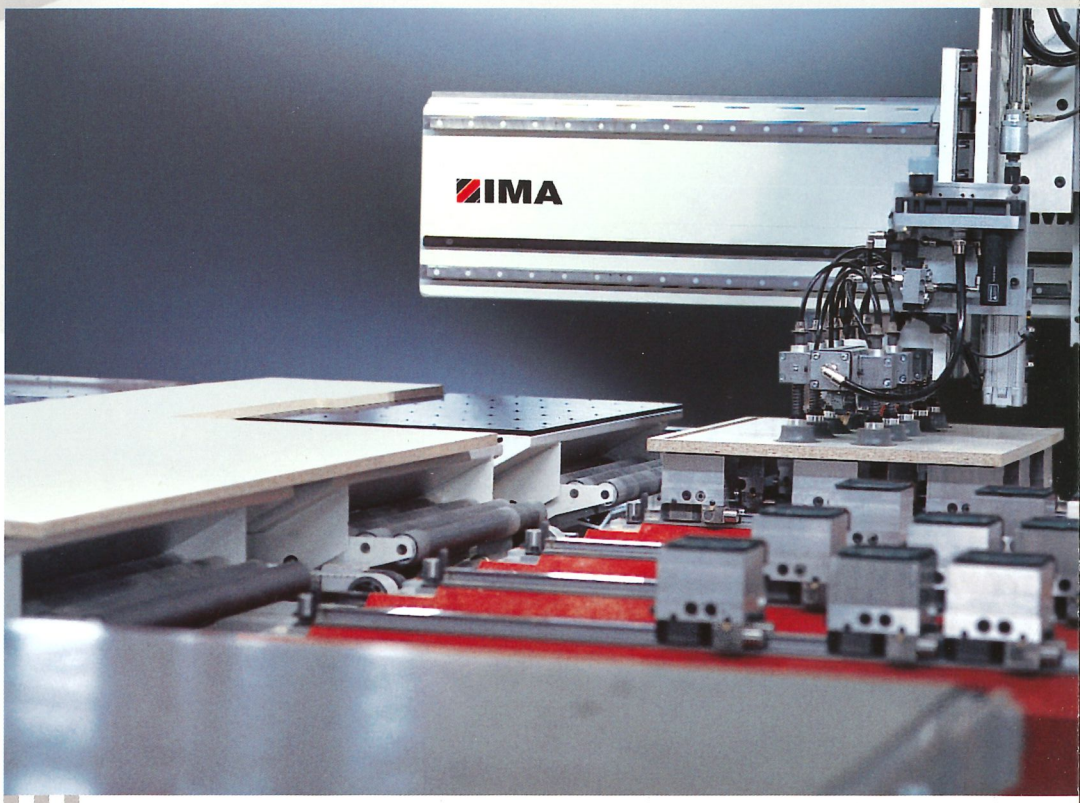
CONCEPT *plus*

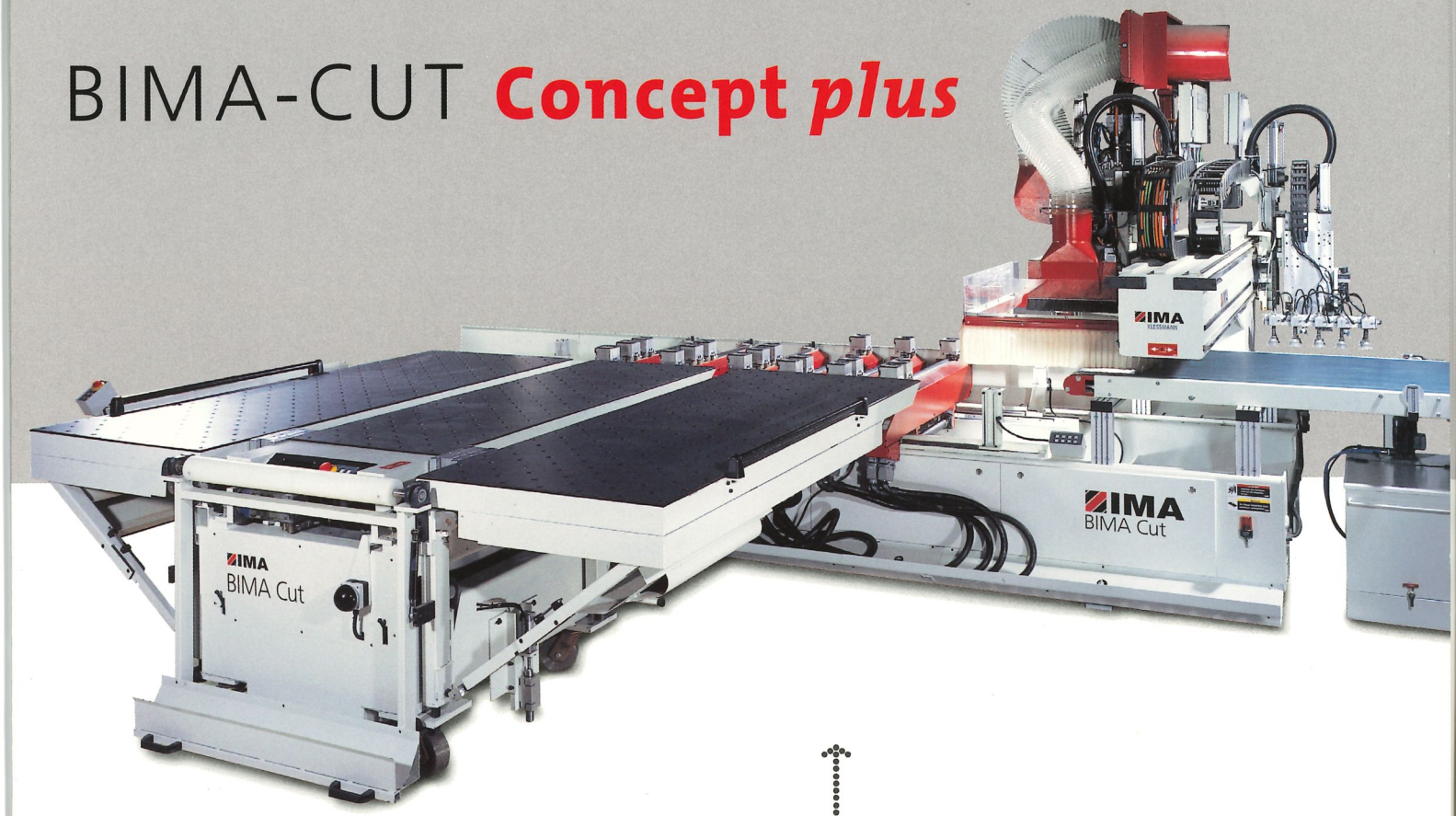


BIMA-CUT

Automatic workcenter with panelsizing and nesting functions

IMA

BIMA-CUT **Concept *plus***

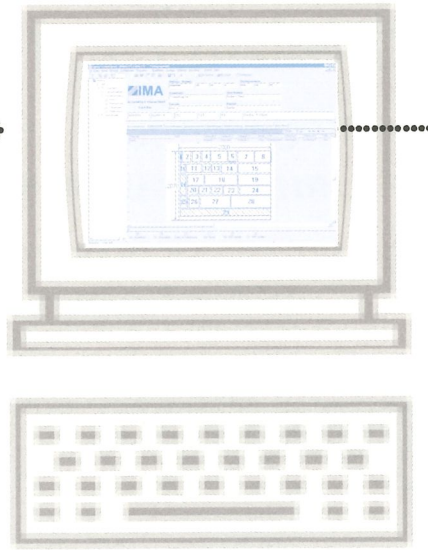


BIMA-CUT Concept *plus* with panel infeed table

Controller:

BIMA-CUT *Editor*

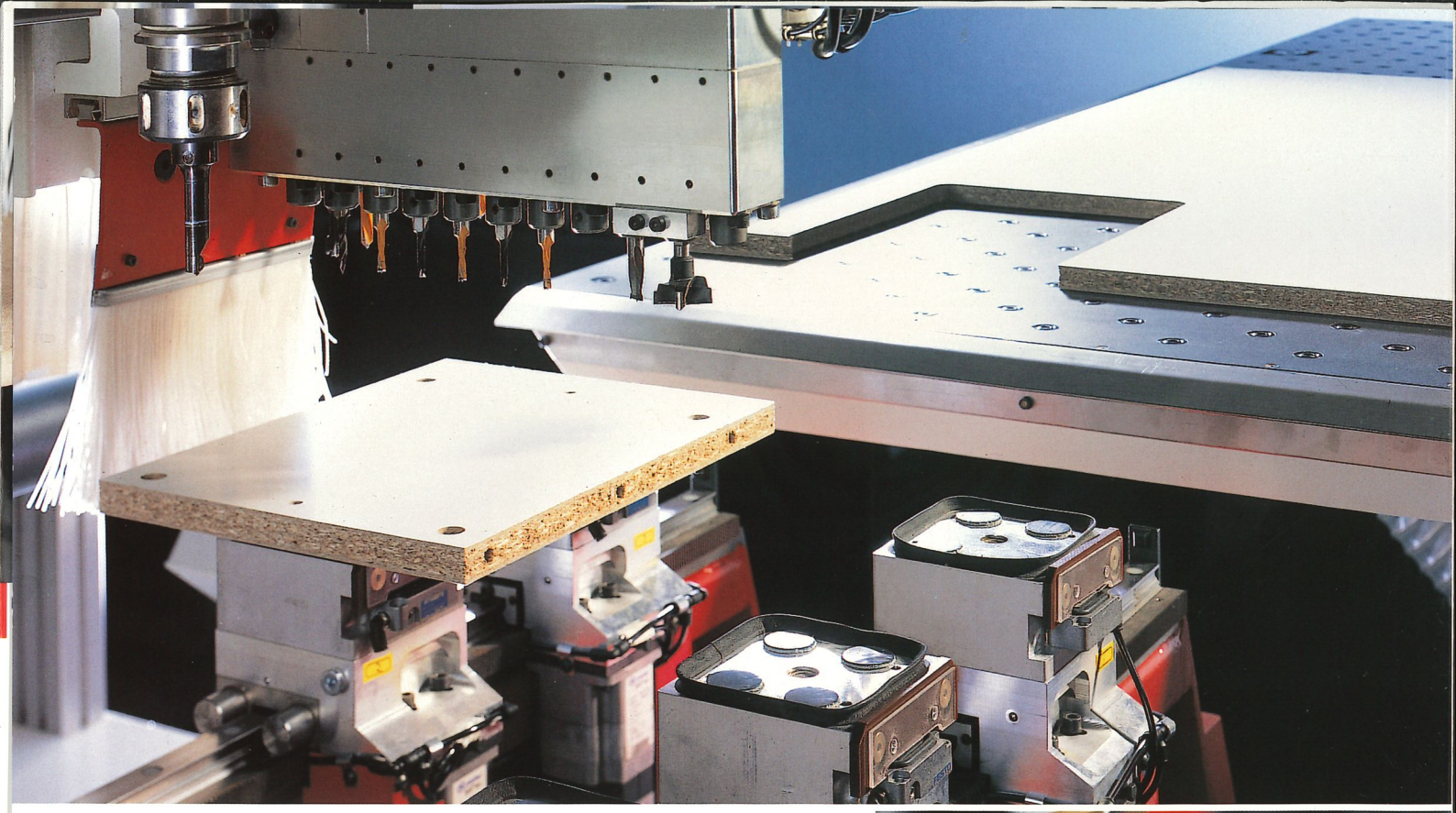
XML IMPORT INTERFACE*



INPUT OF JOB DATA

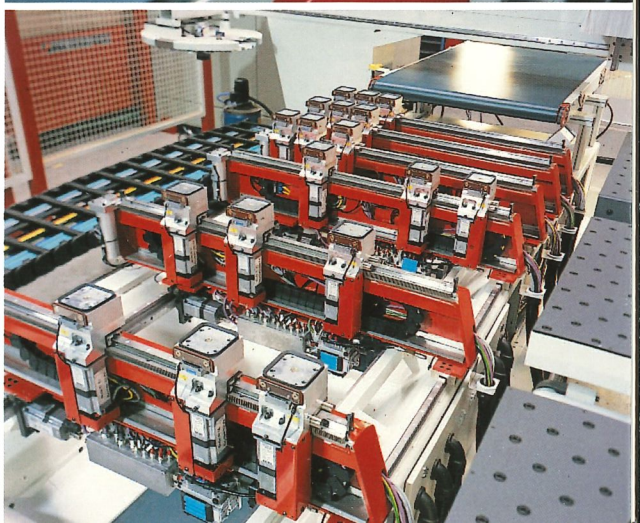
- **PRODUCT DATA MANAGEMENT**
- **PANEL STORAGE MANAGEMENT**
- **PRODUCTION PLANNING**
- **OPTIMIZATION OF CUTTING [NESTING]**
- **AUTOMATIC PROGRAMMING OF THE VACUUM CLAMPING BLOCKS**
- **AUTOMATIC GENERATION OF NC PROGRAMS**
- **PRINTING OF LABELS***

*** Option**

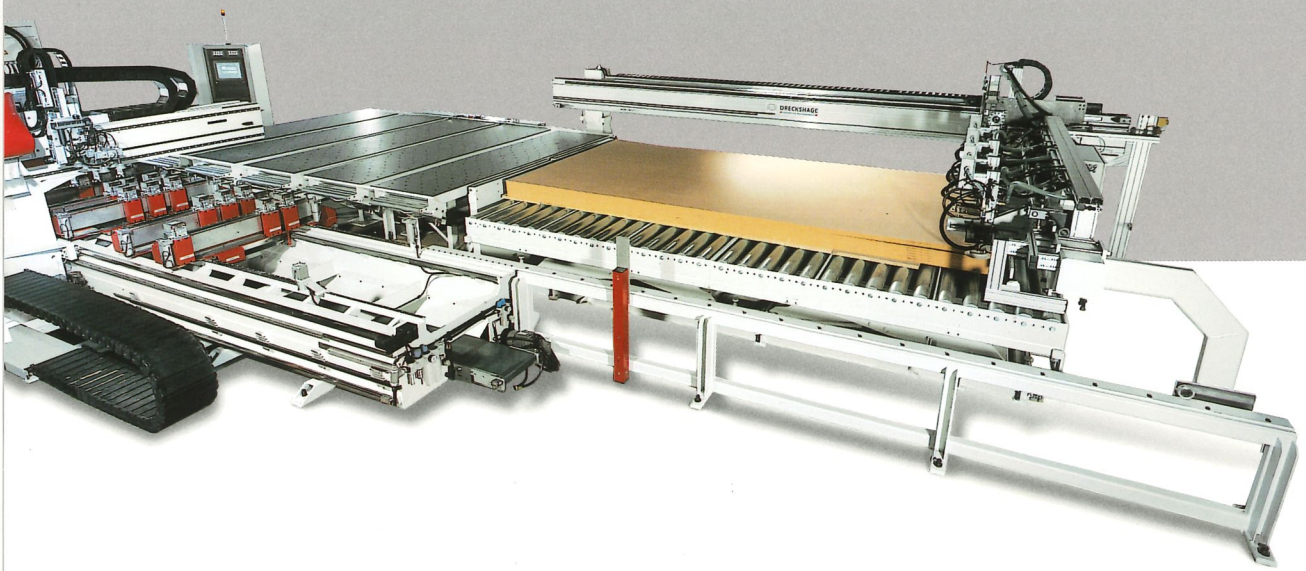


BIMA-CUT **Concept *plus* – a combination of machining center and panel saw – for the "built to order" production in the cabinet furniture industry.**

- **"Mass production" and "small batch size production"**
- **Capacity approx. 300 – 350 parts per shift**
- **Patented vacuum clamping technology with vacuum clamping blocks controlled individually by programming and monitoring function**
- BIMA **Fastcut System for the immediate operation of single parts**
- **Optimal integration into the "IMA Mini-factory" IMA *System*Line**

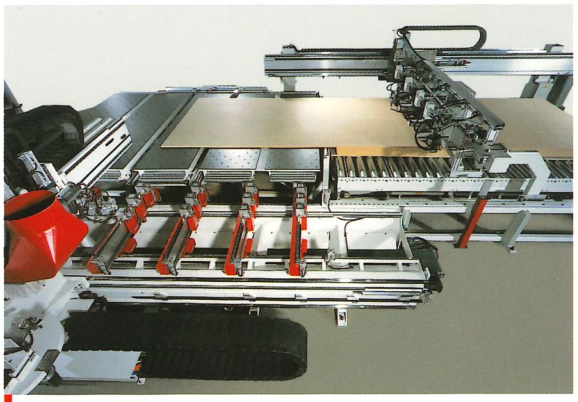


Feeding



Automatic feeding

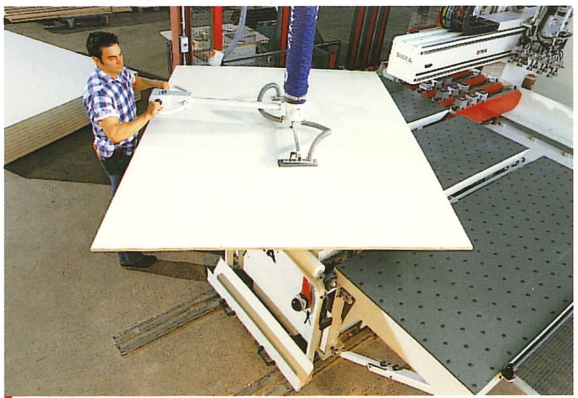
Feeding of panels from the stack of panels by a roller table lift with panel pusher



Roller table lift

Manual feeding

Feeding with a tilting device



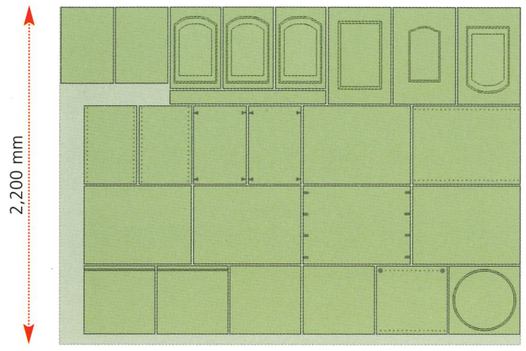
Feeding with vacuum lifting unit

Cutting patterns/nesting

Automatic complete processing
from the large size panel

Sizing – routing – drilling – grooving

BIMA-CUT nesting technology



- **Max. panel size** [depending on machine type]
- **Machining time approx. 45 – 90 seconds per part** [depending on the scope – without machine operator in automatic operation]

Machining of individual parts

from leftover or precut panels
with the BIMA **Fastcut System**

Positioning stop system for individual cutting to size and machining

Main spindle with swiveling saw unit

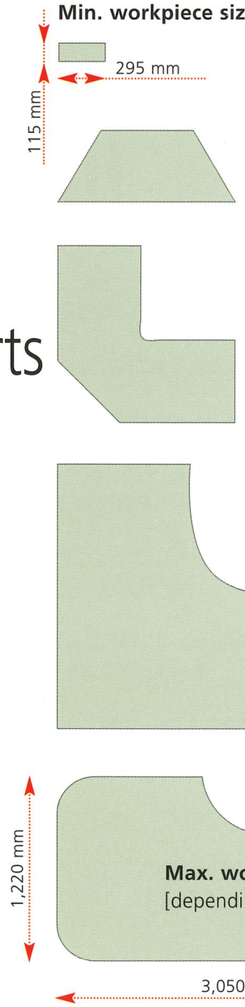
Main spindle with milling tool

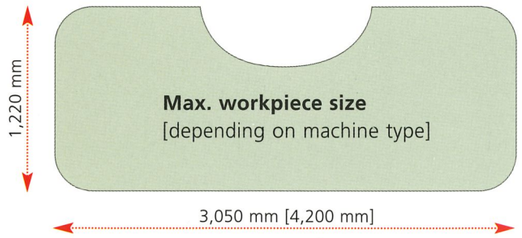
18x automatic tool change magazine

Drilling unit

Milling + drilling

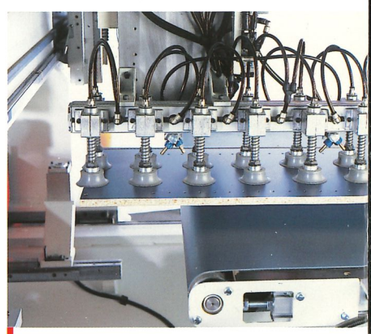
Min. workpiece size



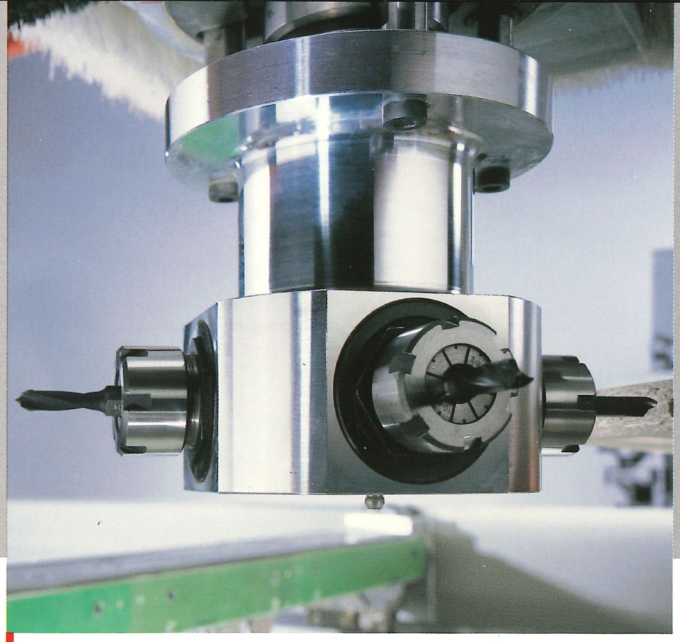


BIMA-CUT **Concept *plus***

Mobile panel table [moving on rollers for workcenter use only]



Removing finished parts with a vacuum suspension block and conveyor belt



Main spindle with horizontal drilling unit

MAIN SPINDLE
- 7.5 kW / 12 kW*
- C-axis

AUTOMATIC TOOL CHANGE MAGAZINE
- 18x

DRILLING UNIT
- 21 spindles

HORIZONTAL DRILLING UNIT
- 4 spindles with grooving saw*

ADDITIONAL MILLING UNIT
- 4.4 kW; n = 12,000 rpm

* Option

Completion

Barcode marking

Fully automatic production with the IMA Mini-factory

The system for the cost efficient production of individual pieces of furniture in the office and kitchen industry, store fixtures, closet furniture, laboratory and dental furniture:

- **STORAGE SYSTEMS WITH SLIDING PANELS**
- **PC PLANNING AND PRODUCTION SYSTEM**
- **BIMA-CUT**
- **EDGE BANDING MACHINE: E.G. ADVANTAGE 7216|7220**
- **INSTALLATION WORKSTATIONS**

BIMA-CUT **Concept *plus***
The profile

Design:Studio HübbelMeyerINortmannIPeters, Minden

	BIMA-CUT	US-standards
WORKING AREA		
X	3,050 / 4,200 mm	10′ / 13 3/4′
Y	1,220 [Option 1,400 mm]	4′
Z	8 – 38 mm with automatic infeed	5/16″ – 1 1/8″
	8 – 80 mm with manual feeding	5/16″ – 3 1/8″
SPACE REQUIRED		
	for X = 3,000 mm – approx. 60 m² [10.0 m x 6.0 m]	645 sq. feet
	for X = 4,200 mm – approx. 70 m² [11.5 m x 6.0 m]	750 sq. feet
MACHINE		
Supporting rails	6 of each with 3 vacuum clamping blocks	
Main spindle	7.5 / 12 kW at 100% duty cycle (S1)	
Automatic tool change magazine	18x	
Tool holder	HSK 63 F DIN 69893	
Vertical drill	21 (11 in X; 11 in Y)	
Central extraction	Ø 300 mm	1′
Noise level – no-load running	< 80 dBA	
WORKPIECE		
Panel dimensions	length 2,800 / 4,200 mm (X-axis)	10′ / 13 3/4′
	width 2,200 mm (Y-axis)	7′
Workpiece as individual piece, max.	length 3,000 / 4,200 mm; in two-panel loading 900 mm	10′ / 13 3/4′
	width 1,200 mm	4′
Workpiece as individual piece, min.	length 295 mm	1′
	width 115 mm	4 1/2″
CONNECTION VALUES		
Extraction	for V = 28 m/sec – approx. 7,200 m³/h	92′ per sec = 250,000 cubicfeet/hour
	underpressure = 1,100 mPa related to 20 m/s	
Compressed air connection	6 bar	87 psi
Compressed air consumption	approx. 1,200 NL/min.	
Electrical connection values	rated capacity approx. 33 kW/54 A; voltage: 3N/PE 50 Hz 400/230 V*	

* Other configurations available on request

Subject to technical alterations and developments. The offer, respectively order confirmation are in any case the only relevant machine description. The fotographs may show the machine without complete safety equipment. However safety equipment will be supplied. Fotographs may show options, which are not part of the standard execution.

Date 02/2003

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