHz Core 2 Duo
 160 GB SATA- hard disc 7,2k
 2 GB RAM DDR2-800 ECC
 NVIDIA Quadro FX570 grafic card 256 MB PCI-E
 1 x LAN Broadcom 10/100/1000
 1 x LAN Intel 10/100/1000
 DVD+/-RW drive, USB Scroll-Mouse

Minimum system requirements:

The following minimum requirements must be fulfilled for installing and operating Calypso 5.0:

PC with 1,6GHz and 1GByte RAM, mouse, printer and data backup facility.

The minimum screen resolution is 1280x1024 pixels. This is the default size for the 'Calypso User Desk' window.

2 network connections must be possible (incl. installed driver):1x for control connection, 1x for customer network. The TCP/IP network protocol must be installed. The installed graphics card must be installed with OPEN-GL drivers. At least one of the ZEISS approved graphics cards should be used (NVIDIA QuadroFX oder ATI Fire GL).

Windows Operating Systems:

The following Windows versions are suitable for running Calypso 5.0:

Windows XP with SP 2	32bit
Windows 7	32bit
Windows 7	64bit

Calypso 5.0 has been tested successfully on Windows 7 systems. Please note the following restrictions:

- Eagle Eye systems are not supported on Windows 7 systems! Windows XP is required.
- The ViScan Sensor can only be used with Windows 7 in combination with suitable hardware. Please refer to chapter 3.4.

[Back to overview](#)

4.4 CAD Interfaces

Calypso supports the following CAD Interfaces:

CAD Software	Version
Catia 5	20
Catia 4	4.2.4
Pro/ENGINEER	Wildfire 4.0
Unigraphics	NX6
SolidWorks	2009
Inventor	2010
JT Open	8.0 & 8.1
Parasolid	22
IGES	5.3
VDAFS	2.0
STEP	AP214

[Back to overview](#)

5 Contact Addresses

If you have questions, ideas or problems regarding Calypso, please always use the integrated **Calypso Error Report** to contact us.

You can call the form for this by selecting "Error Report" from the "Extras" menu.

In the "**Comment**" field you can add any text to explain your problem.

With the pull down menu in the Error Report, you can save the report (to forward this per email) or print it (for faxing). Our email address and the fax number can be found in the report together with the respective phone numbers.

For Germany:

Carl Zeiss IMT
IO-SK Software Support
73446 Oberkochen

Tel.: 0180-333-6337
Fax: 07364-20-4304

eMail: calypsohot@zeiss.de

www.zeiss.de/imt

For USA:

Carl Zeiss IMT Corp.
Software Support
Novi MI 48377

Tel.: 1-800-327-9735
Fax: 248-624-1258 or
763-535-9792

eMail: calypso@zeiss.com

www.zeiss.com

For current **ServicePacks** concerning **Calypso** visit our website:

<http://www.zeiss.com/imt-servicepacks>

Please register in order to access the ServicePack download area and you will immediately receive your personal access code via eMail.

[Back to overview](#)