

New in Vintech 11 (2021- ...)

1. Vintech RCAM 11 – new functions

- 1.1. Optimized functions and user interface
- 1.2. Nesting orders Database
 - 1.2.1. Data support in SQL Database,
 - 1.2.2. Enlarged functions for importing parts in DB, including Vintech rBI library for import and importing from nesting project,
 - 1.2.3. Supporting the data about the parts in structure order.stage.material-thickness,
 - 1.2.4. Supporting geometric information, general and technological attributes about details,
 - 1.2.5. Selecting and loading with multiplicity in RCAM project selected parts from different orders.
- 1.3. Function for “cutting to the material”
 - 1.3.1. Automatically creating the sequence of “cutting to the material”,
 - 1.3.2. Interactively changing the places of Lead-ins/Lead-outs in the sequence of “cutting to the material”
- 1.4. Processing common cuts with kerf=0 and kerf compensation of the path of:
 - 1.4.1. Blocks by pairs,
 - 1.4.2. bar parts with common cut, that are processed with parallel torches,
 - 1.4.3. regular blocks.
- 1.5. Import of attributes of CAD file with nesting attributes;
- 1.6. Text or raster marking
 - 1.6.1. Importing texts from CAD file,
 - 1.6.2. availability to automatically nest the texts for marking
 - 1.6.3. marking text from CAD attributes,
- 1.7. Optimized breaking of a multi-part.
- 1.8. Optimized functionality for preliminary piercing.

2. Vintech rBevel 2.0 – new functions

- 2.1. Function for working with complex bevels of K, X and Y type.
- 2.2. Automatic technology of parts with complex, single bevels and vertical cutting,
- 2.3. Extensions for specifying the sequence of processing of the different type of paths in a part,

3. Vintech rDrill 2.0 – new functions

- 3.1. Optimized interface for defining torches and complex processings
- 3.2. Availability for setting complex processing for processing identical holes in a zone (zone-by-zone setting of the torch sets)
- 3.3. New functions for milling:
 - 3.3.1. setting the milling tools
 - 3.3.2. milling over a line
 - 3.3.3. milling with add-ons for: round holes, inner contour, outer contour
- 3.4. Setting thread cycle parameters in thread tables

4. Multi-user Database for Vintech RCAM 11

5. Vintech Manager – CAPP system for management of the technological preparation of true shape nesting production. Includes

- 5.1. Multi-user Database for nesting orders
- 5.2. Interfaces for importing nesting order data
- 5.3. Planning of nesting and order stages

- 5.4. Profiling the system for working of users with roles; Possibility to set the work organization as per the requirements of the company.
- 5.5. Management of planned jobs
- 5.6. Management of nesting jobs and layouts
- 5.7. Pricing and offering of completed or partially ready nesting orders
- 5.8. Interfaces:
 - 5.8.1. Vintech Manager – ViNES (MES system for nesting production)
 - 5.8.2. ERP system (TECHNOCLASS, ALPHA,...) – Vintech Manager
 - 5.8.3. CAD/PLM system (KOMPAS, ЛОЦМАН)- Vintech Manager

6. New functions in Vintech Duct2

- 6.1. New macros for rectangular fittings,
- 6.2. Macros for Transition fittings remade as Transition-reducers in two directions,
- 6.3. Macros for S-shaped transition fittings remade as Reducers in two directions,
- 6.4. Added labels for printing on jet/laser printer.
- 6.5. Nesting with functionality of Vintech RCAM 11
- 6.6. Enlarged import of CAD geometry

7. Product structure of Vintech v11 CAM system

- 7.1. Vintech RCAM 11 – CAM system for true shape nesting and NC programming.
Optional add-on modules to Vintech RCAM:
 - 7.1.1. Vintech rBevel 2.0 library – for single and complex bevels and NC programming of plasma and oxy-fuel bevel cutting,
 - 7.1.2. Vintech rDrill 2.0 library – for technology of drilling and boring processing of holes, for milling processing, combined with thermal cutting ,
 - 7.1.3. Vintech KG-import library – a library for on-line import of parts for nesting from KOMPAS-Graphic assembly drawings.
 - 7.1.4. Multi-user Database for Vintech RCAM 11
- 7.2. Vintech NCV – verifier of NC programs for thermal cutting,
- 7.3. Vintech Pipe- CAD/CAM system for NC programming of 2D pipe cutting machines,
- 7.4. Vintech Duct2 – CAD/CAM system for parametric design and NC programming of orders of flat patterns of HVAC system elements
- 7.5. Vintech Manager – CAPP system for Technological preparation of true shape nesting
- 7.6. ViNES (Vintech Nesting Execution System) – WEB-based intranet system for management of true shape nesting production with the following sub-systems:
 - 7.6.1. ViNES Warehouse SM – for management of warehouse inventory of plates and usable remnants for nesting by taking into account the weight and the shape of the plates, in different types of warehouse cells
 - 7.6.2. ViNES Production – for management of the movement of Nesting layouts in a warehouse or a section with CNC machines for thermal and jet cutting of true shape nesting
 - 7.6.3. ViNES Operator – for information service of the Nesting layouts processing of a single or a group of CNC machines by a single or a group of operators.

New in Vintech RCAM-Pro v10 (2019-2020)

1. The following new functions are added in **Vintech RCAM-Pro 10** :
 - 1.1. Advanced capabilities for import of multiple parts from a single CAD file; Advanced import of parts from CAD blocks.
 - 1.2. Automatic collision avoidance using circumventing with rapid moves,
 - 1.3. Advanced undo for paths and blocks,
 - 1.4. Changing the technology of the nested parts by pattern,
 - 1.5. Creating common cuts for selected parts in a zone with common cut snaps.
 - 1.6. Automatic cutting gaps in a zone, in a frame
 - 1.7. Automatic change of machine/technology for a separate layout from a project,
 - 1.8. Preview of used and unused blocks in the Project Gallery,
 - 1.9. New features for working with technology
 - Start/End point with line lead-in to the middle of the bridge,
 - Cutting the lattice from the middle, consecutively to two parts,
 - Functionality for setting cutting regimes by default
 - 1.10. Possibility for automatic splitting of a nesting layout with combined processings and programming two settings using two methods:
 - first setting – drilling holes with a drilling, boring machine and second setting – thermal cutting processing,
 - first setting – thermal cutting processing of the contours of the nested parts and second setting – drilling holes of each part with a drilling, boring machine.
2. **A post-marking functionality** is added in **Vintech RCAM-Pro** and **Vintech NCV**
 - 2.1. The post-marking is used to mark an operational information on selected parts on the nesting layout by a program. The operational information includes heat number and/or standard of the specific plate and texts for identifying a part, product, order.
 - The parts that have to be marked with operational information are defined much earlier than the production moment – in the CAD geometry or during the nesting with Vintech RCAM-Pro.
 - An NC program can be performed many times, but two consecutive plates for nesting may have different standards and different heat number. In this case the operational information for post-marking is different for each plate.
 - 2.2. The location and orientation of the post-marking texts are specified in the part geometry by entering a postmarking tag:
 - The tag is imported automatically from the CAD geometry to Vintech RCAM-Pro,
 - the tag can be set at a fixed position on the part in Vintech RCAM-Pro.
 - 2.3. Immediately before processing when the plate is on the machine the operator enters the information about the specific plate in Vintech NCV.
 - Vintech NCV generates respective NC commands for marking the operational information on each separate detail.
 - Vintech NCV uses a separate post-processor for each CNC machine.
 - 2.4. A continuous engraving font has been added for plasma processing.
3. A new **library Vintech rBI for batch import** of parts by specification
 - 3.1. The import specification can be in an XSLX spreadsheet or in CSV structured text.
 - 3.2. It is possible to import the geometry of the parts multiple times per a single specification.
 - 3.3. The capabilities for identifying parts from ungrouped geometry are extended,
 - 3.4. The capabilities for identifying parts from geometry groped in CAD blocks are extended,
 - An import of parts from a DXF file with CAD blocks created as macro elements in KOMPAS-Graphic is developed.
 - The standard 2D CAD blocks, saved as DXF are imported as geometry and parts' attributes. The attributes are name, order, material, thickness.
 - 3.5. It is possible for the user to associate parts from CAD files with specification positions.
4. Advanced functionality of **the Vintech AMT module for common cuts with parallel torches** of long and narrow „band“ type parts.
 - 4.1. The parts for common cuts can:
 - have holes,
 - be with different length.
 - 4.2. The creation of common cuts is done interactively.
 - 4.3. Cross cutting of the adjacent parts is done with the leading torch.
 - 4.4. The Height Tracking Point (Probing Point) can be moved along the cut to avoid collapsing of the torches at the beginning of the longitudinal cut.
5. Product structure of the CAM system Vintech v10
 - 5.1. Vintech RCAM-Pro - CAM system for true shape nesting and NC programming,
Optional add-on modules for Vintech RCAM-Pro:
 - Vintech rBevel- for bevels and NC programming of plasma and oxy-fuel bevel cutting,

- Vintech rDrill- for technology for drilling, boring of holes, combined with thermal cutting,
 - Vintech OrderDB – Data Base for order details
- 5.2. Vintech Pipe- CAD/CAM system for NC programming of 2D pipe-cutting machines,
- 5.3. Vintech NCV – verifier of NC programs for thermal cutting,
- 5.4. Vintech Duct- CAD/CAM system for parametric design and NC programming by orders for flat patterns of HVAC system elements,
- 5.5. Vintech Manager – true shape nesting preparation system,
- 5.6. ViNES (**V**intech **N**esting **E**xecution **S**ystem), True shape nesting preparation, warehouses and CNC production with true shape nesting.

New in Vintech RCAM-Pro v9 (2016-2019)

1. **Vintech RCAM-Pro 9** is a native 64-bit application.
It is installed on 64-bit operating system and works with projects, for which the following are needed:
 - Extended RAM,
 - faster nesting.Vintech RCAM-Pro 9 can be installed on 32-bit operating systems as a 32-bit application.

2. **Vintech RCAM-Pro 9** provides new functions for:
 - 2.1. Work with galleries
 - New Blocks gallery with editing functions,
 - new functions in Parts gallery for group or single editing of technological attributes:
 - limiting the nesting in holes,
 - management of mirror and common nesting,
 - editing orders.

 - 2.2. Extended import of CAD geometry
 - Editing of part geometry with integrated external CAD system,
 - export of filtered part geometry to DXF file
 - import from DWG file.

 - 2.3. Nesting management by orders
 - Color visualisation of parts by order,
 - exclusion/inclusion of parts for nesting, according to order,
 - nesting by part priority.

 - 2.4. Automatic change with one click on:
 - Kerf,
 - machine, carriage/station, tool, regime, postprocessor.

 - 2.5. Lead-Ins/Lead-Outs by paths
 - Ignition at the edge and outside the plate,
 - Lead-In with arc,
 - mass editing of lead-ins/lead-outs and gaps,
 - lead-in with „L-lock“, „L-lock“ on path,
 - „eyelet“ on path and lead-in from „eyelet“,
 - new bridge type- “semi-bridge”
 - lead-in from the corner of an adjacent path

 - 2.6. Defining two qualities of the material assortment in the used part of the plate.

 - 2.7. Work with Usable Remnants (UR)
 - Applying margins on an UR,
 - defining an UR of UR with margins,
 - new type of UR – Remnant to an order

 - 2.8. Batch mode nesting with nesting control with or without paths and route, with cutting of UR and marking

 - 2.9. NC programs setup
 - Test points (optional) along the border of UR for preliminary walk through,
 - assigning an end point of the NC program.

 - 2.10. Improvement in different functions
 - Tracing by parts
 - interactive nesting
 - common cuts
 - part orientation
 - pre-piercing of start holes
 - priorities of the orders for nesting
 - removing the marking along with zone
 - selection and visualisation of contours without paths
 - switching on/off parallel cutting, clean up, marking and processing by points, in the NC panel
 - save an UR, created in a layout, as a plate in the project and in Plates dataset

 - 2.11. The library Vintech rSales for pricing and offering is part of the Vintech RCAM-Pro 9 bundle.
Functions for pricing and offering are added
 - Pricing of processing taking into account the machine
 - extended capabilities for reporting scrap
 - two qualities/prices of the used part of a plate.

2.12. Since 01.06.2017 the library Vintech rPipe for design of unfolds of parts from pipe connections is part of the Vintech RCAM-Pro 9 bundle.

3. Vintech NCV

- Working with CNC machines profiles,
- Improved verification of NC programs with subroutines for Trumpf and Mazak lasers.

4. Product structure of the Vintech v9 CAM system

- Vintech RCAM-Pro- CAM system for true shape nesting and NC programming,
Optional add-on Vintech RCAM-Pro modules:
 - Vintech rBevel- for bevels and NC programming for plasma and oxy-fuel bevel cutting,
 - Vintech rDrill- for technology for drill-boring processing of holes, combined with thermal cutting.
- Vintech Pipe - CAD/CAM system for NC programming of 2D pipe cutting machines.
- Vintech NCV- verifier of NC programs for thermal cutting,
- Vintech Duct- CAD/CAM system for parametric design and NC programming of orders for unfolds of fittings of HVAC systems,
- Vintech NES (**N**esting **E**xecution **S**ystem) – system for warehouse management and true shape nesting production.

New in Vintech RCAM v8 (2014-2015)

1. Product structure of Vintech RCAM v8

- Vintech RCAM-Pro - CAM system for true shape nesting and NC programming,
Optional add-on Vintech RCAM-Pro modules:
 - Vintech rBevel- for creating bevels and NC programming for plasma and oxy-fuel bevel cutting,
 - Vintech rDrill- for creating technology for drill-boring processing of holes, combined with thermal cutting.
 - Vintech rSales- pricing and offering of true shape nesting.
- Vintech RCAM 8 – a bundle of the CAM systems Vintech RCAM-Manager, Vintech RCAM-Pro и Vintech NCV.
- Vintech RCAM-Duct- CAD/CAM system bundle for parametric design and NC programming of orders for unfolds of fittings of HVAC systems,
- Vintech RCAM-Pipe - CAD/CAM system for NC programming of 2D pipe cutting machines.
- The distribution of Vintech RCAM-Master has been stopped.

2. Vintech RCAM-Pro 8

- New Parts gallery and parts functions
- extended part import with CAD splitter,
- interactive extend/trim of plates,
- chain cutting – automatic and interactive,
- new bridge types – negative and corner,
- improved work with Usable remnants – step cutting added,
- new capabilities for management of the automatic cutting of tags and bridges,
- improved automatic defining of start/end point for internal paths,
- improved work with materials with certificates, heat No. and plate standards,
- Blocks dataset supports full technology in block.

3. Vintech rBevel

- extended and fully-functional management of bevels,
- technology points on paths,
- extended management of processing external and internal corners,
- processing with sweep

4. Vintech NCV

- Verification of programs and program packages,
- DNC for programs and program packages.

New in Vintech RCAM v7 (2013-2014)

1. New in the product structure of Vintech RCAM

- Equalized basic functionality of Vintech RCAM-Pro and Vintech RCAM-Master,
- the distribution of Vintech RCAM-Lite and Vintech RCAM-Xpress has been stopped,
- Vintech RCAM-Manager v1.0 – Specialized system for management of the preparation of orders and processing plans for true shape nesting and NC programming.

2. Vintech RCAM-Pro 7

- New Project gallery for working with plates and nesting layouts,
- Project navigator added to improve the user interface,
- unique coloring of parts and blocks
- extended capabilities for fixing CAD geometry,
- import and break-down of multiparts,
- added DSTV and SVG formats for import of parts,
- extended automatic nesting: mirror, by pairs, with technology,
- new processing technology management functions: interactive chain cutting, including chain cutting with circumventing,
- change in parametric macro – direct value input in the dimensions of the drafts,
- setting and reporting the number of layouts in a package in reports.
- extended capabilities of settings and datasets

3. Vintech RCAM Manager

- Management of the production preparation process – from accepting the order to loading NC programs in the CNC controller,
- Control and monitoring of each part, order, job, nesting layout and NC program during the process,
- Automatic nesting by jobs from order.

VINTECH - Your partner for CNC thermal and jet cutting of sheet material!

VINTECH is author and creator of the **Vintech RCAM** CAM system:

Vintech RCAM 11

CAM system for true shape nesting and NC programming,

Vintech Pipe

CAD/CAM system for NC programming of 2D pipe cutting machines,

Vintech NCV

System for verification of NC programs for thermal cutting,

Vintech Duct

CAD/CAM system for parametric design and NC programming of orders for unfolds of fittings of HVAC systems,

VINES

MES system for management of technological preparation, warehouse and true shape nesting production

The development of **Vintech RCAM** CAM system is based on IT excellence and more than 40 years of experience in the integration of effective CNC/CAM solutions.

We create software for managing Your future!