

# Changelog SchueCAM V20

- V20.20.10.01 Error-message if the turned and not turned mount positions have something to be done after the separation cuts. The bar is always rotated in one piece.
- V20.20.08.02 "Start-point in profile permitted" for t-slot.
- V20.20.07.02 Deep-hole-cycle for machinings from the beginning or end.
- V20.20.07.01 Bug fix using the step-milling-cutter.
- V20.20.05.02 Marker for profile-height-measuring-point. The UniqueID using ncx-jobs is generated from JidentNo + PartNo now.
- V20.20.05.01 New tap-holder and disc-milling-cutter-holder.
- V20.20.04.01 Using the enc-reconversion the second mount position is considered now.
- V20.20.02.05 Notches with three lines had been extended.
- V20.20.03.01 For the shuttle-mode the software is using work-limits now.
- V20.20.02.05 Worktime is shown at test-loading. 3D-tool-holder for the machines PBS, PBC and PBX.
- V20.20.02.04 Notches with slope and gap are converted into M000960 und M000968.
- V20.20.02.03 Extended bar-information for labels.
- V20.20.02.01 Bug fix for sloped machinings that are part of dynamic macros.
- V20.20.01.06 The outside-contours from cc-files are used for collision checks now.
- V20.20.01.05 If the lift-aid is activated the cabin stops at the end of the machine now.
- V20.20.01.02 The wall-detection can be de- / activated using the options.
- V20.20.01.01 Bar information had been added for the label-printer.
- V20.19.12.09 The Italian language had been added.
- V20.19.12.06 Bug fix – refreshing mount view.
- V20.19.12.05 Now a polyline can be done using a disc-milling-cutter.
- V20.19.12.03 Bug fixes for ncw-import and ncx-converter.
- V20.19.11.03 The height-measuring-position can now be configured using the clamp-positioner.
- V20.19.11.01 Extended t-slot-milling. T-slot-milling-cutter without shaft is possible now.
- V20.19.10.03 Bug fix using tap-presettings und visualisation of the used tool.
- V20.19.10.02 Ncx-converter cut-offset at the beginning and end of a bar. Bug fix for notches.
- V20.19.10.01 Extended zero-point-dialog.
- V20.19.09.08 Extended rotation functions if machinings had been divided on two sides.
- V20.19.09.07 Ncx-converter is importing cc-files now and the free millings functions had been extended.
- V20.19.09.06 The geo-curve for sloped notches had been extended using the ncx-converter.
- V20.19.09.04 Priorities are shown now at the alarm-row.
- V20.19.09.02 For notches there is now a better assignment of the different working-sides.
- V20.19.09.01 Bug fixes.
- V20.19.08.08 Coloured alarm-row for the machine AF500.
- V20.19.08.06 The ncx-converter is evaluating the working-depths from the depth-tables now.
- V20.19.08.05 Bug-fix mounting over-length profiles at the right rest.
- V20.19.08.04 CadXtract bug fix for open dxf-contours.

- V20.19.08.03 Using the DynamicCutDepth the depth of cuts can be reduced dynamically if too much material is inside the cut-area.
- V20.19.08.02 Improvements converting big jobs.
- V20.19.08.01 Ncx-converter for notches with slopes and free millings on a free plain. Predrill-Options from ncx-datasets is used now.
- V20.19.07.05 Bug-fix for the PBC.
- V20.19.07.03 Now at least two clamps are always holding the profile.
- V20.19.07.02 End position of the cabin can be configured using the mount-graphic.
- V20.19.07.01 Extended usage of different working sides using a notch.
- V20.19.06.04 Notches starting inside the profile are supported now.
- V20.19.06.03 The barcode "Code39" is supported now.
- V20.19.06.02 The spindle-position at the end of the process can be configured now.
- V20.19.06.01 Shortcuts "CTRL+A" for generating the outside-contour and "CTRL+S" for generating the support-clamp positions. The priority can now be set using the machining-filter.
- V20.19.05.04 GeoCurve had been extended for angles greater 180°.
- V20.19.05.03 Additional checks if the job had been edited according to the status-file.
- V20.19.05.02 New function for bar rotations.
- V20.19.05.01 An infinite loop was corrected using test-loading. For ASS-articles the wrapping curve is now detailed by default. Additional checks for critical angles had been added.
- V20.19.04.04 Bug fixes while converting a job into sub-folder.  
The ncx-format was extended by the JobID (inclusive labels).
- V20.19.04.03 Bug fix while moving the last (4th) clamp at the PBX-AS.
- V20.19.04.02 PBS: Because of a mistake nesting of cuts for the M670 was not possible.
- V20.19.04.01 Bug fixes using the ncx-parser.
- V20.19.03.08 Bug fixes using the ncx-parser and the zero-points-dialog.
- V20.19.03.07 (AF500) New verification that the amount of clamps for every clamp-group is the same.
- V20.19.03.06 Bug fixes using the filter-function.
- V20.19.03.06 Bug fix for wrong rotated machinings. They are corrected now automatically.
- V20.19.03.04 Now the mount-rotation can be corrected automatically if it was wrong for a bar/BG.
- V20.19.03.03 Zero-points and measuring-offsets can be edited using a dialog now.
- V20.19.03.02 Adding a new article to the Database sometimes a wrong rotation was created.
- V20.19.03.01 A mistake while relocating a u-cut (M000001) was corrected.  
Converting a ncx-job the cut-vector is expanded over the entire article now.
- V20.19.02.03 Bug fix for cross-cuts with critical cut-angles.
- V20.19.02.01 HS100: Sometimes the wrong work-side was used for rotated millings.  
Bug fix while moving machinings at the clamp positioning.
- V20.19.01.06 Bug fixes for arcs greater than 180° and at polygon-millings.
- V20.19.01.05 Bug fixes for free millings using CadXtract.
- V20.19.01.04 The overrun for cross-cuts can be configured now.
- V20.19.01.02 Corrected m-function for air-blow-function.
- V20.19.01.01 A bar/BG can be opened now even if the article does not exist in the database.
- V20.18.12.02 New support reading ncx-jobs created by CadXtract.

- V20.18.12.01 Bugfix for notches with horizontal-angle. Extended collision check against faces at start and end of the profile. Bugfix while positioning clamps and reorganizing the machining-tree.
- V20.18.11.08 Automatic merging of two connected notches into a notch with additional cut.
- V20.18.11.06 Bugfix for LogiKal notches.
- V20.18.11.05 (AF500) Now a machine-place can be loaded/unloaded automatically using the spindle (see tool management).
- V20.18.11.03 The cross-cuts of a profile can be saved as a new BG now.
- V20.18.11.01 With the parameter m\_bFreeMillingWithAngle in the machinedata.xml polylines can be rotated in 3d-space (by default enabled). M960 is deactivated now. Countersinks are now supported using ncx-jobs. AF500-Bugfix for half clamping clamps and new error message rotating into main-fix-position. Bugfix for "serial-machining"-option.
- V20.18.10.09 Priority END are supported now (see ncx-converter).
- V20.18.10.07 Jobs can be converted into its own directories now.
- V20.18.10.06 (AF500) A crosshead can be switched on and off using configuration-menu now.
- V20.18.10.05 (AF500) Extension for high support-profiles.
- V20.18.10.04 (PBX) By default the NC-Backup is disabled now.
- V20.18.10.03 Extended ncx-conversion for notches.
- V20.18.10.01 Bugfix for arc-elements. New dialog to generate polylines using a DXF files. Linkings between script-macros are possible now.
- V20.18.09.06 (AF500) Bugfix wrong crosshead error-message. Bugfix for remains-barcode.
- V20.18.09.05 (HS100) Additional security checks and bugfixes HS100.
- V20.18.09.03 (AF500) Bugfixes using the automatic clamp-positioning. Amount of terminal-character for barcode-scanner can be configured now.
- V20.18.09.02 (AF500) Better and more detailed collision checks. Bugfix while expanding a tree.
- V20.18.08.05 (AF500) While doing mitre cuts the pieces are divided better now. Produced-files have been extended with new entries.
- V20.18.08.03 Bugfixes for profile over-length-function. Bugfixes for cutting the profile-remains and generating clamp-groups.
- V20.18.08.02 Now angles are supported using the BG-filter.
- V20.18.08.01 Bugfixes using the ncx-converter, polylines and the macro 1.
- V20.18.07.10 A error had been corrected while loading DXF-files with block-elements.
- V20.18.07.08 Active jobs can be deleted now.
- V20.18.07.06 (AF500) Bugfixes at the automatic two-sides-dividing. Icons changed.
- V20.18.07.04 Bugfixes profiles with over-length. Corrections at the BG-filter.
- V20.18.07.01 Bugfixes BG-filter and row-elements.
- V20.18.06.07 Extended polyline and notches.
- V20.18.06.06 Extended collision-checks. Bugfix clearing an elements. Row-elements with offset.
- V20.18.06.05 (AF500) Extended position-check. Filter has been extended.
- V20.18.06.04 Bugfix while reading a service-mail.
- V20.18.06.03 (AF500) Extended position-check for 2nd mount-position.
- V20.18.06.02 (AF500) Some machine-abortion are handled is a better way. Extended collision-checks and bugfixes.
- V20.18.06.01 (AF500) Unused clamps are positioned in a better way now.
- V20.18.05.09 (AF500) Corrections while using the second mount-position.
- V20.18.05.09 Barcode-printing for the remaining piece.
- V20.18.05.07 (PBX) Software-crash fixed while creating a new profile-fix-position without a DXF.
- V20.18.05.06 Corrections converting a macro960 to a macro1.

- V20.18.05.06 (AF500) The machine can mill polylines now.
- V20.18.05.05 (AF500) Amount of clamp-groups has been increased from 300 auf 400 (iteration cut)
- V20.18.05.05 (Converter) Machinings divided to two sides are displaying by the converter in a proper way now.
- V20.18.05.04 (AF500) Problems fixed using the second mount-position.
- V20.18.05.03 Error using the polyline has been fixed.

### V20.18.05.02 (AF500)

- By converting a job it can now be decided between generating a M960 or a M1 (AF500).
- The NCX-conversion has been accelerated.  
Using the NCX-conversion the second mount-position is generated automatically now.  
Mitre-cuts can be converted now.
- Configurations for the remaining profile can be edited now.  
Functions for the label-printing have been extended. (HS100).
- Using the AF500 special tool can be inserted into the tool-stock now.
- In the profile management the profile-files can be exported in an alphanumeric format.
- Collision check: On a bar clamps can be positioned nearer to the cross-cuts.
- Notches with tilt-angle have been extended.
- Script-macros can be added into the dynamic macro-management.
- Bars can be rotated more easily now.
- SRW-files can be rotated to the main-mounting-position using the right mouse button.
- Undo-function for the ready-message.
- For the AF500 a reduced cross-cut was implemented.
- The different machines can be switched using the main menu.
- New simple profile-contours R-I-L-U-O can be used if the DXF-file is missing.
- For the T-slot cutter a shaft can be inserted now.
- The ruler is showing the direction-angle now.
- New time-calculations for the AF500.
- Using the profile-management only one mount-position is needed anymore (not for HS100/PBL).  
There is a new option to export the profile contours as a DXF-file.
- At the macro-management polygons have been extended by an inside- and outside-contour.  
Additionally to this circles, lines and arc can be imported from the DXF-file now.
- The new deep-cut-cycle pulls out the tool completely out of the profile after every cycle.
- A tool-break-check has been implemented (HS100-V3)
- Extended control and edit-functionalities using the BG-Programming.  
Bars can now be rotated more easily.  
Machinings can be bound to a macro using a centre point as macro reference-point.
- Corrections and optimizations.

### V20.17.04.07 (AF500)

- New possibility to place a free amount of bars onto a profile.  
Simplification of the profile-management.
- Extended polygon-line also for bigger radius (V20)

- Not existing mount-positions are generated automatically now (not for HS100/PBL). Using the database only one mount-position is needed now.
- Pendulum-mode, Timed cutting (AF500)
- The machine can send an email/SMS in case of an error (HS100)
- Function to manually assign tool.
- Mitre-sink generated by SchueCAL are available in the SchueCAM now.
- PBC: Predrill for cleared rectangular cuts are now available.
- Extensions using the NCX-conversion.
- Extended formula-input.

### V20.16.02.05

- Bug fixing and runtime optimization.

### V20.16.01.01

- **ENC-reconversion**, machine independent file format for Schueco machines (unlocking the feature is **chargeable**)
- **Multi-selection** available using tool-presettings.
- The work-tree can now be **expanded** using the context-menu or the toolbar.
- **Clamp presettings** can now be **removed** in the production view via context-menu.
- The error-messages have been extended mounting a profile.

### V20.15.09.03

- A new **barcode (code 93)** can be used to communicate with the FDC.

### V20.15.08.03

- **Test loading and job reconversion** are now integrated directly into programming view.

### V20.15.07.03

- A new tool type **countersink cutter** has been added.

### V20.15.06.01

- To replace the **macro 262** (notch for structural mullions), the MCO interface has been expanded by a new **macro 967**.

### V20.15.03.04

- Macros can now using the "save in **dyn. macro management**" are permanently stored in a macro database. With the function "insert from dyn. macro management", the stored in the database macro then reinserted into a BG.
- BGs and bars can be **renamed** in the "programming" now.
- A thread can now be cut into a blind hole. For this, the parameter "**Offset core hole depth**" are given in each thread.
- [PBX] The PBX now no longer crashes when you switch the machine or configuration changes.
- Problems in the macro management have been corrected.

## V20.14.11.04

- [PBX] The approach paths were accelerated at the PBX.

## V20.14.05.05

- About "new predecessor" and "new successor" the **sequences** of basic elements can be fixed. Specifications can also be automatically set within the "enc" file. The first element is shown as "|>>", the intermediate elements with "<->" and the last element of the series appears with "<<|". The function is i.a. used for steel machining.

## V20.14.05.01

- Mathematical functions can now be used in a **formula editor** together with basic elements or macros. In addition to the basic arithmetic functions such as roots, sine or cosine are possible. In dynamic macros, it is possible to store "public" variables.
- More BGs can be simultaneously mounted using the barcode scanner.
- [PBX] At the PBX, there were some corrections using the clamp-positioning.

## V20.14.02.07

- [PBX] Besides generating a 2nd mount-position, now **overlong bars** are divided additionally. Thereby the mount-positions .03 and .04 are generated.

## V20.14.02.03

- By clicking a job with the right mouse button, now a context menu with the options "**Converting and test loading**" and "**Convert without rotating**" appears.

## V20.14.02.03

- Using the new **filter** it's now easily and quickly possible to select certain basic elements or old script macros in BGs and replace them by other elements. It is even possible to reassemble script macros completely.

## V20.14.06.1

- A **pre-drilling function** was inserted into the tool management and the basic element.

## V20.13.05.06

- The window-sizes are now saved and restored automatically. You can choose your personal settings in the production, programming or "BG-programming".

## V20.13.01.08

- Backups can now be automatically sent by the new e-mail function.