



ACS Labelling Systems

The system for all labelling needs

LABELLING



MANUAL



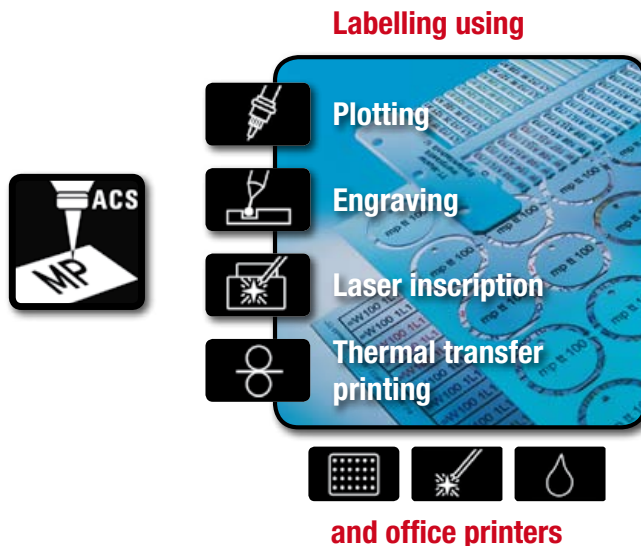
Labelling – from indents to computer controlled labelling

The labelling of electrical components was from the beginning a continually developing topic driven by the industry. The need to be able to produce information carriers (for more and more complex equipment) cheaply, quickly and flexibly, challenges today's manufacturers of labelling systems to continually design new and innovative solutions. Murrplastik reacted to these demands very early on with its Ademark indent system: using sophisticated tools individual types of fonts and symbols were combined to make an ideal label for the application concerned. As early as 1986 this system was supplemented

with the new option of software-controlled labelling and extended for use in new areas of application. With a large range of label holders and the latest labelling devices, Murrplastik allows for increased demands in the area of application as well as product safety and speed. Our slogan tells the truth:

"We save you time".

SOFTWARE



ACS Software

Simple to use – quick results

Labels provide smooth man/machine communication in industrial environments – increasing security and fostering faith in technical workflows. The **ACS Gold Studio** labelling software provides users with all of the colours, numbers, symbols and plain text one might need: It's the quick and uncomplicated way to create meaningful labels in-house. The integrated system database makes that process much easier. It provides standardised symbols for electric, mechanical, hydraulic and pneumatic applications. An editor function can be used to adapt symbols from the database into custom ones.

Intelligent user support

An integrated CAD interface module connects the application with the E-CAE or other planning system. This ensures quick, error-free transfer of data containing function texts, wiring diagrams, terminal block or operating resource lists and machine schedules. A CAD interface generator allows the user to customise individual interfaces to the application programs. Intelligent utilities are provided to allow data to be freely assigned to the required labelling materials. Text and colour attributes can be tailored at the click of the mouse. The **ACS Gold Studio software** supports all Windows-compatible output devices.



Compatible operating systems

- WIN 2000
- WIN XP/XP Pro
- WIN VISTA 32 Bit

Hardware requirements

- Minimum hardware requirements for the respective OS





Manual entry



Software
ACS Gold Studio



Transfer from
CAD-/CAE systems

INPUT

OUTPUT



Porty



ST Mark



MVPS-G3



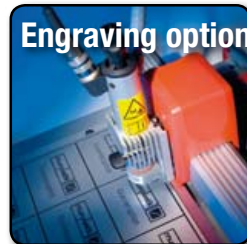
CAM-System



Office printers



Laser option



Engraving option

APPLICATION



Terminal
block labelling



Single wire,
cable,
and conduit
labelling



Control gear and
equipment location
labelling



Control and signal unit
labelling



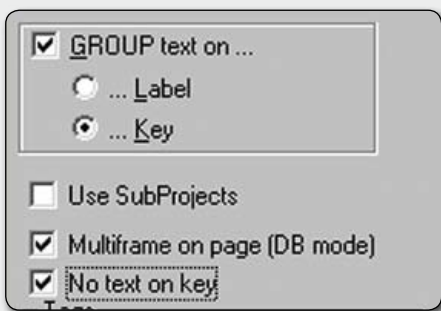
System
labelling

New functions of the ACS-Gold Studio software



New start screen for ACS software

The new navigation function launches when the CD is inserted, allowing for quick access to all important data, both on the CD and on our home page, including documentation, updated parameters, downloads, etc.



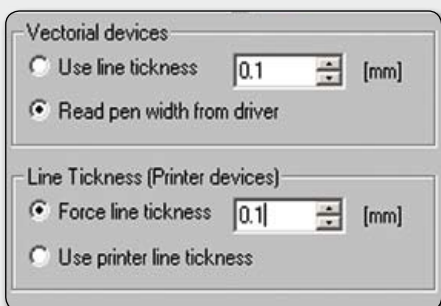
Output without header possible

If for some reason you do not need the project information for your file (project name, group, master numbering), these can be hidden on a project-by-project basis which also cuts down the production time.



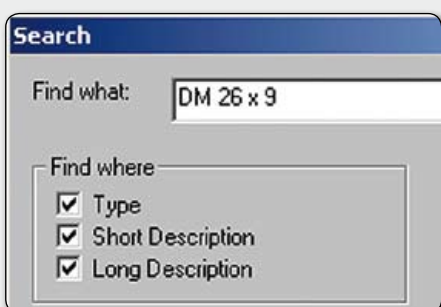
Several sheet label frames possible

The required data for processing through several sheet label frames can be entered into the plotter. That allows for two or more Duomatt or label sheets to be inscribed in one pass.



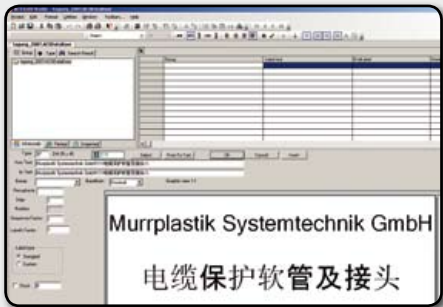
Line weights freely definable

Select your own line thickness for outputting symbols, regardless of whether on the plotter or printer, or used the default values in the driver.



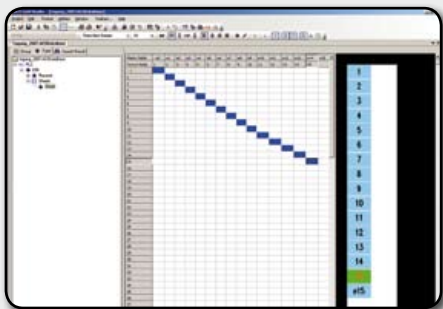
Search parameter editor

Search for a specific parameter: searches are possible in the database fields "Type", "Short description" and "Text", and can be future restricted or expanded.



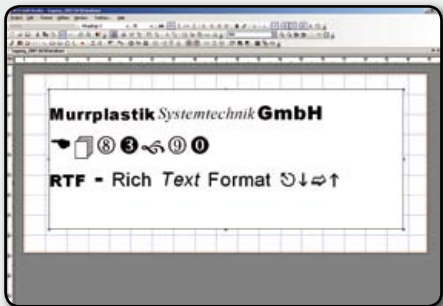
Unicode

Processing and output of symbols from around the world, including Chinese, Japanese, Cyrillic, Greek, Indian, etc. Available for WIN 2000 and newer. The international language support function must be activated in the control panel.



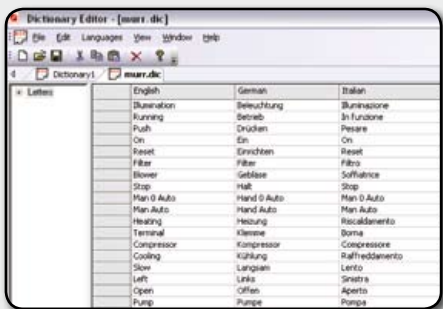
SPS Function

Freely definable matrix. It is possible to make a targeted assignment of texts and data records onto individual matrix fields within the project. Variable and convenient printing of insertion strips for SPS modules, including S7 Siemens, XC Moeller etc.



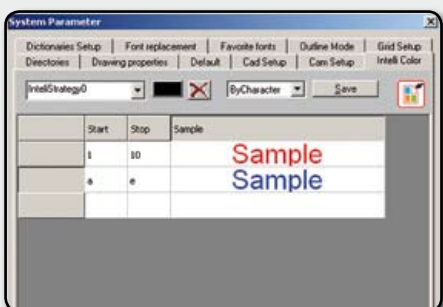
RTF (Rich Text Format)

Free formatting and processing of all RTF symbols with all available attributes, e.g. font, size, colour, weight etc within a data record.



Dictionary

Freely definable dictionary with as many languages as desired for automated translation of projects, including for Unicode symbols. Single or multilingual versions possible for each record.



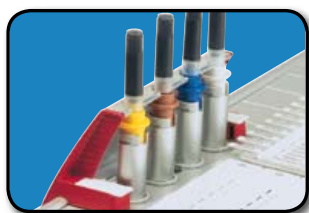
IntelliColor

Flexible output control of projects defined through a 'colour strategy'. Assignment is handled through the available RGB colours, allowing for values, items and symbols to be assigned.

MVPS-G3 Plotter systems

Universally useable for high quality labelling

The MPVS-G3 plotter systems are the universal labelling system for different labelling requirements and materials. Fast and safe with an extremely high quality typeface, the systems are suitable for labelling electrical, pneumatic and mechanic components. The plotter system is perfectly coordinated with the ACS labelling software. With its modular units which are constantly redeveloped for everyday situations, the plotter system radically simplifies daily work:



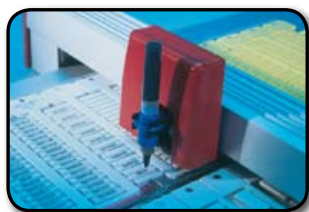
PEN station

The pens are kept tidy and can stay in the machine permanently. The plotter pens are closed airtight in the pen station, thus preventing them from drying out.



Writing function

The PEN station can hold the standard Murrplastik KS 15/27 labels. The plotter can carry out a pen test on these plates. Top-quality typeface guaranteed from the first to the last label.



Automatic calibration

Should it be necessary to recalibrate the machine during a job, then this can be done at the touch of a button. After automatic calibration, the pen goes back to the position at which the job was interrupted and finishes the inscription.



High intake capacity

Up to 10 base plates can be laid on one plotter board of the MVPS-G3 series. This means that base plates do not often need to be replaced during operation.



Economical partial labelling

With the MVPS-G3 series, the trees already started can also be labelled. Labelling materials are used optimally and economically.



Output systems

MVPS-G3-T

Advantages:

Plotter type: Flatbed plotter
 Max. plotting area: 295mm x 210mm
 Speed: max. 40 cm/s
 Ports: Parallel (Centronics),
 USB Level 1.1
 Drive: Two-phase
 stepping motor
 Pen station: max. 4 pens with
 double sealing
 Base plates
 mountable: 4 Pieces

MVPS-G3

Advantages:

Plotter type: Flatbed plotter
 Max. plotting area: 450 mm x 300mm
 Speed: max. 40 cm/s
 Ports: Parallel (Centronics),
 USB Level 1.1
 Drive: Two-phase
 stepping motor
 Pen station: max. 4 pens with
 double sealing
 Base plates
 mountable: 10 Pieces

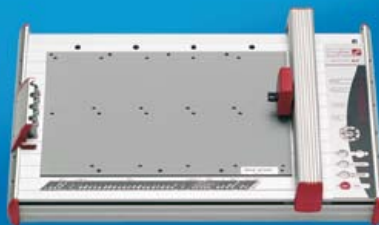
MVPS-G3-XXL

Advantages:

Plotter type: Flatbed plotter
 Max. plotting area: 800 mm x 300mm
 Speed: max. 40 cm/s
 Ports: Parallel (Centronics),
 USB Level 1.1
 Drive: Two-phase
 stepping motor
 Pen station: max. 4 pens with
 double sealing
 Base plates
 mountable: 20 Pieces



MVPS-G3-T



MVPS-G3



MVPS-G3-XXL

Engraving option

ENGRAVING OPTION



Plotter as engraving machine!

The **MVPS-G3 series plotter** can be simply and easily converted into a quality engraving machine complete with vacuum suction unit. Conversion is very straightforward: The spindle unit is affixed on the plotter in place of the pin unit and connected to the vacuum cleaner and a control unit for the spindle.

Every plotter now has multiple talents! Long wait times for external engraving job are a thing of the past. That saves time and money.

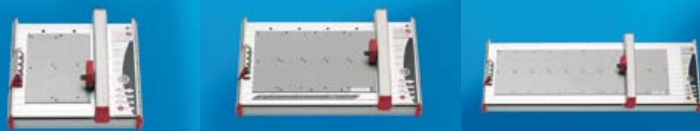
Engraving option:

Technical data and scope of delivery:

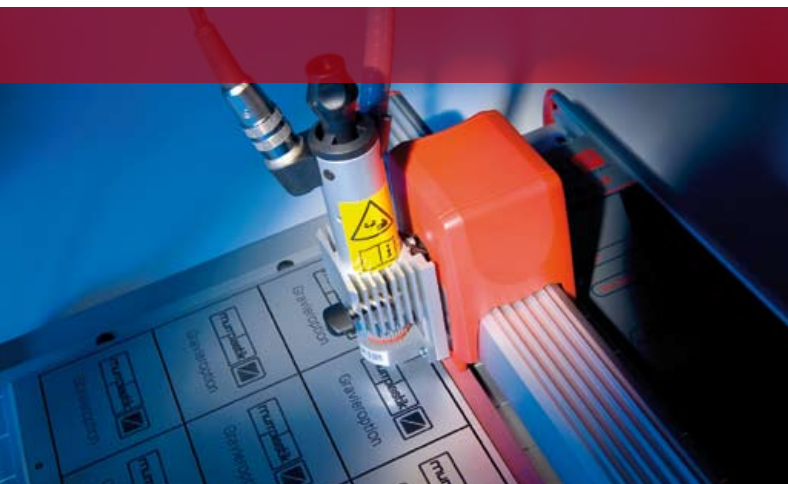
Engraving spindle:	with assembly carriage and graver 0.5 mm (15°)
RPM:	min. 5,000 RPM, max. 50,000 RPM
Frequency:	6 Ncm
Power consumption:	120W
Tong:	Shaft diameter 3mm
Requirement:	ACS 2000 (release 053 or higher) Plotter firmware 05h or higher

Scope of delivery:

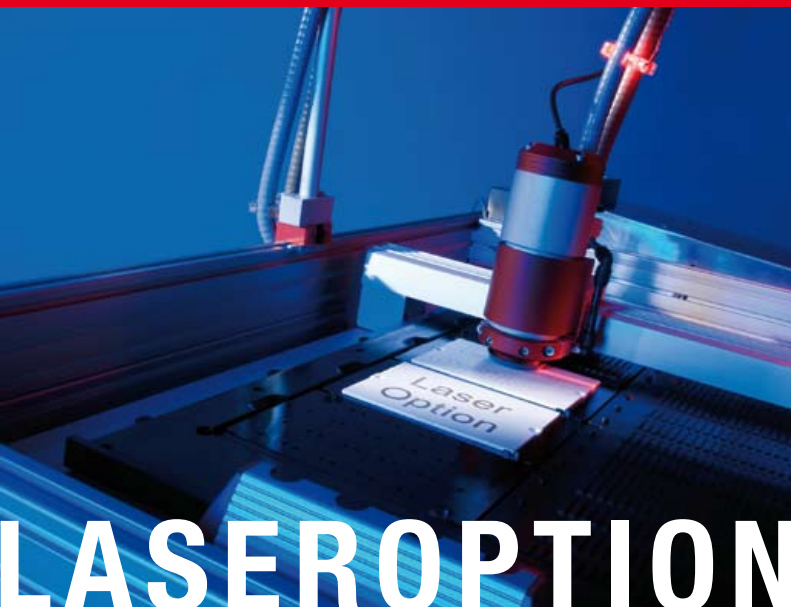
Control unit:	G3/VEC <u>V</u> acuum <u>E</u> ngraver <u>C</u> ontroller
Vacuum cleaner:	G3/VC <u>V</u> acuum <u>C</u> leaner



- All plotters in the MVPS-G3 series can be converted into engraving machines
- Simple conversion
- Extensive selection of engraving materials



Laser option



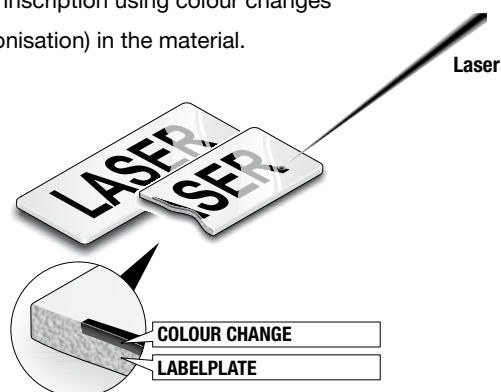
LASEROPTION

Technical specifications

- Pulsed ytterbium solid state laser with 2 watt optical fibres and optics unit
- Wavelength 1060 – 1080 nm
- Pulse duration >25 ns
- Pulse frequency 10 kHz
- Focus diameter 0.01 mm
- Laser class 1 based on DIN E 60825-1
- Approved operation with conventional tested suction technology
- Simple lens cleaning
- Patented and released in DE 102006002573A1 and WO 2007/082583A2

Principle

Laser inscription using colour changes (carbonisation) in the material.



Laser labelling – for ultimate quality

The existing plotter system can be converted into a plant with laser option with just a few days.

When the systems are thus modified they are subject to safety class 1 and can additionally be brought back into use in the existing working areas with the established technologies.

The laser option can create labels for wires, cables, terminals, switching devices, controlling and signalling units as well as system labelling of the highest and most lasting quality for all areas of applications.

Advantages

- Top quality inscriptions thanks to carbonising laser labelling
- Easy use in any conditions
- Laser class 1 based on DIN E 60825-1
- Compact, robust design for optimal quality
- Easy assembly
- Laser labelling – high quality inscription
- Highly flexible inscription possible: Pictograms, symbols, logos, single line, True Type
- Area or line inscription
- Uses ACS standard software
- Minimal consumables costs
- Existing plotter systems can be converted.



Tests



Engraving systems

Lasting inscription

Engraved label plates are often the only technology able to stand up to industrial environments with "aggressive ambient conditions" like high moisture and temperature fluctuations. Mechanical engraving is the most highly resistant form of inscription, since the labels are milled as grooves into the labelling carriers. The waste material, i.e. from plastic or metal plates, is carried away by rotating cutting bits.

Murrplastik engraving materials Ready for any tasks

With single-ply materials like anodised aluminium: During engraving, the script is milled into the labelling plate as grooves. An aluminium oxide can be used as part of a second process step to colour or accentuate the contours of the script. With two-ply or multi-layer materials of plastic or aluminium plastic compounds: During engraving, the lowermost layer is exposed and through the different colouring made visible as script or symbol.

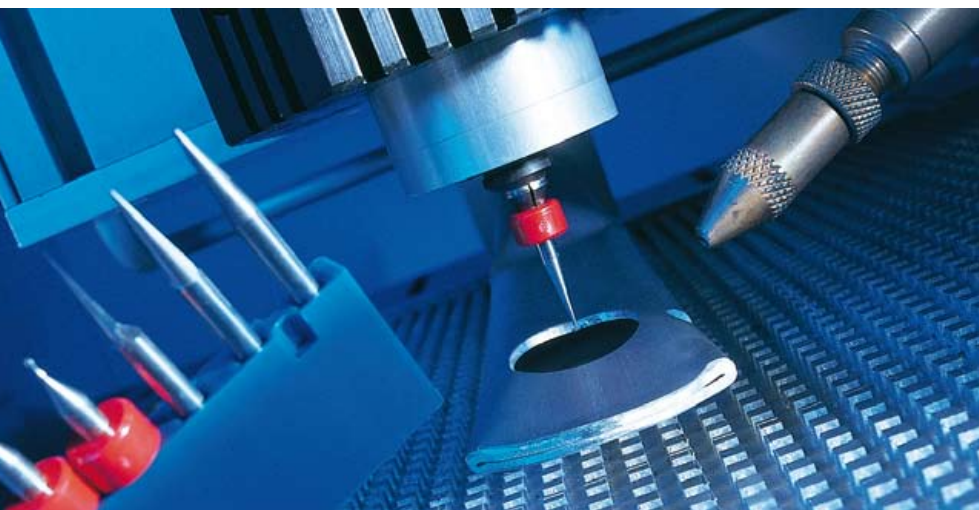


Engraving



Overview of benefits

- **User-friendly ACS – software for all engraving machines**
- **Several engraving machines in the product range**
- **Large palette of gravers and cutters**
- **Extensive range of products: Two-layer and multi-layer materials available**
- **Large selection of plastic and metal plates**



Technical data CAM... :

CAM 100 complete system

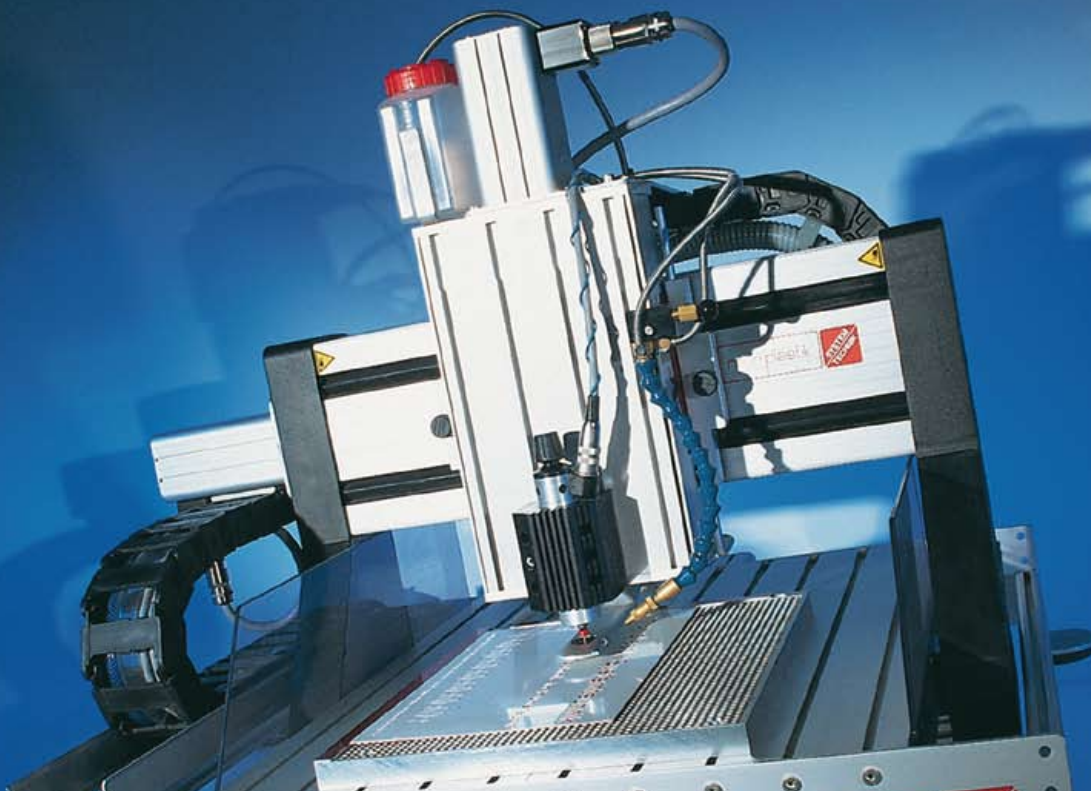
Positioning range X/Y 330 x 290 mm,
Stroke 75 mm
Clamping surface 500 x 600 mm

CAM 200 complete system

Positioning range X/Y 540 x 500 mm,
Stroke 75 mm
Clamping surface 750 x 850 mm

Mechanics

- Surface-milled, face accuracy < 0.05 mm
- x/y/z-infeed free from backlash, stepped motor drive
- 3 ball screw drive 16 x 5 mm with flange bearings
- Rubber cover with teflon coating
- Repeating accuracy +/- 1/100 mm
- 3 end and reference switches, accuracy < 1/100 mm



ST-Mark Thermo laminating system



Overview of benefits

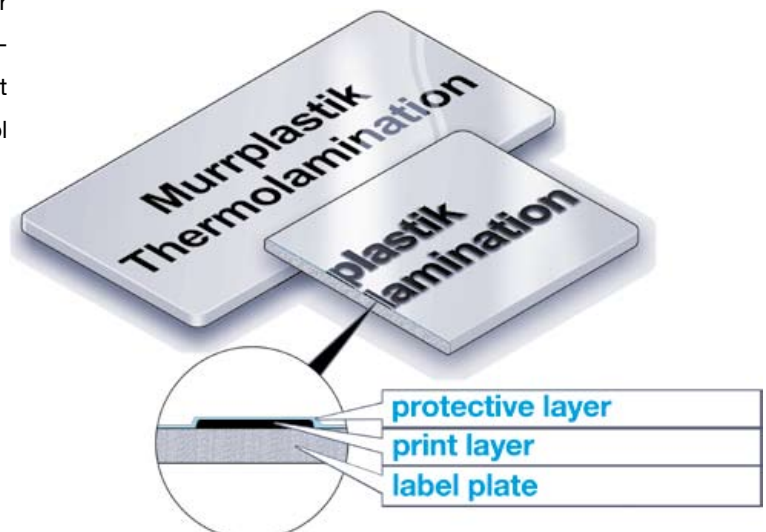
- Can operate in automatic mode
- Quick: approx. 8,200 labels per hour (with label type KS 4/18ST)
- Long service life: One unit of consumables allows for up to 59,976 labels to be printed (with label type KS 4/18ST).
- Increased abrasion resistance through protective laminate layer
- Designed for rapid inscription of label mats
- User-friendly ACS Software

High output performance, high abrasion resistance

Thermal lamination is generally the option of choice for labelling jobs where very high production output must nevertheless be achieved with high abrasion resistance for the inscription.

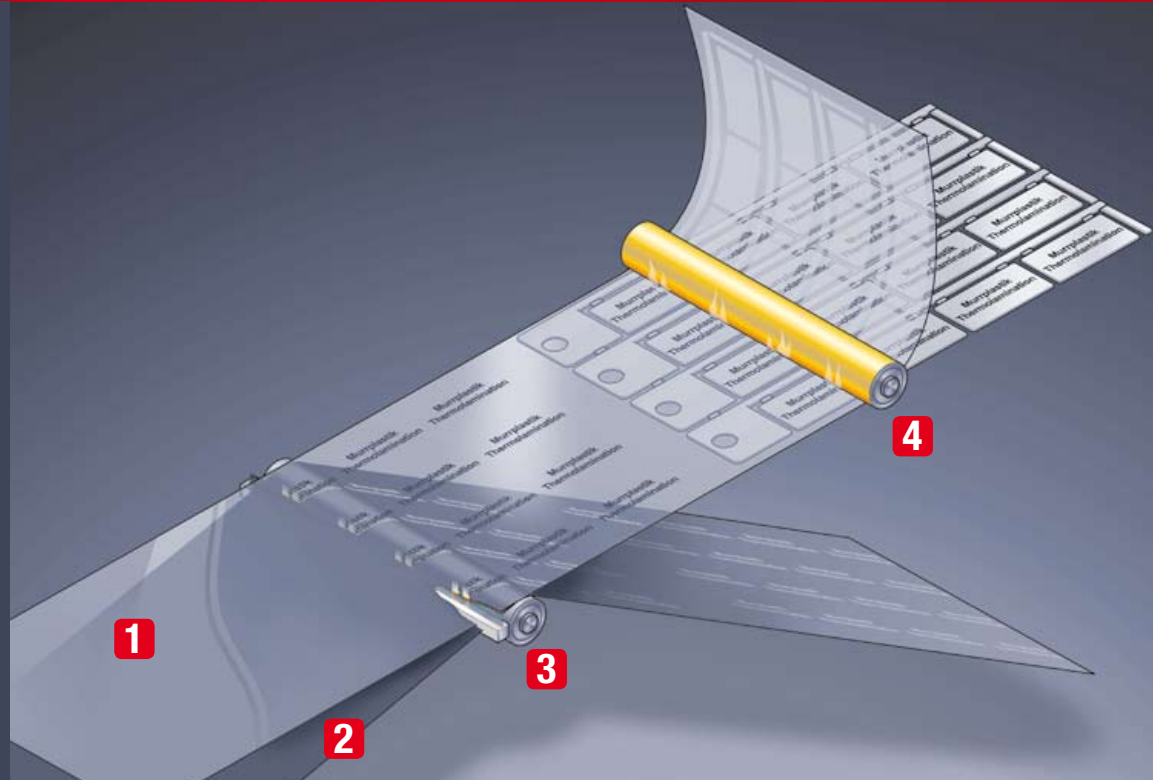
The ST thermo laminating system from Murrplastik sets standards in this area. With a label output of around 8,200 individual labels in one hour (with KS 4/18ST) and operated in automatic mode it is perfectly suitable for "large tasks" in industrial manufacture. The labelling device comprises a thermal transfer technology-based print module, a tray for storing the label plates and a control panel.

The print module has a thermal print head with 1,280 print dots at a resolution of 305 dpi. An integral History Control enables individual print dots to be heated individually, depending on the print image, in order to achieve brilliant print quality. The printing speed and heating time can be adjusted to optimise the print image. The design is printed from the transfer foil via the thermo head onto the laminate foil.



Schematics of lamination process

- 1** Laminate film
- 2** Thermal transfer film
- 3** Thermal transfer head
- 4** Lamination process



The lamination process

The transfer and lamination film are transported line by line during the printing process. An encoder ensures constant print length regardless of fluctuations during transport. After the printing process, the laminate film is transported until the printed image is above the plates.

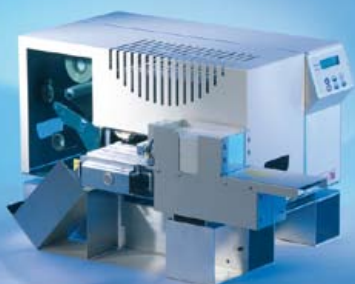
The temperature of the heated roller is kept constant by a controller. The temperature and laminating speed can be set to optimise the laminating quality.

Once the label plate sets have been inserted, the job specified and the unit in READY mode, pressing the START button (on the front of the tray) pulls in the tray and the printing and lamination process can begin. When

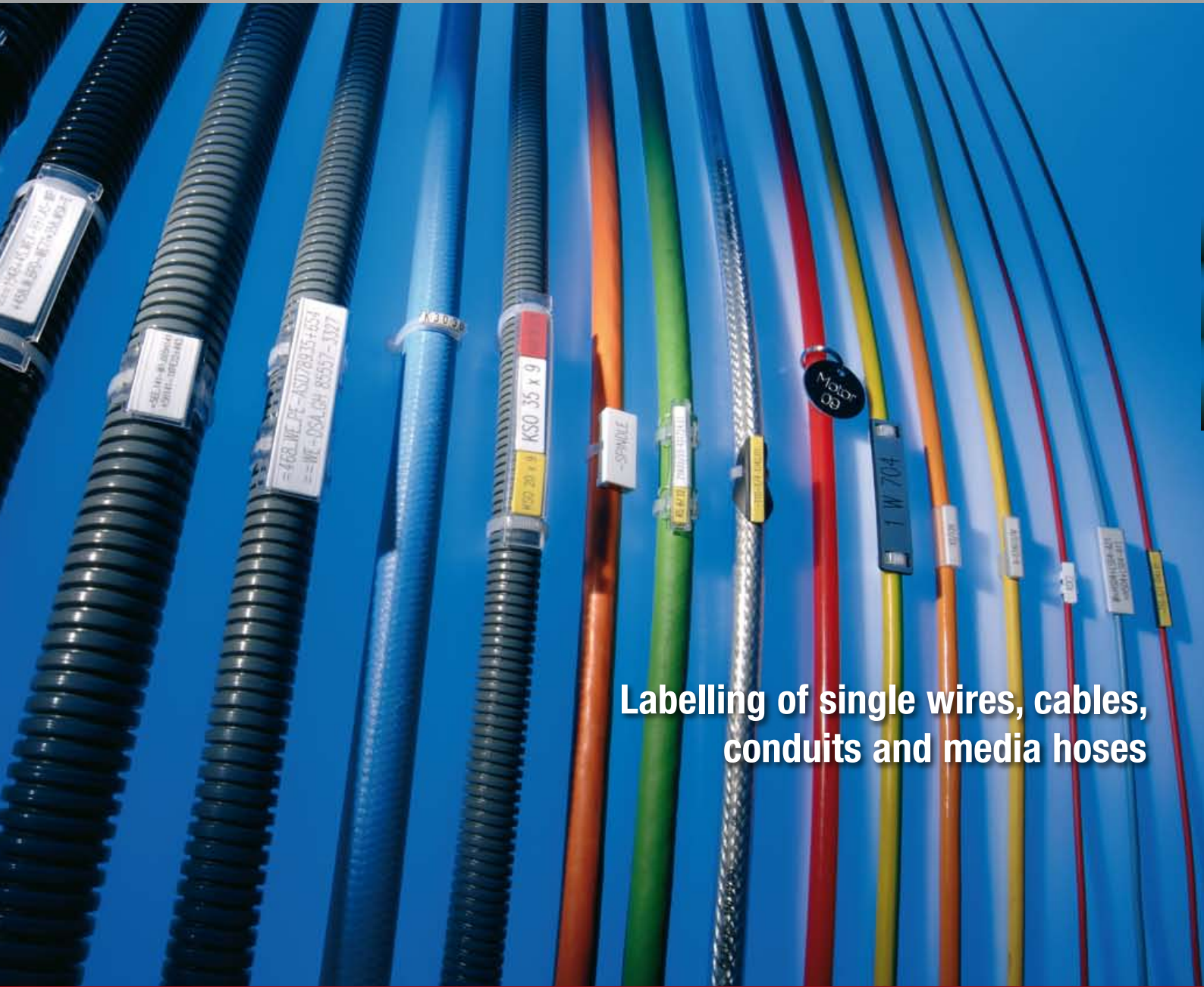
the job is complete, the bed extends out to allow the plate to be removed. A feeder can also be optionally attached to allow for automated operation.

Brief technical specifications

Capacity:	approx. 8,200 labels per hour (with label type KS 4/18ST)
Service life:	approx. 56,600 labels per unit of consumables (with label type KS 4/18ST)
Resolution:	305 dpi
Ports:	USB 2.0 / Ethernet RJ45
Dimensions:	530 x 290 x 270 mm
Weight:	Approx. 22 kg



Sample applications



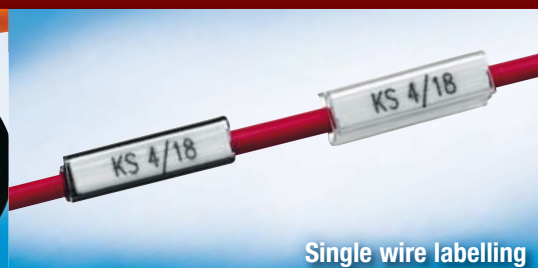
Labelling of single wires, cables, conduits and media hoses



Conduits and media hose labelling



Cable labelling

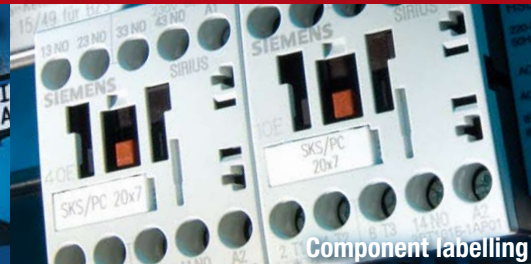


Single wire labelling

Component location labelling

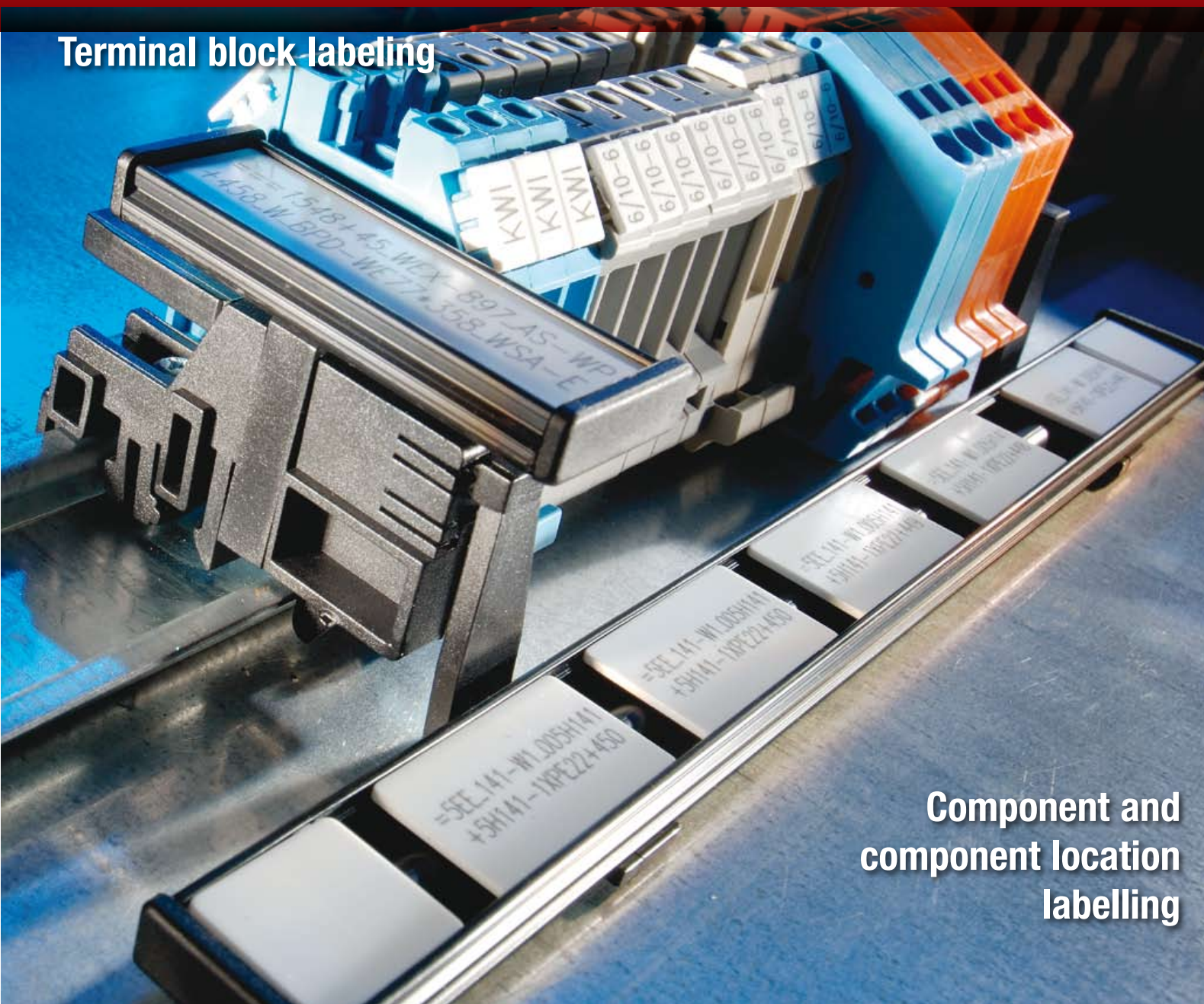


Control and signal unit labelling



Component labelling

Terminal block labelling



Component and component location labelling

Labelling services



Tailored labelling services

Murrplastik Systemtechnik supports companies in a variety of labelling requirements. We have therefore seen that companies often pay less for outsourcing that they do for in-house labelling. The reasons for this are obvious. A company that, for example, develops, installs and commission controls is usually under a lot of financial and time pressure to provide the necessary equipment and training for members of staff. Not to mention the fact that labelling tasks change constantly.

Quick and easy execution

According to the requirements of the customer the matching labelling method is chosen:

- Laser technology is synonymous with high operating speeds, supreme quality, short processing times and crisp typefaces.
- Plotter technology boasts a very high configuration capacity and is suitable for virtually any material.
- Laser printing technology lends itself well to sheet labels, which in turn are suitable for virtually all fields of application. Colour printing is possible as well.
- Engraving technology is used for metals and suitable plastic-coated materials. The weight of the font varies according to stylus size; repetition accuracy is very high.

Overview of benefits

- Short processing times
- Simple, flexible execution
- Rapid and cost-effective production
- Delivery within three working days
- No own investment needs
- On request we can fit labels into sleeves, assemble holders and cable ties and package your order



Convenient and secure data exchange

It is remarkably easy to transmit labelling data. Simply send your data to our service centre by e-mail (dl@murrplastik.de), data carrier or fax.

The data are then processed as quickly as possible by Murrplastik specialists and can be saved for two years for further projects on request.

The data format options are virtually unlimited: ASCII format, files from MS Office applications (Word, Excel) and ACS labelling software data.



Impressive credentials

Many reputable firms in a very diverse range of sectors have been using this all-inclusive service: The automotive industry, railway systems, control cabinet construction, general electrical engineering. For reasons obvious to branches of industry like these which are mindful of supreme economy and profitability.

Maximum quantities in minimum time

State-of-the-art equipment means that maximum quantities of labels can be inscribed in minimum time.

Full service

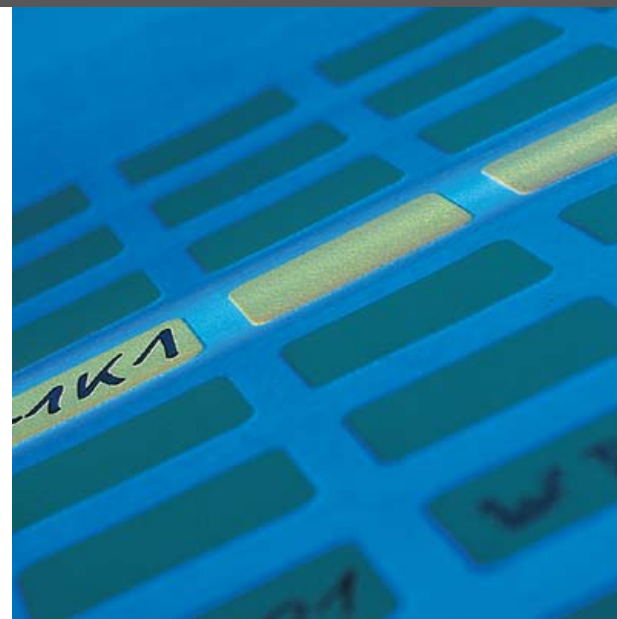
Murrplastik offers completely inserted grommets or just labels. Just as the customer wishes.

High laser quality...

... for supreme inscription quality on labels. Other inscription methods such as plotting and engraving are also offered.

Transfer of labelling data

... is possible from any CAE/CAD programs or Excel files.



Head Office

Germany

Murrplastik Systemtechnik GmbH
Postfach 1143
71567 Oppenweiler
☎ +49 7191 48 20
☎ +49 7191 482 280
www.murrplastik.de
info@murrplastik.de

Italy

Murrplastik Italia S.r.L.
Via Circo, 18
20123 Milano
☎ +39 02 856 805 70
☎ +39 02 805 034 69
www.murrplastik.it
info@murrplastik.it

Austria

Murrplastik Systemtechnik GmbH
☎ +43 732 660 870
☎ +43 732 660 872
www.murrplastik.at
info@murrplastik.at

North America

(Canada, Mexico, USA)
Murrplastik Systems, Inc.
1175 US Highway 50
Milford, OH 45150
☎ +1 513 201 3069
☎ +1 215 822 7626
www.murrplastik.com
cablegmt@murrplastik.com

China

Murrplastik Asia Co., Ltd.
1802 Rm. No. 218
Hengfeng Rd.
200070 Shanghai
☎ +86 21 512 869 25
☎ +86 21 512 869 29
www.murrplastik.com.cn
info@murrplastik.com.cn

Switzerland

Murrplastik AG
Ratihard 40
8253 Willisdorf
☎ +41 52 646 06 46
☎ +41 52 646 06 40
www.murrplastik.ch
info@murrplastik.ch

France

Murrtechnic S.à.r.l
Zone industrielle Sud, 6 rue Manurhin
B.P. 62, 68120 Richwiller
☎ +33 389 570 010
☎ +33 389 530 966
www.murrtechnic.eu
murrtechnic@murrtechnic.fr

Spain

Murrplastik S.L.
Paseo Ubarburu, 76
Pabellón 34, polígono 27
20014 San Sebastián
☎ +34 943 444 837
☎ +34 943 472 895
www.murrplastik.es
info@murrplastik.es



0601TI

MP8902864100