

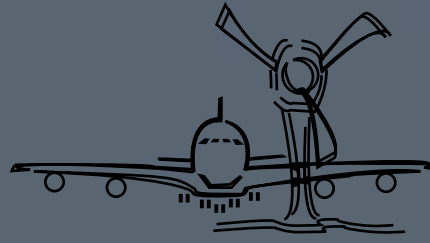
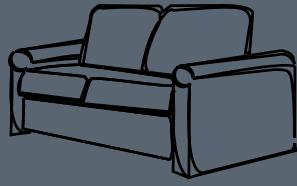
# bullmer

cutting room technology



## GROUNDBREAKING LAYING TECHNOLOGY- COMPACT 600 D/E

Innovation  Made  
 in  
 Germany



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Whether it is clothing, wind turbines, car seats, sofas or fashion – the Mehrstetten based market leader bullmer GmbH ensures the right design.

The company based in Mehrstetten in South Germany develops and produces automated machines for material handling, material flow and automatic cutting. Universally acclaimed high-quality, precision cutting systems with sorting and distribution technology for various widths and all desired lengths with the quality mark known all over the world as “Made in Germany.”

What began 80 years ago as a metal workshop in the Swabian Alps, has today grown into an international market leader. With more than 130 employees, bullmer manufactures products for Germany, Europe, Asia and North and Central America. The company’s customers include the who’s who of the international automotive, furniture, Textile, graphics and wind power industries. All of them appreciate the economic efficiency and productivity that they achieve using bullmer’s machines.

Based on the machine design customized for individual customers, bullmer is in a position to develop and manufacture any machine for any desired height and length of material with the best quality, extreme processing precision, remarkably professional and well developed service and short response times. Bullmer offers all the necessary solutions and services under one roof: from machines for cutting applications in single layer and multilayer to material handling and right up to storage systems. The widest range of materials including films, fabrics, leather, carbon fibres and cardboard achieve their perfect finish that is, their **best shape** using bullmer machines.

Comprehensive, professional, universally available service complements the range of services of this Swabian company. A team of 130 employees – employees who value their work and of course have the technical knowledge and are glad to be a point of contact for their customers and for whom Quality, Service and Competence are a matter of daily life - is what makes bullmer a provider of cutting solutions, who is in great demand all over the world.

**bullmer**  
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# GROUNDBREAKING LAYING TECHNOLOGY-

## COMPACT 600 D/E

### Technology:

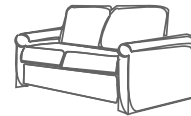
In the field of material handling, the company bullmer supports two ways. First spreading machines that can handle a wide range of materials for the other machines that respond to particular requirements:

- Sheets of heavy weight
- Sheets of great rigidity
- Normal and delicate textiles
- Especially fine, delicate fabrics
- Especially stretchy fabrics
- Technical Textiles

The fabric rolls on the one hand, will be guided via a bar which enables a particularly gentle handling, the bar can be powered or unpowered. The other type of material processing is carried out in a belt - driven cradle. This technology offers the advantage of using the roll without additional guidance.



Apparel Industry



Upholstery Industry

### Version of Compact D 600:

The compact D 600 has a cradle available without an extension and without air nozzles (Image 1)



(Image 1)

### Version of Compact E 600:

The Compact E 600 has a cradle available with extensions for automatic loading or unloading. The lateral guides for the fabric rolls can easily be adjusted from the operator side.

Automatic detaching of the beginning of the fabric by air nozzles when threading (Image 2)



(Image 2)

Precision machine for tension-free laying. Wide range of applications through numerous customizable options for specific applications

### Version of 600 D/E:

# GROUNDBREAKING LAYING TECHNOLOGY-

## COMPACT 600 D/E

All versions can be extended with various options in terms of the tasks. Equipment can be upgraded or extended even after installation.

### Generic features:

- Distortion-free, light sectional steel chassis
- Four-wheel drive with „Vulkollan“ wheels
- Stable lateral guidance with 4 lateral guide rollers at the angle bracket on the operator side
- 3-phase traction drive with frequency control
- Machine reversing speed can be adjusted separately
- Automatic pre-centring of material beginning during threading
- Electronic edge control, manually adjustable
- Fault-cutting-off-mode with automatic synchronous material rewinding
- Automatic return drive of spreader to the loading position at fabric end
- Motor-driven lift for the cutting and zigzag unit, with automatic height adjustment at ply height
- Control handle for continuous manual adjustment of the spreading speed
- Power and air supply with cable drag chain

- Encoder for measuring and controlling for drive and spreading length by means of a tooth belt at the table
- Integrated, all-in-one controller opposite to operator side in externally blower housing
- 4-fold emergency stop on both sides and at the front and back of the machine
- CANBUCON 1 controller on free programmable basis, control panel with display, control in CAN-BUS technology



Halfmoon device and platform for folded fabrics (Image 3)

### Additional integrated features:

- Cradle with permanent drive and synchronisation to the travel speed by means of electric shaft with adjustable advance and lag
- Halfmoon device and platform for folded fabrics (Image 3)
- Pneumatic tilting of the cradle into loading and unloading position (two speeds can be set, Image 4)
- The lateral guides for the fabric roll can be adjusted independently of each other
- Automatic fabric rewinding before unloading the cradle
- Automatic fabric threading and unthreading



cradle with extensions for loading and unloading (Image 4)

### Laying variants:



(Some laying processes can provide optional features)

Your new Standard:

# GROUNDBREAKING LAYING TECHNOLOGY-

## COMPACT 600 D/E

### Individual options:

- One-way cutting device with continuous adjustable speed
- Zig-Zag device with tension compensation
- Attachment to layout folded tubular knit
- Fixed ply catcher
- Movable ply catcher
- Automatic level adjustment for step plies and hilltype plies
- Sensor for fault brand detection (metal plates) with display indication and automatic machine stop
- Blower ahead of ply-cutting in order to remove creases
- Roller to smoothen fabric before cutting in order to remove creases
- Fault detection handling system with touch screen (FDH system)
- Operator platform with emergency stop at the back of the machine)
- Seat for operator platform
- Power supply with double contact carriage instead of cable drag chain (not possible when air supply is required)
- Slot for USB stick for importing external production data directly (in connection with CANBUCON 3)
- Link to spreading job optimisation programmes (e.g. cost. assyst) via connection to an FTP server by online cable or wireless (W-LAN) (in connection with CANBUCON 3)
- Data transfer to fabric roll magazines (in connection with CANBUCON 3)
- Printer for recording material consumption (in connection with CANBUCON 3)
- Barcode scanner for importing article or material roll ID number (in connection with CANBUCON 3)
- CANBUCON 3: Compact controller with touch screen on a free programmable basis with integrated programming capability for all functions, parameters, job data, time sequences, safety functions and drive diagrams in CAN-BUS technology



CANBUCON 3 Controller

### Working width:

**Working width**  
1600, 1800, 2200 mm (other versions on request)

**max. roll diameter**  
500 mm

**max. roll weight**  
100 kg

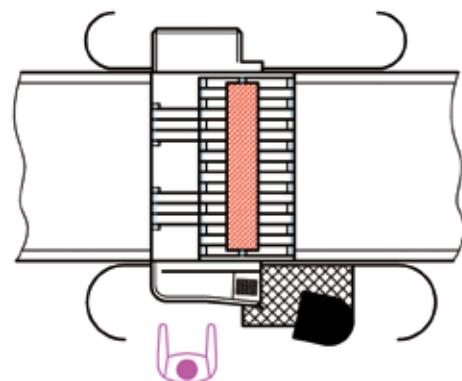
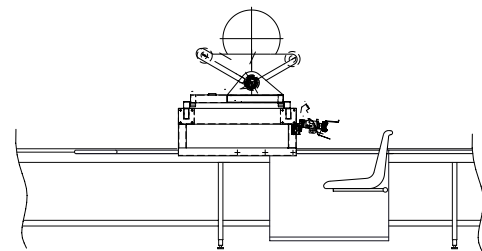
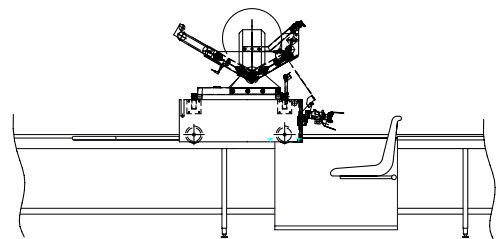
**max. spreading speed**  
120 m/min

**max. layer height**  
180 mm

### Specification:

**Compressed air (optional)**  
minimum 6 bar

**electricity**  
230/400 Volt, 50 Hz, 3 kW



### Technical data:

# GROUNDBREAKING LAYING TECHNOLOGY-

## COMPACT 600 D/E

The company bullmer combines the laying system compact 600 by using the steaming technology of Veit!

The steaming of knitted fabric during the laying operation is possible by means of the steaming system of Veit and bullmer immediately before cutting. By making use of this technology, the user can do without an elaborate additional operation but still obtain the necessary dimensional accuracy of the final product. Without this combined laying and steaming process an additional operation is required and an additional large machine with a price range of up to about 150,000 euros will be necessary, requiring additional space and additional costs for extra workforce.

By steaming the fabrics during the laying process we allow the relaxation of the fabric without any other intermediate treatment. The necessary components of this solution include a specific equipped VEIT steam generator, a steaming lance and a high-quality bullmer spreading machine.

The bullmer "600 series" meets these requirements, thus ensuring an economical spreading solution with sensitive knitwear and the investment costs are a fraction in comparison to other commercially available steam systems. The company VEIT on its side has large experience in the field of steaming and pressing of textiles. The productivity of manual spreading can be tripled by use of automatic laying machines. Without the support of the steaming lance in the laying process, the fabrics would be on standby mode for at least 20 hours (relaxation).

**The relaxation time can be reduced, from 2 days to 2 hours by using the treatment of steam!**

**1. Material savings:** the material relaxes after steaming - and according to our experiences it will „pre-shrink“ but the width of the fabric will remain. Since the material hardly shrinks after decompression and processing, we will be able to work with much smaller „safety distances“. By adding smaller buffers, the waste will be reduced accordingly. The ratio of cut pieces and waste will raise this way. The average utilization of the material increases by approx.5%!

**2. Reduction of the needle cuts:** After steaming, the fabrics react in a much more flexible way. The needle finds its way more easily through the stitch and there are far fewer needle cuts. Usually, in order to support this further on, you would have to moisturize the air in the sewing room. Fabrics thus keeping the moisture absorbed and would not evaporate to the environment and would hence be less flexible.

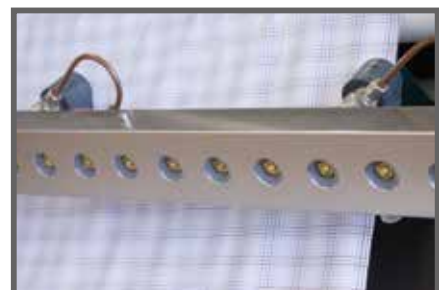
**3. Reduction of static electricity:** The best remedy for static charging is moisture! We experienced in this process that the fabrics are much less charged after steaming and therefore are easier to process!



Spreading machine 600 D / E with steam lance



Steam lance front side

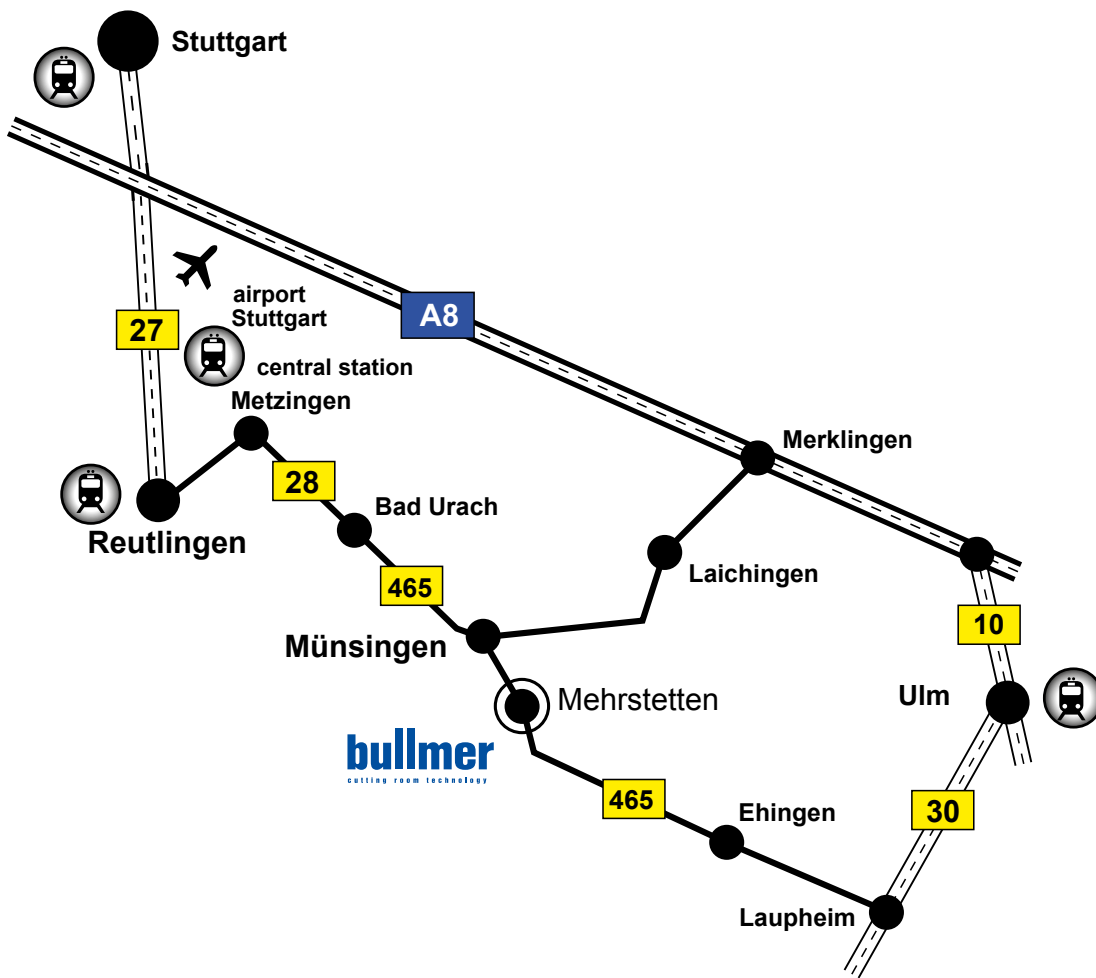


Steam lance back side

Spreading by means of combined steam lance:

# GROUNDBREAKING LAYING TECHNOLOGY- COMPACT 600 D/E

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Owing to the dynamic nature and software development technical specifications are non-binding. They are subject to changes for the sake of technical progress. Performance data depend on the materials that are processed and apply on the condition that they are operated as specified and that the prescribed consumables, wear parts and original spare parts are used.

Procut CV / 1.D / 0210 PR