Purpose of Vintech Duct

➢ Designs flat patterns of duct parts using libraries with parametric macros for rectangular, round and conical fittings, taking into account the assembling technology,

➢ creates automatic and interactive true shape nesting and NC programming,

➢ Manages orders and organises CNC manufacturing.

Configuration

The Vintech Duct bundle includes:

➢ Vintech Duct – CAD/CAM system for parametric design, true shape nesting, NC programming and pricing of orders for flat patterns of fittings of HVAC systems.

➢ Library Vintech rDuct – parametric rectangular, round and conical fittings and transitions between them.

➢ Vintech RCAM-Pro based functionality for true shape nesting and NC programming.

➢ Vintech NCV – verifier of NC programs for thermal cutting, with DNC for program packages on the RS-232 serial interface to CNC controllers as Burny, Linatrol, Mazatrol, Amada.

Libraries of fittings

Vintech rDuct

Vintech rDuct is a set of parametric libraries for rectangular, round, conical air duct fittings, transitions between them and standard flat parts.

Each fitting from the library is selected visually and the geometrical parameters are entered directly in the dimensions in its draft.

A created fitting can be saved for later use in normal to a parametric fitting.

Working with library Vintech rDuct allows for:

CAD geometry from files created with universal CAD system,

➢ Creates fittings from parametric macros according to assembly, technological and customer requirements for creating the flat patterns of their parts.

➢ controls the sequence of creation stages of nesting orders, parts, nesting jobs, nesting layouts, NC programs, labels and inquiries

➢ allows editing of parts from the nesting order using universal CAD system and their replacement in the order

➢ prepares nesting jobs based on orders and visualizes the status of the job

➢ automates the creation of processing technologies using Datasets database.

➢ monitors the information and status of every single part; Provides advanced tools for managing changes in orders,

➢ saves NC program package and submits it to the DNC system in Vintech NCV

➢ saves listings for nesting layouts and marking labels for the parts in the sequence of their cutting.
- adding fitting in order by setting parameters or by selection from normal, with no need for a CAD system.
- automatic break down of fitting to flat parts.
- compensation of elongation or contraction of bended parts.

True shape nesting with Vintech RCAM-Pro

- Opens nesting job from Vintech Duct and creates nesting layouts and NC programs

Specific characteristics of Vintech Duct

- Limits the incorrect actions with the system to the highest degree.
- Works in mm or inches and gauges. Supports weight of the materials in kg or lb.
- Takes into account the requirements of the HVAC ducts production. Allows the user to define:
  - type and size of connections/flanges,
  - type and size of seams and slits
  - markings – with labels or with ink-jet printer.
- Supports types and dimensions of seams and flanges in technological datasets.

NC programs and documents

- Vintech Duct uses a configurable postprocessor to generate NC programs for CNC machines for thermal cutting, and:
  - generates NC programs in ISO/EIA and ESSI command systems,
  - allows the creation of NC programs for cutting and text marking,
  - allows the creation of NC program packages for orders.
- Generates documents from the current job in HTML, DXF and PDF. When needed, the listings follow the cutting sequence of the layouts and parts in the order.

Vintech Duct generates:
• nesting layout listing file,
• label listing file,
• technological and organisational documents.

Verification and DNC with Vintech NCV

Vintech NCV is designed for verification of NC programs and program packages for thermal and jet cutting.

Vintech NCV creates a graphic simulation of the processing path of ESSI and ISO / EIA NC programs, and:
• checks for correspondence between the NC commands and the paths of the graphic simulation,
• verifies NC programs with subroutines in absolute or relative coordinates, with translation and/or rotation of the subroutines,
• allows direct editing of the NC programs,
• uses CNC machine profiles to verify programs with different structure and format,
• creates a technological sketch of the NC program in PDF and a specification in HTML.

Vintech NCV loads NC programs and NC program packages in the CNC controller via serial DNC interface. Allows management of the DNC interface by the CNC controller.

• Loads NC programs in the order of processing, allows selection and loading a single plate or part from a plate.

Vintech NCV converts ISO / ESSI NC programs in AutoCAD DXF file format.

System requirements and localizations

The CAM system Vintech Duct works in 64 or 32 bit mode in the environment of Microsoft Windows 10/7.

It is localized in English, Bulgarian, and Russian. There are no limitations for the localization language in the system.

The licenses are activated by a hardware key WIBUBox/U+. The key is installed in a USB port of a local computer or file server in the factory’s network. The license for Vintech Duct is a local licence and for Vintech NCV it is a network licence.

VINTECH - Your partner for CNC thermal and jet cutting of sheet material!
VINTECH is author and creator of the Vintech CAM system:

Vintech RCAM-Pro
CAM system for true shape nesting and NC programming,

Vintech NCV
System for verification of NC programs for thermal cutting,

Vintech Pipe
CAD/CAM system for NC programming of 2D pipe cutting machines.

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

VINES
MES system for warehouse and true shape nesting production management.

The development of Vintech CAM system is based on IT excellence and more than 39 years of experience in the integration of effective CNC/CAM solutions. We create software for managing your future!