Release Information

Incicam
Helix / ES_Curve

Version 2.03

Part number: 95519
EC number: 4922
Document status: released

Date:	Version:	Change:	Author:
2012-08-07	2.03.05	Document created	Michael Martinet
2012-08-30	2.03	Document updated	Michael Martinet
2012-09-01	2.03	Document released	Michael Martinet

1 Version Information

1.1 Helix

The following main components are included in the software:

Component	Functionality
Edging	- Pulling down a job - Editing job information - Edging lens - Drilling a lens - Shelving - Re-cut a lens
Maintenance	- Cleaning cycle - Cleaning polishing wheels - Tool usage information
Calibration	- Probe calibration - Polishing wheel calibration - Axis calibration - Size and bevel calibration - Safety bevel calibration - Multi-cutter calibration - End-mill calibration
Advanced Operations	- Customized Materials and Frames - Cycle statistics - Pause mode - Drill database - Diagnostic tools
Communication	- RS-232 - Ethernet - DCS protocol compatible
Language	- English - French - German - Spanish - Portuguese - Italian

1.2 Module version

Sub-system version included in the installer package:

- Helix version 2.03
- UI version 1.03
- Frame Editor version 1.04.00.00
- Incicam version 1.0.65.85
- Cnc version 1.62E9
- Plc version 1.40
- SatisLoh Starter version 1.00.18.00
- Helix Server DLL version 1.00.02.106
- B&R PLC updater version 2.00.02.00
- B&R PLC version 0.12.07.18

2   System requirements

2.1   Minimum hardware requirements

2.1.1   Helix
- Incicam dongle

2.1.2   ES Curve
- Incicam dongle
- B&R Runtime version G3.01

2.2   Operating system
Installer package is compatible with the follow operating system:

2.2.1   Helix
- Windows XP 32 bits

2.2.2   ES Curve
- Windows XP embedded 32bits

3 Fixed errors and new features

3.1 Helix User Interface

The following new features / bugfixes have been implemented in the application, since the last official release:

ID	Title	Description	Fault class.
-	Chuck	Fix problem where chuck will not open/close on Helix machines.	Fix
927	Job ID	Increase allowed job number length to 20 characters.	Add-on
927	Job ID	Add space for null character when manipulating job number.	Add-on
931	Communication	Add support for local connection to host.	Add-on
934	Tools	Change 1/8 in, 1 flute mill to rough only.	Add-on
-	Materials	Updates to default values.	Add-on
-	EOB	Updates needed for EOB version of the software.	Add-on

3.2 Incicam

The following new features / bugfixes have been implemented in the application, since the last official release:

ID	Title	Description	Fault class.
-	EOB	Mist action on EOB according to Mist checkbox on the material screen ("ShelvingMist=x" on [Tool__Material__] into OPTOPARAMS.INI)	Add-on
-	Shelving	Faster shelving tool path calculation.	Add-on
-	Edging	Fixed minimum bevel distance from FRONT when using Hi-Wrap 2 cutter.	Fix
-	Probing	Fixed request "scan inside 2mm" in the event that the PLC does not detect the probe tips run out of the lens while data analysis reveal that probe reading is way off after one turn.	Fix

3.3 PLC & DLL

The following new features / bugfixes have been implemented in the application, since the last official release:

ID	Title	Description	Fault class.
-	Reset	Do a complete automation reset when starting the automation. Spindle collision danger with loader when loading the first lens.	Fix
-	Tool length	New parameter for calibrate all tool lengths to disable calibration of certain tools.	Add-on
-	Shut-down	Application crash when shutting down AR010. Using FrmControlMonitor.pas from ES4.	Fix
-	Limits	A axis positive limit changed from 3.5° to 40°.	Add-on
-	Mister	New request "Mist Air On/Off"	Add-on
-	Probing	When probing record Y instead of C as an option	Add-on
-	Automation	Collision between probes and new loader.	Add-on
-	Probing	New M function for only stopping probing.	Add-on
-	Timers	Apparently timers weren't properly reset in M210	Fix
-	Calibration	Safety feature for probe calibration. If analogue value doesn't change movement is stopped. Added because sensors didn't work.	Add-on

3.4 Frame Editor

The following new features / bugfixes have been implemented in the application, since the last official release:

ID	Title	Description	Fault class.
-	Shelf	Under certain rare conditions after importing, the frame editor was connecting the ends of the shelf as though it thought there were multiple shelves present even though the setup menu indicated the machine can handle multiple shelf segments. This has been corrected.	Fix
-	Language	Added multi-language support to the Image Processor dll.	Add-on
-	Language	Language files have been updated.	Fix
-	Language	Major rewrite of language translation code to significantly improve speed when a language other than English is selected.	Fix
-	Startup	Program startup speed has been improved	Fix
-	Language	A missing entry in the Italian language file would sometimes cause the program to lockup on startup if Italian was selected as the language. The missing entry has been replaced and code has been added to allow	Fix

-	Frame database	fixed bug when running Frame Editor on-board the Helix or ES-Curve. When there were existing frames in the access database from running the FE from the windows desktop, the FE would often not display the correct frame for editing when running from the UI on-board the machine. This	Fix
-	Color	Improved the color picker display on the setup menu.	Fix
-	Import/export	Other minor changes in the import/export code.	Fix
-	Drill data	Note: This change relates only to on-board use of the Frame Editor. The ES-Curve UI and possibly the Helix UI is adding previous drill data back into the job each time the Frame Editor is used even though the original drill data is being returned by the FE to the UI. This unintentionally doubles the number of drill features each time the on board Frame Editor is used. The only solution was to not return drill	Fix
-	Drill data	Changed added back in to allow editing drill features when running on-board the ES-Curve and return the edited features to the UI. Drill feature editing is being moved to the Magnified Shape Editing screen so these features can also be used when running on-board. Drill displaying, editing, and adding is still limited to center reference drill data. Other types of drill reference data will not be displayed and cannot be edited in the FE, but it will be passed back to the UI and retained after and edit.	Fix
1063	Data	Shape editor not saving changes	Fix
1199	Drawing	Not possible to merge two points to a line	Fix
1292	Import/export	Import of frame/job/VCA file when only left eye is present now works correctly.	Fix
1197	Import/export	Mixing up left/right during importing if only Left-Eye-Information present in original file	Fix
1188	Import/export	Lost or duplicate of drill data.	Fix
1263	Import/export	Shelf is not properly imported in Frame Editor	Fix
1041	Drill data	be able to enter drill data in the Frame Editor using shape edge or box edge reference.	Add-on
1304	Drill data	Frame Editor allow you to enter too small hole diameters	Fix
1311	Import/export	Shape 004 in the UI shows sides not straight in the Frame Editor.	Fix
1305	Import/export	Negative drill depth is not transferred.	Fix
1198	Import/export	3B can only block trace files	Add-on
1316	UI	Frame Editor should remember last used tabs	Add-on
1063	Import/export	Shape editor not saving changes	Fix
1308	Drill data	Need to be able to add hole by clicking on machine	Fix
1340	Drill data	A new added drill hole should open "Edge" Reference tab by default	Add-on

1339	Drill data	Drill reference method sent from FE is being ignored in UI	Fix
1306	Drill data	A vertical angle is converted to Zero lateral angle	Add-on
1324	Drill data	Operator should have the option to move or not move drill features if the size changes	Add-on
1338	UI	Clicking into frame editor magnified screen makes a point jump somewhere	Add-on
1348	Drill data	Do not allow "edge reference" for holes that are vertically out of shape	Fix
1308	Drill data	Need to be able to add hole by clicking on machine	Add-on
1349	Drill data	Enable entering "minus" sign for drill angle before entering any number	Add-on
1390	Drill data	FE should allow any drill reference method when running on Nopcam machine and only center ref with Incicam	Add-on
1350	Drill data	UI - Do not allow "edge reference" for holes that are vertically out of shape	Add-on
	Import/export	BSIZ back and forth between Nopcam and the FE.	Add-on
	Drill data	handle drill angle back and forth between Nopcam and FE	Add-on
1435	Shelf	If there is no shelf, The "Other" tab displays the number of shelf points as 1 instead of 0.	
1405	DBL	Enter DBL in frame editor	Add-on
1421	Drill data	Add code to limit the distance from the box measurements that a drill feature can be placed or moved.	
1417	UI	Frame Editor Start-Up dialog should only display operating systems it has been tested with: Xp and Windows7	Add-on
1436	Shelf	Creating a new shelf for a 4 point uneven angle square shape results in a shelf that is not exactly straight on all sides	Fix
1421	Drill data	Add code to limit the distance from the box measurements that a drill feature can be placed or moved.	Fix
1419	Drill data	Hide side drilling tab (we do not have any code to utilize it)	Add-on
1348	Drill data	Do not allow "edge reference" for holes that are vertically out of shape	Add-on
1422	Drill data	Letters hidden by something	Fix
1418	Shelf	Make newly added shelf point jump on 004	Fix
1434	Shlelf	After creating a new shelf, "Lock Shelf Point Axis" checkbox value is incorrect if the shape is even angles	Add-on

4 Known restrictions

4.1 Installation / Updates

- (none)

4.2 Software
- Small shelf Z glitches on some specialty shapes.

5 Installation notes

5.1 Requirements
- ES_Curve Setup-V2.03.exe
- ES_Curve or Helix computer

5.2 New installation
1. Copy ES_Curve Setup-Vx.xx.exe on an USB thumb drive.
2. Plug the USB thumb drive into a Helix or ES_Curve
3. Click on the "**Start**" >> "**My Computer**"
4. Locate the thumb drive and click on it.
5. Click on ES_Curve Setup-Vx.xx.exe
6. Follow the instructions on the screen
7. Remove the USB thumb drive

5.3 Updates
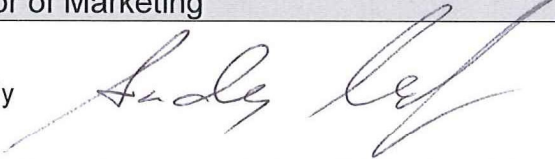1. Rename ES_Curve Setup-Vx.xx.exe to HelixSetup.exe
2. Copy HelixSetup.exe on an USB thumb drive.
3. Plug the USB thumb drive into a Helix or ES_Curve
4. On the Machine screen, touch the "**Setup**" button
5. In the "**Save/Restore**" frame, touch the "**Upd SW Jobs or Frames**" button
6. Follow the instructions on the screen
7. Remove the USB thumb drive

6 Files locations

Binary files	F:\Release Disk Images\ES_Curve - Incicam - 95535
Online binary download	http://nationaloptronics.net/index.php/Helix
Product manuals	F:\Manuals\Helix
	F:\Manuals\ES-curve
Online help and documentation	http://nationaloptronics.net/index.php/Helix
Software Release Information (this document)	F:\Release Disk Images\ES_Curve - Incicam - 95535

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7 Approvals and signoff

Signatures represent the approval to release/deploy the software.

Software Engineering Manager Signature	Date
M. Martinet	9/19/2012
Project Owner Signature	Date
(none)	
Director of the Research and Development Signature	Date
M. Wagner	9/18/2012
Support Service Signature	Date
K. Thacker	9/27/12
Director of the Quality Signature	Date
T. Doyle	9/27/2012
Director of Manufacturing Signature	Date
M. Bergeron	9-27/12
Director of Marketing	Date
K. Paddy	9/27/12