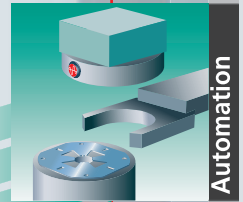


# Easy Retrofit for DMU 50 and 70 eVolution

3



Integration

Automation

Standardization

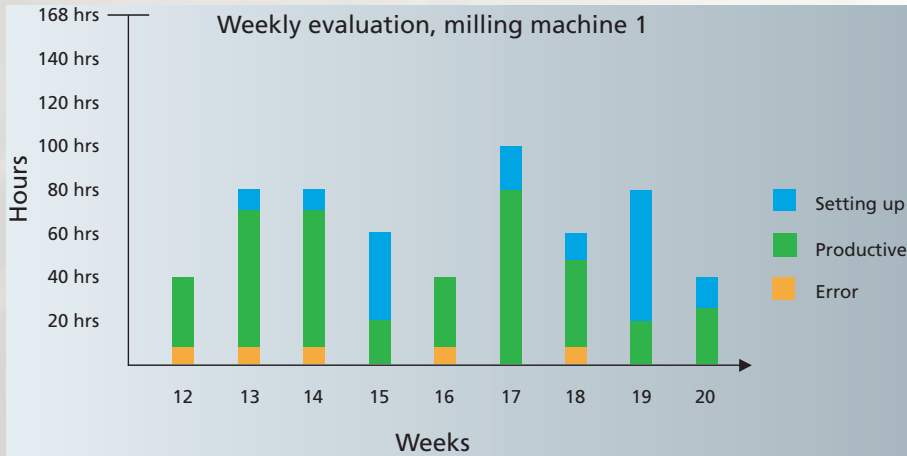
Organization

Increasing the value of existing machines



**EROWA**<sup>®</sup>  
System solutions  
from one single source

More than ever, the usefulness of any investment is subjected to the closest scrutiny. The extension of the unmanned autonomy of a milling machine is among the most sensible measures, for every hour in which the machine produces workpieces is one hour gained! And it is not strictly necessary for the operator to stand guard and look.

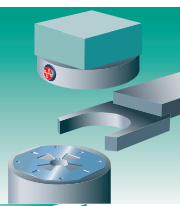


- ...don't fancy manned shiftwork?
- ...don't have any free capacities for new orders?
- ...have a full production order book?
- ...have customers who demand short lead times?



- ...don't have any leeway in capacity planning?
- ...produce one-off parts with long machining cycles?
- ...produce large series with long machining times?





- ...have one (or more) well-broken-in DMU 50s or 70s with a Heidenhain TNC 426 / 430 / 530 control unit?
- ...don't feel like buying a new machine?
- ...unfortunately don't have an automation kit for the existing machine?
- ...don't have a machine with an automatic loading door?
- ...don't have a machine table with a compressed air supply?

**But you do have enough ideas about how to automate your production?**

**...we will provide...**



**EROWA®**

**The idea**

# ...the solution for existing machines

We offer a complete solution for the retrofit automation of DMU 50V/eV and DMU 70V/eV. Tooling system, pallets, air supply and handling facility will be delivered, installed and put into operation.

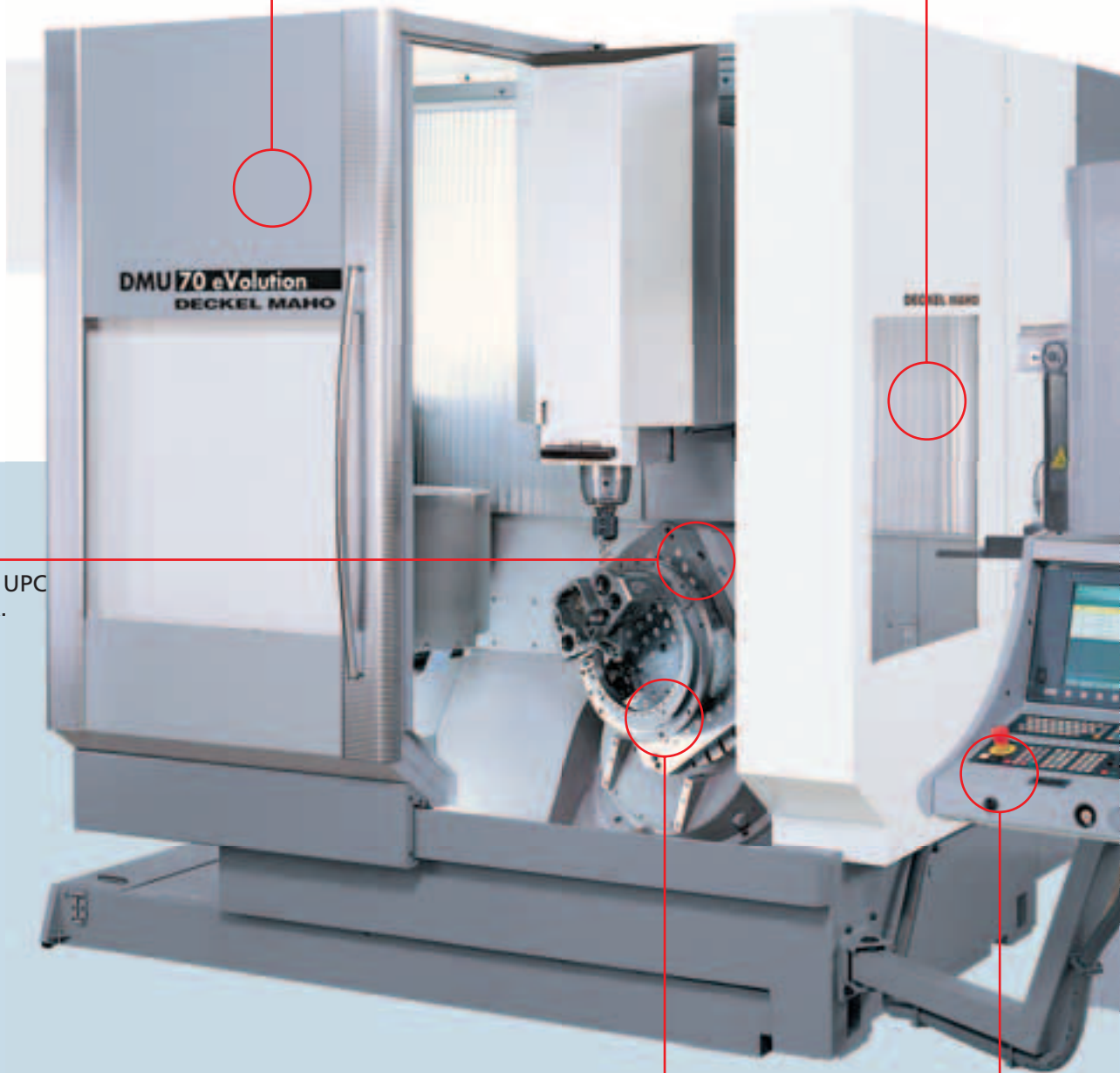
User training for the operation of the whole center in automatic mode.

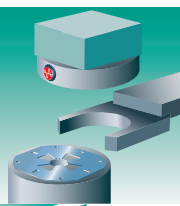
EROWA RoboDoor for the CNC machine.

Installed EROWA UPC Production chuck.

The AirDock supplies compressed air to the 5-axis table.

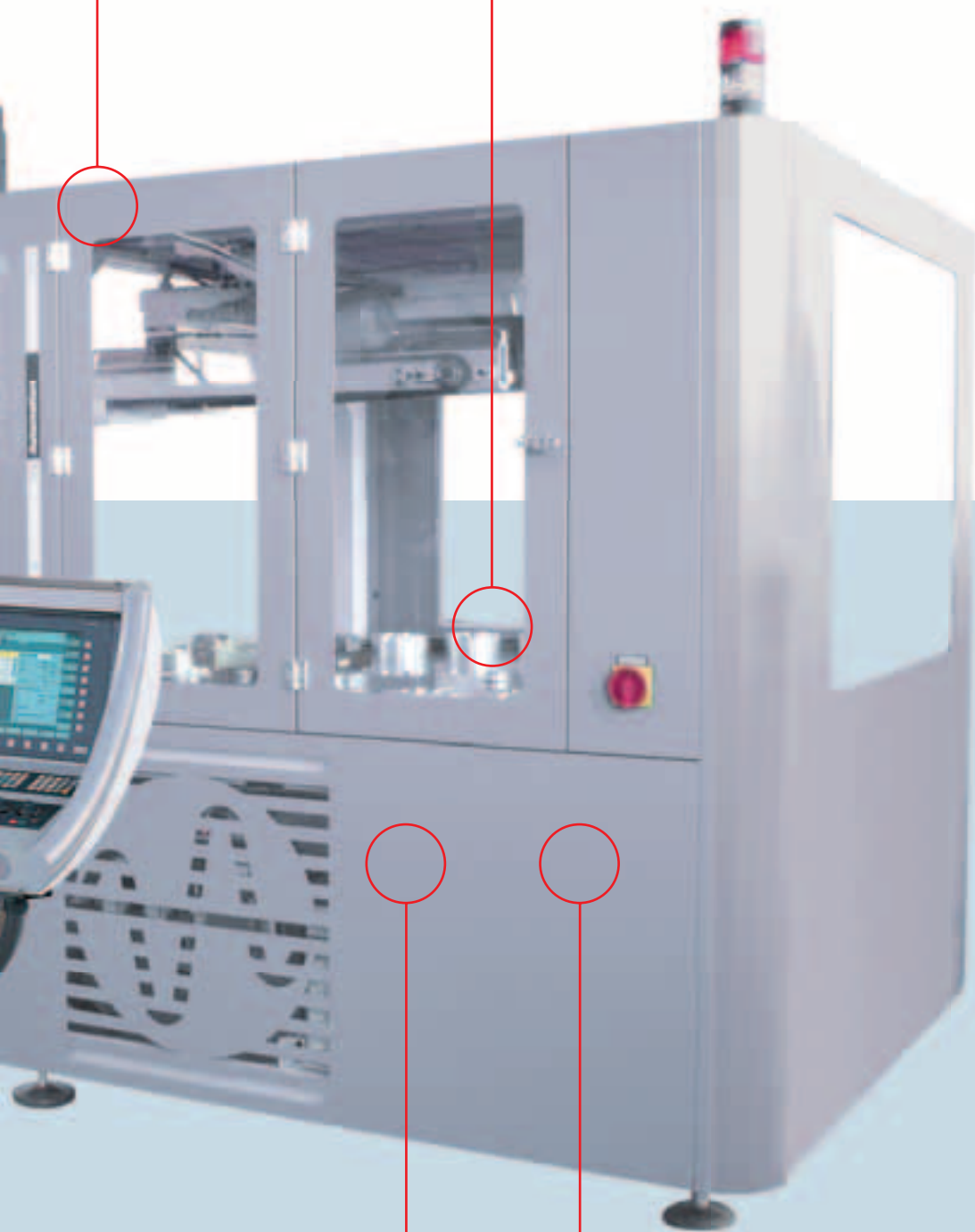
Macros for simple load/unload programs.





CE-conforming automation solution, including safety barrier.

Automatic loading facility for 10 EROWA pallets.



Installation, training, commissioning, tests with servicing and maintenance agreement.

Electric and software interface with Heidenhain control system.

The idea



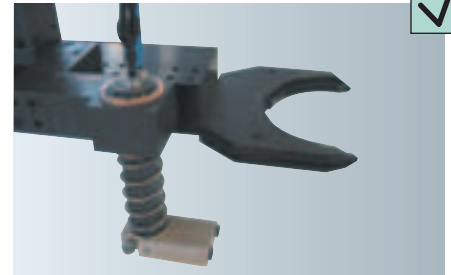
EROWA®

# Easy Retrofit

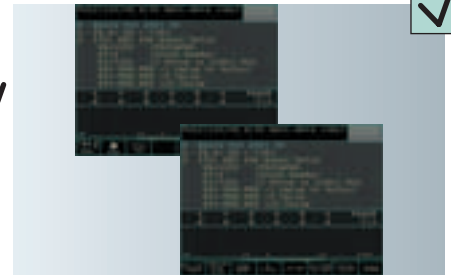
We believe in a full service, that is why we offer you a complete package at a fixed price!

## Kit for retrofit

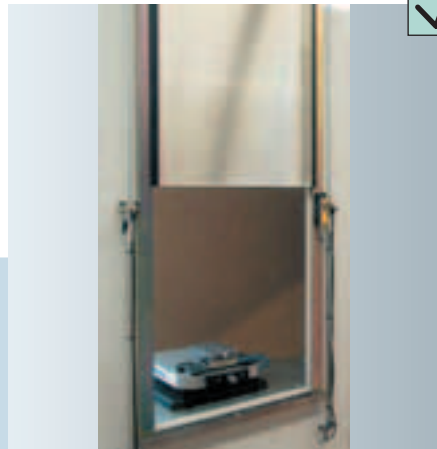
- 1 Robot Easy
- 1 AirDock with air supply to 5-axis table
- 1 RoboDoor
- 1 Adaptation (of the CNC control unit)
- 1 Uploading software to machine
- 1 Commissioning and test
- 1 "Automation" training course



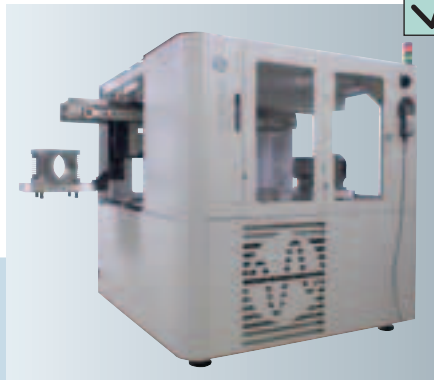
Air supply to 5-axis table: simple and well-thought-out.



Small is beautiful: with a specially developed macro, you control the Robot directly through the CNC.



RoboDoor Mark II: automatic door, built in and connected up - suitable, reliable and tight.



EROWA Robot Easy.



Commissioning and training.

## Select your preferred tooling



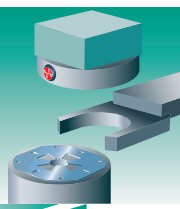
PowerChuck P  
pallet  $\varnothing$  148 mm  
24 magazine positions



ProductionChuck 210  
pallet  $\varnothing$  210 / 250 x 250 mm  
12 magazine positions



UPC  
pallet UPC 320 x 320 mm  
10 magazine positions



# Work it out for yourself

Investments for the retrofit of the handling facility		in EUR
Tooling system, including pallets		16,000
Robot		39,000
Retrofitting work on machine		19,000
<b><sup>1</sup>Total investments</b>		<b>74,000</b>
Savings and profits from the retrofit of the handling facility		
<sup>2</sup> Setting-up time saved	400 hrs/year @ 40	16,000
<sup>3</sup> Remachining time avoided	200 hrs/year @ 40	8,000
<sup>4</sup> Automatic production time available	3200 hrs/year @ 40	128,000
<b>Total improvements</b>		<b>152,000</b>
Payback time for investments		
Investments divided by improvements	$74,000 / 152,000 = 0,48$ (12 mths. * 0.48) <b>6 months</b>	

## Basis for the calculation

<sup>1</sup>Procurement expenses

<sup>2</sup>Time made productive through setting-up work being done during machine operation

<sup>3</sup>Time saved through fully automated completion with 5-side machining

<sup>4</sup>These productive hours are available thanks to the machine being loaded/unloaded automatically.

It is obvious that both investment costs and overheads increase when a plant is automated.

What is equally clear is the fact that an automated plant has a substantially higher degree of autonomy, thus working more productive hours in a comparable period of time.

Series machining times decrease substantially in terms of calendar time since the machine is productive round the clock. Shorter lead times become possible.

The hourly rate of an automated plant is lower despite investment costs, which means that more competitive offers can be made. All in all, then, there is no really conclusive argument for running a CNC milling machining without automatic loading/unloading - or are you aware of one?



# Take the next step.

Would you like a detailed offer with technical and commercial data?  
Please call your nearest EROWA representation.  
We're at your service at all times!

EROWA AG 047384 e/02.06

## Germany

EROWA System Technologien GmbH  
Gewerbepark Schwadermühle  
Rossendorferstrasse 1  
D-90556 Cadolzburg b. Nbg.  
Tel. 09103 7900-0, Fax 09103 7900-10  
e-mail: info@erowa.de

## France

EROWA Distribution France Sàrl  
PAE Les Glaisins  
12, rue du Bulloz  
F-74940 Annecy-le-Vieux  
Tel. 4 50 64 03 96, Fax 4 50 64 03 49  
e-mail: info@erowa.tm.fr

## Switzerland

EROWA AG  
Knutwilerstrasse 3  
CH-6233 Bürön  
Tel. 041 935 11 11, Fax 041 935 12 13  
e-mail: info@erowa.com  
www.erowa.com

## USA

EROWA Technology, Inc.  
North American Headquarters  
2535 South Clearbrook Drive  
Arlington Heights, IL 60005  
Tel. 847 290 0295, Fax 847 290 0298  
e-mail: info@erowatech.com

## Italy

EROWA Tecnologie S.r.l.  
S.S. 24 km 16,200  
10091 Alpignano (TO)  
Tel. 011 9664873, Fax 011 9664875  
e-mail: info@erowa.it

