

Hammer®



HNC3 825

Unlimited Creativity

Unlimited creativity and professional CNC results

Variations

Models & Your Advantages



HNC3 825

- » Processing surface 32^{31/64} x 18^{55/64}", through feed height 6^{19/64}"
- » Recirculating ball screws on X & Y axis
- » 1.000 Watt milling motor (optional)
- » 7 m/min. feed rate
- » ± 0.05 mm repeatability and ≤ 0.02 mm backlash
- » Linear guides on all axes

HNC3 825 perform

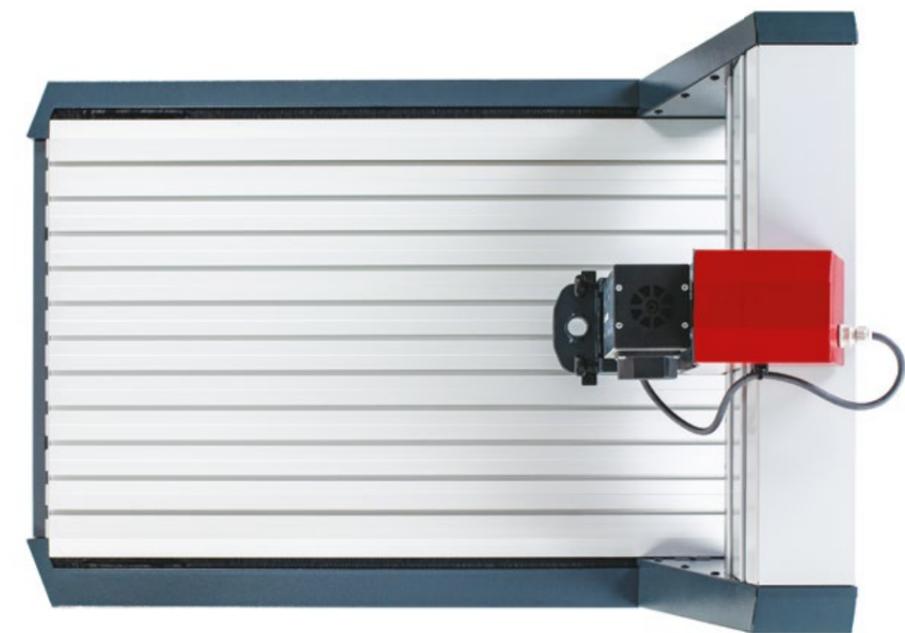
- » Processing surface 32^{31/64} x 18^{55/64}", through feed height 6^{19/64}"
- » Recirculating ball screws on X & Y axis
- » 2.2 kW router spindle
- » 7 m/min. feed rate
- » ± 0.05 mm repeatability and ≤ 0.02 mm backlash
- » Linear guides on all axes



Step into the world of CNC machining now! The new Hammer® CNC portal milling machine – CNC technology made affordable and possible for everyone. No matter whether you are a demanding do-it-yourselfer, ambitious model maker, quality-conscious small-series manufacturer, training facility or school. The Hammer® CNC portal milling machine removes the limits of manufacturing possibilities and impresses with its Austrian engineering quality in every detail.

On a surface as small as a kitchen table, the Hammer® CNC portal milling machine offers all the freedom of CNC machining with a unique price-performance ratio.

The classic, solid and durable construction combined with the highest quality materials ensures exceptional torsional strength and stability. A powerful shaper spindle, precise linear guides and powerful stepper motors ensure maximum performance and efficiency for every challenge. Absolute precision and repeatability are guaranteed at all times, even with delicate work. The Hammer® CNC portal milling machine can be controlled either by an integrated, intuitive software or by any software of your choice. The workpieces and numerous accessories can be fastened to the T-slot table in no time at all.



The most important highlights at a glance



High-precision Linear Guides

Two high-precision linear guides on each axis of the machine ensure high-quality results even for the most delicate jobs. Four guide carriages on the z-axis, three on the y-axis and two on each side of the x-axis are resistant to contamination and absolutely maintenance-free.



Recirculating ball screws on X & Y axis

Maximum precision, accuracy and smooth operation – recirculating ball screws on X & Y axis (Tolerance Class T7, 16 mm diameter, 10 mm pitch)



T-slot machine table

The workpieces and numerous accessories can be attached to the robust T-slot machine table with M6 slot (17.5 x 7.5 mm) in a flash. With a variety of clamping devices from the Hammer range and the possibility of using specially developed clamping methods, the aluminum table offers complete flexibility.



Powerful and Efficient – The HF Shaper Spindle with 2.2 kW

The powerful shaper spindle with 2.200 W power enables demanding CNC processing freedom and highly precise professional results.



Hammer®

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Hammer – Decision making reliability for many years to come

Durability, functionality and reliability made in Austria – Hammer woodworking machines are top-quality products from Felder. Since 1997, Hammer has been producing high-quality yet affordable woodworking machines for the skilled trades and crafts. The models have been specifically designed for this customer group and are available in the basic, winner and perform configuration, offering price optimized solutions for every requirement. Decades of experience building machines, Austrian

craftsmanship, strict quality standards and tried and tested Felder system solutions, guarantee excellent woodworking machines, the best operating results and customer satisfaction for years to come. From the passionate woodworker to the business user with high demands, with machines from Hammer you are guaranteed reliability and precise woodworking.

... why you should decide on a Hammer machine now:

- » Excellent value for money
- » Decision making reliability for many years to come
- » State of the art machine technology
- » Solid cast iron tables and units
- » High quality, unique detail solutions as part of the standard package
- » Top quality manufacturing with strict quality guidelines
- » User friendly
- » Classic design
- » Quality and precision from AUSTRIA
- » Compact functionality
- » Mobile as an option
- » Minimal space requirement
- » Quickest changeover times

Details



Unpack, plug in and get started

The Hammer HNC is delivered fully assembled, lubricated and calibrated. Once the machine has been unpacked and connected to a power supply and the control computer, then it can be used immediately. There is no assembling or set up to be done at all.



1.000 W milling motor with quick-change system

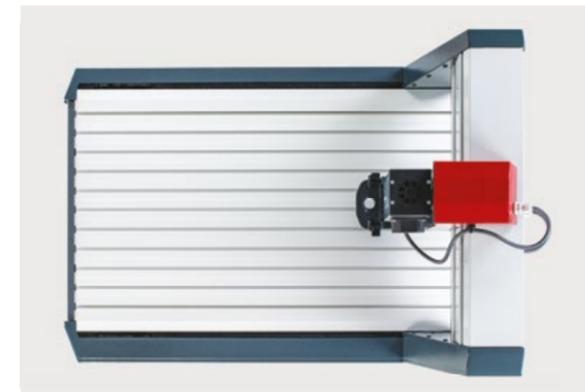
The tool-free quick-change system reduces the milling cutter changover time.



„Perform“ extraction hood

The extraction hood can either be attached to the Z-axis and move up/down simultaneously with the shaping spindle or be set to a fixed height (top edge of workpiece). This ensures an optimal extraction performance with every application.

The extraction connection diameter is 3 15/16".



CNC machining diversity within a surface area of a Euro pallet

On an area as large as a Euro pallet, the HNC offers all the possibilities of CNC machining with a working area of 825 x 479 and a through feed height of 6 19/64".



Intuitive control and open interface for the software of choice

The HNC can be controlled either via the integrated, intuitive software or with any software of your choice. The user-friendly interface of the standard operating software is fully touchscreen operable.



Electric fan

Instead of the small internal fan, that sits directly on the shaft, an electric fan is mounted on the milling spindle. Not only does this guarantee the best possible cooling for the milling spindle, it also reduces the noise level by half!



Height adjustable Extraction Hood

The height adjustable dust extraction hood with 1 17/64" extraction connection ensures a clean working area. The brush ring is fixed to the hood using magnets and can be removed easily when changing the tools.

Powerful motors and maximum repeatability

The axes drive is powered by a 2.8 A NEMA 24 step motor, which runs in 1/8 step mode. The recirculating ball screws (tolerance class T7, diameter 16 mm, pitch 10 mm) installed on the X & Y axis ensure maximum precision and smooth operation. The maximum travel speed of 7 m/min (4 9/16 in / s) guarantees short processing times.

Technical resolution: 0,00625 mm
 Repeatability: ± 0.05 mm
 Reverse Backlash: ≤ 0.02 mm



Technical specifications

HNC		HNC3 825	HNC3 825 perform
20	Dust extraction hood	○	S
21	„Perform“ extraction hood D=100mm	-	○
29	High speed milling spindle with electric fan for noise reduction	-	○

Electrics			
22	4-axis controller + D-SUB cable, 1.0 m, shielded, 25-pin + USB 2.0 cable, 2m, A plug to Mirco B	S	S
32	Power supply cord 10A/230V, 3m, Schuko (Europe) CEE7/7 power supply cord 10A/230V, 3m, Schuko (Europa) CEE7/7	○	○
33	Power supply cable 10A/125V, 3m, USA/Canada NEMA 1-15	○	-
34	Power supply cable 10A/125V, 3m, USA/Canada NEMA 6-15P	○	○
35	Power supply cable 10A/230V, 3m, Switzerland SEV 1011	○	○
36	Power supply cord 10A/230V, 3m, England BS 1363	○	○
37	without power supply cord	W	W

HNC Technical Information		
Dimensions (X,Y,Z) in mm	1.111 x 762 x 682	1.111 x 762 x 682
Clamping range (X,Y) in mm	1.005 x 574	1.005 x 574
Working area (X,Y) in mm	825 x 479	825 x 479
Passage height in mm	160	160
Movement speed [m/min]	7 (Z 5)	7 (Z 5)
Weight in kg	85	103
Technical Resolution in mm	0.00625 (Z 0.00375)	0.00625 (Z 0.00375)
Repeatability in mm	± 0,05	± 0,05
Reverse backlash in mm	≤ 0.02	≤ 0.02
Step motors NEMA 24, 2.8A in Nm	1	1
Torsional stiffness at 150N load capacity (X,Y,Z) in mm	0,02 – 0,06	0,02 – 0,06
Z axis: Trapezoidal threaded spindle	14 x 6	14 x 6
X & Y axis ball screw	16 x 10 P7	16 x 10 P7

Accessories		HNC3 825	HNC3 825 perform
23	Tool length detector including 3.5 mm jack plug	○	○
44	HAMMER router motor HFM 1.000 PV-ER	○	
43	HAMMER HFM 1.000 router motor PV-VVS	○	
50	Mounting plate for the screwing of HFM 1.000 PV-VVS	○	
51	Carbon brushes for the HFM 1.000 router motor (1 pc.)	○	
52	Sleeve nut for HFM 1.000 PV-ER	○	
66	3 mm reduction sleeve for HFM 1.000 PV-VVS	○	
67	4 mm reduction sleeve for HFM 1.000 PV-VVS	○	
68	6 mm reduction sleeve for HFM 1.000 PV-VVS	○	
69	1/8" reduction sleeve for HFM 1.000 PV-VVS	○	
70	1/4" reduction sleeve for HFM 1.000 PV-VVS	○	
77	S-Collet chuck ER25, 3 mm		○
78	S-Collet chuck ER25, 3.175 mm (1/8")		○
79	S-Collet chuck ER25, 4 mm		○
80	S-Collet chuck ER25, 6 mm		○
81	S-Collet chuck ER25, 6.35 mm (1/4")		○
82	S-Collet chuck ER25, 8 mm		○
83	S-Collet chuck ER25, 9.53 mm (3/8")		○
84	S-Collet chuck ER25, 10 mm		○
85	S-Collet chuck ER25, 12 mm		○
86	S-Collet chuck ER25, 12.7 mm (1/2")		○
87	S-Collet chuck ER25, 14 mm		○
88	S-Collet chuck ER25, 16 mm		○
89	S-Collet chuck ER16, 3.175 mm (1/8")	○	
90	S-Collet chuck ER16, 6.35 mm (1/4")	○	
91	S-Collet chuck ER16, 3 mm	○	
92	S-Collet chuck ER16, 4 mm	○	
93	S-Collet chuck ER16, 5 mm	○	
94	S-Collet chuck ER16, 6 mm	○	
95	S-Collet chuck ER16, 8 mm	○	
96	S-Collet chuck ER16, 10 mm	○	
188	Clamping jaw set M6 58-piece	○	○
189	Centring vice	○	○
190	High prisms for centring vice	○	○
191	Low prisms for centring vice	○	○
192	Clamping bolts for centring vice	○	○
193	Mounting set for HNC	○	○

Combination machines C3 31



Combination machines C3 41



Saw-Shaper B3



Planer-Thicknesser A2, A3



Circular Saws & Sliding Table Panel Saws K2, K3, K4



F3 Spindle Moulder



CNC Portal Milling Machines HNC

Edge sanders

Bandsaws



Air filter dust extractor



Hammer®

Hammer Affordable functionality and reliability

Since 1997 the Felder Group has been producing high quality yet affordable woodworking machines with the brand Hammer for do-it-yourselfers and small businesses. Robust, durable, space-saving and precise in its operation. Quality products that simply make woodworking fun.

FELDER GROUP

KR-Felder-Straße 1
A-6060 HALL in Tirol

☎ Tel. 05223 55306

www.hammer.us

[Contact](#)