

WorkPartner 1 +



...modularly adapted to your needs

WorkPartner 1+

- Can serve one or two machines in a production cell.
- One, two or three magazine capability gives exceptionally flexible capacity.
- Large doors facilitate loading of workpieces and tools into the magazines.
- Integrated pneumatic control of gripping devices and table chucks.
- Minimal floor space requirements.

WorkPartner 1+ is an extremely compact unit for changing pallets – on machine tables and at machine spindles in one or two machines. Its modular construction means that magazine capacity is extremely flexible and can be adapted to your company's needs.

Typical application areas

- Milling – changing of workpieces.
- Grinding – changing of workpieces.
- Die-sinking EDM – changing of workpieces and electrodes.
- Wire EDM – changing of workpieces.



Note: For further details, please see www.system3r.com.



Two light magazines



Three light magazines



Three heavy magazines



Light magazine
("skeleton" – view from inside)



Heavy magazine
("skeleton" – view from inside)

WorkPartner 1+ offers maximum magazine capacity in minimum floor space. Unlike many other solutions on the market, there is no risk of "painting yourself into a corner". Our modular magazines give an unprecedented flexibility that can be adapted to each user's needs. If you start with a single magazine, one or two more can be added whenever required.

WorkPartner 1+ is equally ideal for milling machines, grinding machines and die-sinking and wire EDM machines. Similarly, it is equally efficient whether used in one-off or series production.

With generous magazine doors that facilitate loading/unloading, WorkPartner 1+ is extremely user friendly. Other advantages include rapid change cycles, integrated pneumatic control of gripping devices and table chucks and minimal floor space requirements.



One light magazine &
one heavy magazine



Two light magazines &
one heavy magazine



Two heavy magazines



Two heavy magazines &
one light magazine

Technical specifications – general

- Transfer weight: pallet with workpieces, 50 kg (80 kg as option).
- X, Z and C axes: AC servomotor.
- Stroke length, X axis: 1,254 mm.
- Stroke length, Y axis: 1,500 mm.
- Rotation, C axis: 330°.
- Required air pressure: 6 bars $\pm$ 1 bar, 150 litres/minute.
- Required power supply: single-phase, 180 – 240 V AC, 15 A at 180 V AC, 20 A at 230 V AC.
- Required floor space: 1,730 x 1,290 x 2,460 mm (but affected by increased magazine capacity).
- Interface: serial RS-232.
- Double emergency stop.

Example configurations

With two light magazines

Max. transfer weight (including pallet)	50 kg
Max. size (including pallet), cubic	70 x 180 x 130 mm (Macro)
Max. size (including pallet), cylindrical	75 mm (Macro)
Max. no. of magazine positions, front magazine	80 (Macro)
Max. no. of magazine positions, rear magazine	80 (Macro)
Size (length x width x height)	1,730 x 1,290 x 2,460 mm
X arm, range of motion	1,400 mm
X axis stroke	1,000 mm $\pm$ X (gripping device dependent)
X axis stroke length with Macro	1,200 mm
X axis stroke length with MacroMagnum	1,250 mm
X axis stroke length with Dynafix	1,205 mm



Options

Software: WorkShopManager and ID system

With one light and one heavy magazine

Maximum transfer weight (including pallet)	50 kg
Max. size (including pallet), cubic	400 x 400 x 250 mm (Dynafix)
Max. size (including pallet), cylindrical	400 mm (Dynafix)
Max. no. of magazine positions, front magazine	80 (Macro)
Max. no. of magazine positions, rear magazine	10 – 20
Size (length x width x height)	2,030 x 1,290 x 2,460 mm

Options

Loading station	Note: The option takes one position from the heavy magazine.
Draining station	Note: The option takes one position from the heavy magazine.
Increased transfer weight	80 kg
WorkShopManager and ID system	



With two heavy magazines

Maximum transfer weight (including pallet)	50 kg
Max. size (including pallet), cubic	400 x 400 x 250 mm (Dynafix)
Max. size (including pallet), cylindrical	400 mm (Dynafix)
Max. no. of magazine positions, front magazine	10 – 20
Max. no. of magazine positions, rear magazine	10 – 20
Size (length x width x height)	2,425 x 1,290 x 2,460 mm

Options

Loading station	Note: The option takes one position from the heavy magazine.
Draining station	Note: The option takes one position from the heavy magazine.
Increased transfer weight	80 kg
WorkShopManager and ID system	



With two light magazines and one heavy magazine

Maximum transfer weight (including pallet)	50 kg
Max. size (including pallet), cubic	400 x 400 x 250 mm (Dynafix)
Max. size (including pallet), cylindrical	400 mm (Dynafix)
Max. no. of magazine positions, front magazine	80 (Macro)
Max. no. of magazine positions, rear magazine	10 – 20
Max. no. of magazine positions, left magazine	80 (Macro)
Size (length x width x height)	2,425 x 1,290 x 2,460 mm

Options

Loading station	Note: The option takes one position from the heavy magazine.
Draining station	Note: The option takes one position from the heavy magazine.
Increased transfer weight	80 kg

WorkShopManager and ID system

4



Draining station for heavy magazine



Loading station fitted to heavy magazine with pull-out rack

Options

- Loading station.
- Draining station.
- Increased transfer weight (80 kg).
- ID system with or without automatic scanning.
- Internal magazine lighting (4 LEDs).
- Cell PC with WorkShopManager software.
- RS422 interface.
- Customer chosen colour for outer casings.

Magazine capacity

There are two types of magazine, light (L) and heavy (H).

Up to three magazines can be connected to the changer unit in any combination whatsoever.

One magazine: L or H.

Two magazines: L + L, H + H or L + H.

Three magazines: L + L + L, H + H + H, L + H + H or L + L + H.

Note: Each individual magazine is intended for one and the same pallet system.

The magazine's capacity is determined entirely by the shape and size of the workpieces. The tables below show only "guideline values" for each pallet system carrying workpieces of a "standard" size and shape.

Pallets systems in the light magazine

	Number of pallets/rack	No. of racks	Total
Macro 54/70	10	8	80
Macro PT (70 x 70)	10	8	80
Macro 116	7	8	56
Macro Chip Guard	7	8	56
MacroMatrix 110	7	5	35
MacroMatrix 142	5	5	25
MacroMagnum	5	5	25
GPS70	10	8	80
GPS120	6	8	48
ITS50	10	8	80
ITS72	9	8	72
ITS115	7	8	56
ITS148	5	5	25

Pallet systems in the heavy magazine

	No. of pallets/rack	No. of racks	Total
MacroMagnum	4	5	20
MacroMatrix 110	4	5	20
MacroMatrix 142	4	5	20
GPS240	2	5	10
Dynafix	2	5	10
ITS148	4	5	20
UPC Fork	2	5	10
UPC RCS	2	5	10

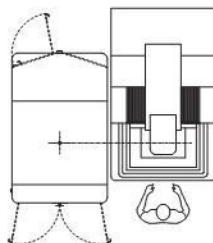
Note: When carrying out wire EDM with Macro, MacroTwin or Unimatic, solutions are customer specific – the number of positions per rack is entirely determined by the nature of the devices securing the workpiece and not by the pallet system.



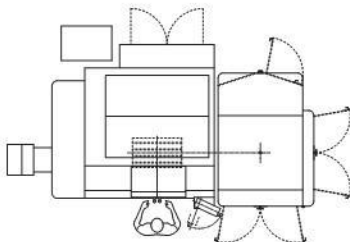
Foot print

Two light magazines	A= 1290, B = 1730 & C = 2460 mm
One light magazine & one heavy magazine	A= 1290, B = 2030 & C = 2460 mm
Two heavy magazines	A= 1290, B = 2425 & C = 2460 mm
Three light magazines	A= 1460, B = 1730 & C = 2460 mm
Two light magazines & one heavy magazine	A= 1460, B = 2030 & C = 2460 mm
One light magazine & two heavy magazines	A= 1860, B = 2030 & C = 2460 mm
Three heavy magazines	A= 1890, B = 2430 & C = 2460 mm

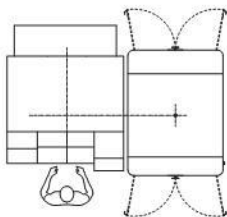
Example applications



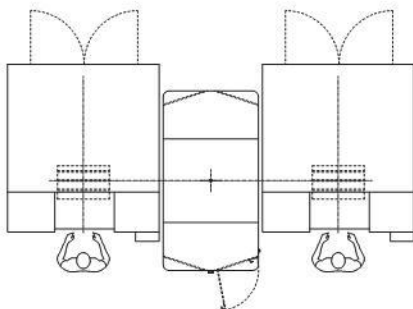
WorkPartner 1+ equipped with one heavy magazine and one light magazine and connected to an EDM machine



WorkPartner 1+ equipped with two light magazines and one heavy magazine and connected to a milling machine



WorkPartner 1+ equipped with two light magazines and connected to a milling machine



WorkPartner 1+ equipped with two heavy magazines and connected to two milling machines

System 3R International AB

Sorterargatan 1, SE-162 50 VÄLLINGBY

tel +46-08 620 20 00, fax +46-08 759 52 34, e-mail: info@system3r.com, www.system3r.com

ASIA

Far East, China & India
System 3R Far East Pte.Ltd.
 6 Harper Road
 Leong Huat Building, 01-01
 SINGAPORE SG-369 674
 tel +65-6289 4811
 fax +65-6289 3011
 e-mail: info.sg@system3r.com

Shanghai Contact Office
 tel +86-21 6432 7927
 fax +86-21 6432 7928
 e-mail: info.cn@system3r.com

Beijing Contact Office
 tel +86-10 8225 1632
 fax +86-10 8225 1635

Guangdong Contact Office
 tel +86-769 8162 0628
 fax +86-769 8162 0638

Malaysia Contact Office
 tel +60-03 7877 4785
 fax +60-03 7877 5948

Taiwan Regional Office
 tel +886-02 2278 3126
 fax +886-02 2278 3108

Japan & Korea
System 3R Japan CO., Ltd.
 Kaki Building
 2-5-22, Suiko, Bunkyo-ku
 TOKYO JP-112-0005
 tel +81-03 5840-7383
 fax +81-03 5840-8723
 e-mail: info.jp@system3r.com

Nagoya Regional Office
 tel +81-052 774 6250
 fax +81-052 774 6285

EUROPE

System 3R Europe GmbH
 Wassenweg 19
 DE-64521, GROSS-GERAU
 tel +49 61 52 80 02 0
 fax +49 61 52 80 02 35
 e-mail: info.eu@system3r.com

Czech Republic & Slovakia
System 3R Czech
 Tiskanska 10/257
 CZ-108 28 PRAHA 10
 tel +420 234 054 224
 fax +420 234 054 225
 e-mail: info.cz@system3r.cz

France & Portugal
System 3R France
 56 Boulevard de Courcouron
 Les Espaces Multiservices 15
 F-77183 CROISSY BEAUBURG
 tel +33-01 60 95 90 89
 fax +33-01 60 37 88 16
 e-mail: info.fr@system3r.com

Germany & Benelux
System 3R Deutschland
 Wassenweg 19
 DE-64521, GROSS-GERAU
 tel +49 61 52 80 02 0
 fax +49 61 52 80 02 35
 e-mail: info.de@system3r.com

Italy & Spain
System 3R Italia
 Via Poncetri, 24
 IT-20063 CERNUSCO SUL NAVIGLIO (MI)
 tel +39 02 92 38 821
 fax +39 02 92 11 23 19
 e-mail: info.it@system3r.com

Scandinavia
System 3R Nordic
 Sorterargatan 1
 SE-162 50 VÄLLINGBY
 tel +46-08 620 20 00
 fax +46-08 759 52 34
 e-mail: info.no@system3r.com

Järfälla Hårdverksstad
 Elektronikbjörden 8
 SE-175 43 JÄRFÄLLA
 tel +46-08 580 125 50
 fax +46-08 580 125 55
 e-mail: info@hvw.se

Switzerland & Austria
System 3R Schweiz AG
 Wilerstrasse 98
 CH-9230 FLAWIL
 tel +41-071 394 13 50
 fax +41-071 394 13 60
 e-mail: info.ch@system3r.com

Turkey
System 3R Türkiye
 Abdi İpekçi Cad. Özel İdare İş Merk 150/209
 Bayrampaşa 34030 İSTANBUL
 tel +90-212 613 8062-8063
 fax +90-212 613 8069
 e-mail: info.tr@system3r.com

United Kingdom
System 3R UK
 Paradise Way
 Walsgrove Triangle
 Coventry, West Midlands
 CV2 2ST, United Kingdom
 tel +44-02476 538653
 fax +44-02476 538695
 e-mail: info.uk@system3r.com

AMERICAS

System 3R USA Inc.
 Headquarters & Technical Center
 915 Busse Road
 ELK GROVE VILLAGE, US-IL 60007
 tel +1 847 439 4888
 fax +1 847 439 5099
 e-mail: info.us@system3r.com

Canada & MI
 mobile +1 519 870 8339
 fax +1 847 439 5099
 e-mail: info.us1@system3r.com

AZ, CA, CO, ID, MT, NM, NV, OR, UT,
WA, WY & Mexico
 mobile +1 714 299 4923
 fax +1 847 439 5099
 e-mail: info.us2@system3r.com

IA, MN, ND, NE, SD & Western WI
 mobile +1 612 953 6904
 fax +1 847 439 5099
 e-mail: info.us3@system3r.com

AR, IN, KY, OH, TN, MO, KS, OK & Southern IL
 mobile +1 317 694 7508
 fax +1 847 439 5099
 e-mail: info.us4@system3r.com

AL, FL, GA, LA, MS, NC, SC & TX
 mobile +1 813 326 0125
 fax +1 847 439 5099
 e-mail: info.us5@system3r.com

North IL & Eastern WI
 mobile +1 847 400 6073
 fax +1 847 439 5099
 e-mail: info.us6@system3r.com

NJ, NY & PA
 mobile +1 201 248 3885
 fax +1 847 439 5099
 e-mail: info.us7@system3r.com

CT, DC, DE, MA, MD, ME, NH, RI, VA, VT & WV
 mobile +1 201 214 7088
 fax +1 847 439 5099
 e-mail: info.us8@system3r.com

For further information, see
 www.system3r.com



ERTEC BV
 BREVELD 2
 NL-5673 BN NUENEN
 NETHERLANDS
 T. +31 (0)40 2982036
 F. +31 (0)40 2982037
 ERTEC@ERTEC.NL
 WWW.ERTEC.NL

system 3R the Pioneer

+GF+

Combi, Delprat, Dynafix, Loxa, LX, Macro, One Minute Set-Up, One System Partner, R2R, System 3R, VDP, WorkMaster, WorkPat, WorkPartner, WorkShopManager, 3HP, 3R, 3Ready-To-Run and 3Reflex are registered trademarks of System 3R.