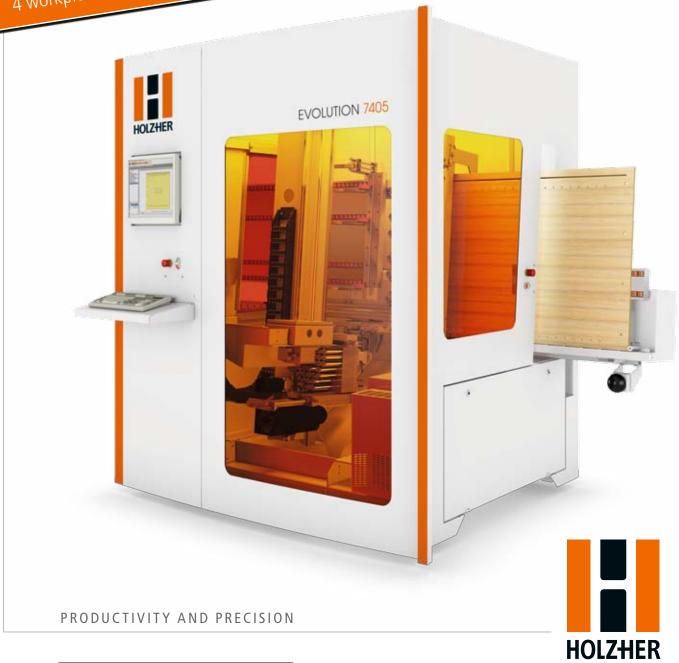
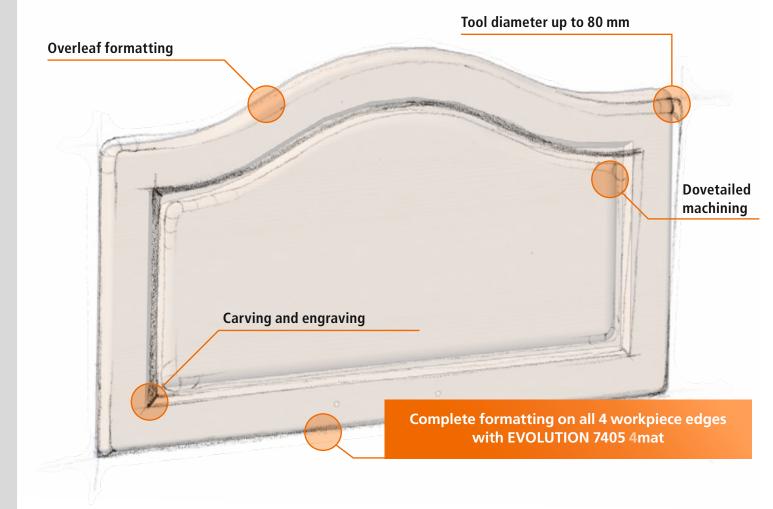
# Complete CNC Machining in Compact Format

# **EVOLUTION 7403 | 7405**

**Unique!** The **EVOLUTION 7405 4mat**provides for complete machining on all
4 workpiece edges as well as the surface.



# Unique Versatility and Performance





Illustrations may contain optional features.

The technical data for the Evolution series speak for itself: Workpieces with height of up to 920 mm and unlimited length can be processed with the smallest possible space requirements.

Possible material thicknesses of 8 to 70 mm make the vertical machining centers from HOLZ-HER all-round machines for producing everything from drawers to body parts, furniture fronts and rear walls; in short complete machining of all your products.

Short cycling times and extreme precision, because workpieces with lengths up to 1,500 mm can be machined without reclamping.

The solid design of the EVOLUTION series guarantees you maximum machining quality.



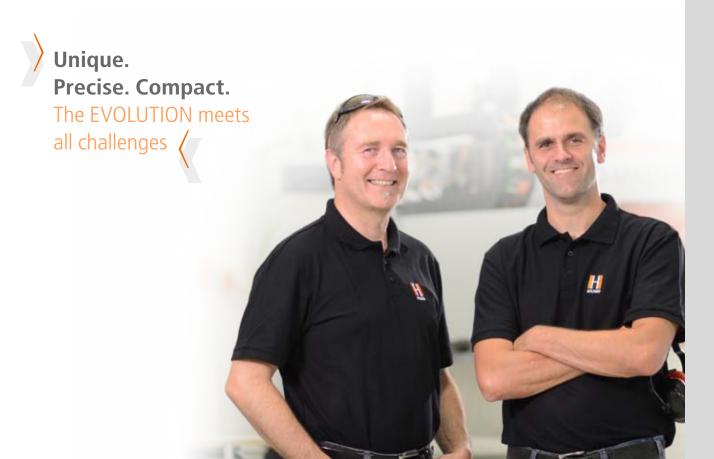




Demo videos can be viewed at: www.holzher-evolution.com

- Use the capacity of a full-fledged CNC machining center that takes up less than 5 square meters of floor space.
- Machining of panel material with length up to 3,200 mm, width up to 920 mm and weight of up to 75 kg without additional extensions. Even workpieces with dimensions up to 200 x 70 mm are no problem. Fully automatic workpiece thickness adaptation from 8 to 70 mm without setting up anew.
- User-friendly CAMPUS/NC Hops software.

- Intelligent vacuum clamping system is easy on material – patent pending.
- Drilling with grooving saw as standard feature. Powerful milling spindle with ceramic bearings – optional on EVOLUTION 7403.
- Precision direct drives with exceptionally high dynamic acceleration values for extremely high productivity.

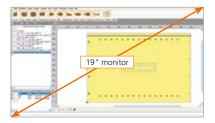




# **Optimum Performance**

## ■ Simple programming

Equipped with a 19" monitor and the newest version of our user-friendly CAMPUS/NC-Hops software, including aCADemy CAD, DXF import and versatile macros.



### Full equipment

15 drilling spindles for 5 in-line holes each in X and Y directions as well as 6 horizontal drills and integrated sawing unit for quick and precise results (Fig. 1). For higher drilling capacities the EVOLUTION series can optionally be equipped with a XL drilling head with up to 22 drilling spindles and grooving saw.

### ■ 100 % Precision – Your advantage!

Only the HOLZ-HER EVOLUTION 7405 **4mat** offers complete machining on all 4 edges of the workpiece as well as the surface. Perfect appearance – perfect fit! (Fig 2).

#### Shorter machining times

Easy on material and time saving, because workpieces with lengths of up to 1,500 mm can be machined without reclamping. Up to 35 % shorter machining cycles (Fig. 3).

### Unique clamping concept

Fully automatic positioning of suction cups. Automatic contact pressure independent of material thickness for optimum results and precise dimensions (Fig. 4).

#### **■** Extremely versatile

With optional tool changing package for 6 tools, including 6.5 kW HSK spindle, the HOLZ-HER EVOLUTION 7405 **4mat** is prepared for all challenges (Fig. 5).

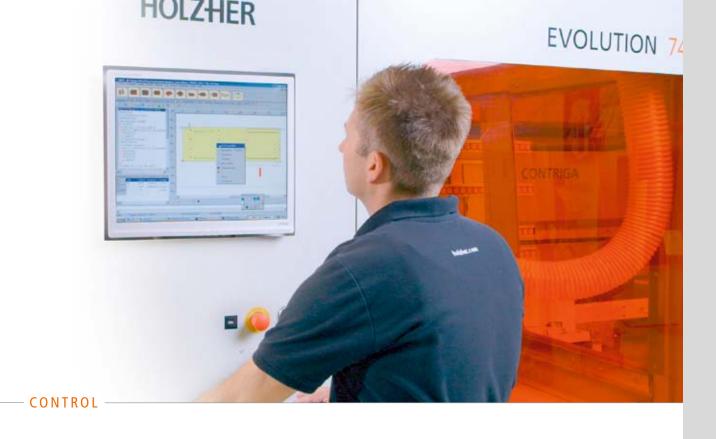
#### Automatic tolerance correction

Determination of exact length dimension and automatic correction of tolerances for dimension-dependent drilling. Ideal as perfect supplement for high precision drilling, e.g. for workpieces which have already been edged (Fig. 6).

#### Perfect access

The generous machine door offers a free view of the machining work, as well as easy access for installing tools.

Illustrations may contain optional features.



# The CAMPUS Control – Clear and Absolutely Convenient

The HOLZ-HER machine control system is an integral part of the machine's design. The equipment package includes our comprehensive CAMPUS/NC-Hops software. This package provides the prerequisites for effective machining and convenient operation. Our **ECO**MODE automatic standby control is a standard feature on all HOLZ-HER CNC machining centers for software-controlled minimization of the power consumption.





The intelligent energy management for HOLZ-HER CNC machining centers.

# CAMPUS – The user-friendly HOLZ-HER Machine Control System

- CAMPUS aCADemy is a full-fledged, high-performance CAD/CAM software package with versatile import features.
- In addition to variable programming, 3D views and simulations, the NC Hops editor offers full Z-axis interpolation and a text editor.
- "Easy Snaps", adjustable parameters and wellconceived macros additionally simplify and speed up program control.
- The work center shows the occupancy of the machine table. Tools, drilling heads and routes are automatically optimized over the workpiece as a whole and the machining times are calculated.

- The MT Tool Manager allows clear, graphic set-up using "Drag & Drop".
- Including sequence simulation.
- Open software architecture allows simple incorporation of existing data and connection to a wide range of branch, design and CAD/CAM software.

# CabinetControl – Software for Simple Furniture Designing

- CabinetControl Base optionally in software package.
- Design of furniture.
- Views can be represented in 2D or 3D.
- Quick adaptation to individual desires of furniture buyers.
- Perfect presentation of furniture.
- Automatic completion of cutting plans.
- Generates CNC machining program automatically at the touch of a button.
- Optional CabinetControl EVOLUTION professional version also includes a database, calculation, data transfer to pressure beam saw, etc. Also ideal for kitchen and room planning.



# **Highly Efficient Production in combination with Other HOLZ-HER Machines**

# **Programming – Sawing – Vertical CNC Machining – Edgebanding**



## CabinetControl (1)

- Design component at the click of the mouse.
- Automatic generation of cutting lists and CNC programs.

## Rational and Precision Sawing (2)

- Perfect cutting results with vertical saws as well as pressure beam saws from HOLZ-HER.
- Mature optimization software, also for vertical sawing.
- Optimum sawing cycle.

### Perfect Data Flow (3)

Program information also via data matrix barcode.

## Effective vertical CNC performance (4)

- Automatic program call with barcode using optional Bluetooth scanner.
- Variable programming with CAMPUS Software.
- Perfect drilling and milling results.

## Intelligent Edgebanding (5)

- Simple to operate perfect finish.
- Superior HOLZ-HER Glu Jet nozzle technology for PUR and EVA application and invisible zero joint.



# Vertical CNC Machining Center – Requires Less than 5 Square Meters of Floor Space

Your choice – perfectly matched to your requirements as EVOLUTION 7403 or the more powerful version – the EVOLUTION 7405 **4mat**.

The EVOLUTION series from HOLZ-HER ensures convincingly short processing cycles. The clamping system (patent pending) is gentle on material while guaranteeing precision milling and drilling.

Moreover the EVOLUTION 7405 **4mat** with optional performance package, tool changer for six tools, and powerful 6.5 kW HSK spindle, is equipped to meet all challenges.

The EVOLUTION provides unlimited latitude for your creativity.



Complete machining on all 4 sides in one clamping operation

with the EVOLUTION 7405 **4mat** (Fig. 1). Simply adjust the bottom jointing dimension – the machine does everything else automatically.

- Significantly shorter machining times
   while maintaining maximum precision and machining
   quality (Fig. 2).
- Generous machining dimensions Height up to 920 mm and length up to 3,200 mm without additional supports. And still extremely spacesaving and compact.
- workpieces from 8 to 70 mm

  Ideal for rear walls, sides, fronts and even kitchen counter tops. These can be processed in any length in workshops with appropriate space and safety intervals (Fig. 3).

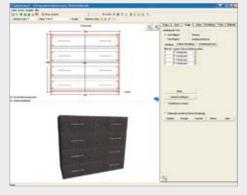
■ Fully automatic thickness adaptation for

Live demonstrations:
Make an appointment: 07022702-207
or kontakt@holzher.com











# Completely Integrated – from Design to Simulation to Finished Furniture

- Regardless of whether you program single pieces using our comprehensive CAMPUS/NC-Hops software or use corresponding furniture design programs with post processing the EVOLUTION offers a complete solution for perfectly dimensioned furniture.
- With the optional CabinetControl Base, only one click is required for the CNC programs to generate all components.
- The integrated simulation software allows the program sequence to be checked before running the workpiece through the CNC machining process.
- The NC-Hops software has a tool optimization feature to ensure a perfect machining sequence.

# **Equipment Overview**

Machine	EVOLUTION 7403	EVOLUTION 7405 4mat
Machining dimensions in mm Max.: Min.:	3,200 x 920 x 70 (without additional support) 200 x 70 x 8	3,200 x 920 x 70 (without additional support) 200 x 70 x 8
Max. machining in X direction without reclamping	1,500 mm edge routing (minus radius of cutter)	1,500 mm edge routing (minus radius of cutter)
	1,300 mm for complete machining	1,300 mm for complete machining
Drilling head	15 Spindles (9 V   6 H), incl. sawing unit for grooving in X-direction	15 Spindles (9 V   6 H), incl. sawing unit for grooving in X-direction
XL-Drilling head	19 Spindles (13 V   6 H), incl. sawing unit for grooving in X-direction	19 Spindles (13 V   6 H), incl. sawing unit for grooving in X-direction
	Duplex drilling spindle in Y-direction	Duplex drilling spindle in Y-direction
	Vertical adapter with doubled power	Vertical adapter with doubled power
Cutter Unit	5.6 kW, with clamp 1,000 — 18,000 rpm	5.6 kW, with clamp 1,000 — 18,000 rpm
	X	6.5 kW, HSK chuck, 1,000 – 18.000 rpm
Tool Changer	X	6-fold linear changer
Max. tool dimensions	Dia. 80 mm, length 80 mm	Dia. 80 mm, length 80 mm
Run-in linear stop	Fixed	Height adjustable for 4-sided edge routing and profiling
Vector speed	68 m/min.	68 m/min.
Safety equipment	CE compliant	CE compliant
Workpiece support	Solid rollways incl. 2 stops	Solid rollways incl. 2 stops
Workpiece clamping	Automatically positioning vacuum system	Automatically positioning vacuum system
	ECO-Vac 8 m³/h vacuum pump	ECO-Vac 8 m³/h vacuum pump
Software	CAMPUS/NC-HOPS incl. aCADemy CAD/CAM Machine license module	CAMPUS/NC-HOPS incl. aCADemy CAD/CAM Machine license module

Standard

Optional

X not possible



# - TECHNICAL DATA -



	EVOLUTION 7403	EVOLUTION 7405 4mat
Machine dimensions		
Overall length (mm)	3,675	3,675
Overall height (mm)	2,350	2,350
Overall depth (mm)	1,660	1,660
Weight (kg)	2,500	2,500
Evacuation (mm)	1 x dia. 120 + 1 x dia. 140 Optional: + 1 x dia. 120	2 x dia. 120 + 1 x dia. 140



The intelligent energy management for HOLZ-HER CNC machining centers.



The technical data specified is intended for reference only. HOLZ-HER woodworking machines are subject to constant development and are therefore subject to modification without prior notice. The illustrations are therefore not binding. Some of the machines shown also contain special equipment not included as a standard feature. For clarity, some of the machines are shown without protective hood.

Picture credits: © istock | lisegagne, © fotolia | Alexander Rochau

**UK** – HOLZ-HER 3278 40 – Printed in Germany/Imprimé en Allemagne Printed on: 14.02.2014 – First edition: 14.02.2014

Your authorized HOLZ-HER dealer



HOLZ-HER GmbH Plochinger Straße 65 72622 Nürtingen Germany

T +49 (0) 70 22 702-0 kontakt@holzher.com www.holzher.com