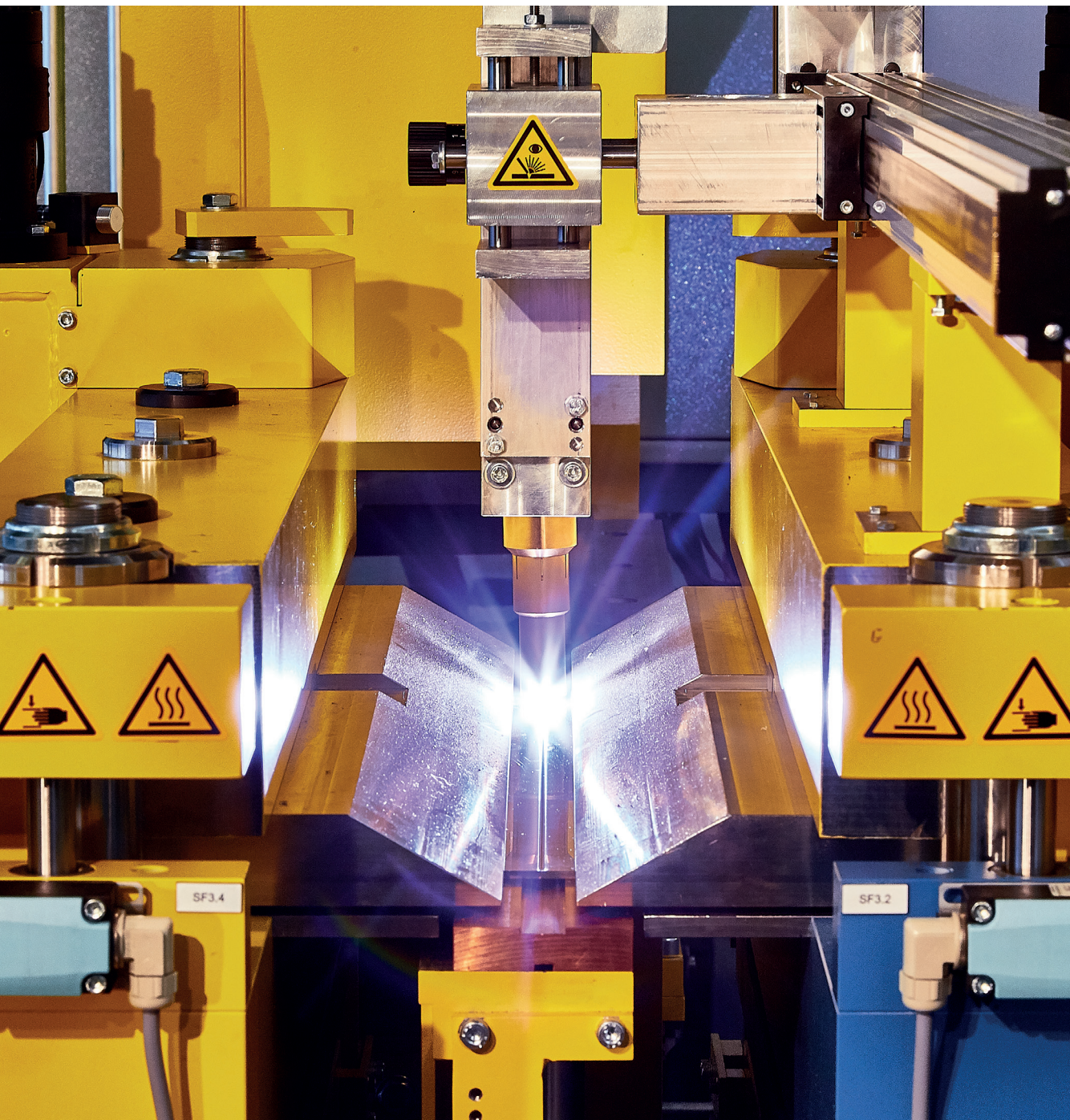




LBS COIL WELDING MACHINES

Individual solutions for perfect coil joints

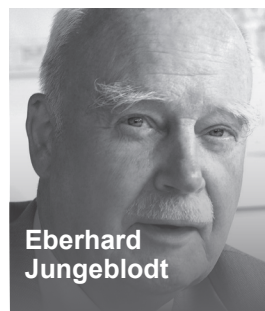




Clemens
Jungeblodt sen.



Clemens
Jungeblodt



Eberhard
Jungeblodt

IDEAL – The Pioneering Spirit of a Medium-Sized Company

In december 1923 the family business was founded - at that time under the name Elektro Apparate Bau GmbH (EAB). After a short time the company name changed and already the first electrical apparatuses were called IDEAL.

The name IDEAL is composed of „Jungeblodt Deutschland Elektro Apparatebau Lippstadt“, but one day the J became the I. In 1970, EAB was officially renamed IDEAL-Werk C.+E. Jungeblodt GmbH+Co. KG. Since then, the name IDEAL has stood for constant innovation and quality in mechanical and plant engineering. The company's core competence is resistance welding. In 2020, Dorothee Jungeblodt and Max Clemens Jungeblodt step down as managing directors and lead the company as third-generation shareholders.

In the same year, Dipl.-Ing. Katrin Goldhahn takes over the management and leads the company with a wealth of knowledge and experience.

The expansion of the European business and the advancement of digitalization - two major and important topics of the strategy, which drives the company under the leadership of Mrs. Goldhahn. Of course, the corporate strategy also includes the topic of sustainability. This means, for example, saving raw materials and using renewable energies. The installation of a photovoltaic system will be successfully completed in 2022.



The shareholders:
Dorothee Jungeblodt and
Dipl.-Ing. Max Clemens Jungeblodt



The management:
Dipl.-Ing. Katrin Goldhahn



With welding systems to the Top 100 innovator: With this announcement, the start of the IDEAL anniversary year has been more than successful. After successful participation in the Top 100 Innovation Competition, IDEAL-Werk receives the Top 100 seal. The third-generation family-owned company convinces with its innovative qualities and proves to be one of the hundred most innovative medium-sized companies from Germany.

The competition is based on a scientific selection process. On behalf of compmedia, the organizer of the comparison, innovation expert Prof. Dr. Nikolaus Franke from the Vienna University of Economics and Business Administration and his team examined IDEAL on the basis of more than 100 criteria from five categories:

- Innovation-promoting top management
- Innovation climate
- Innovative processes and organization
- External orientation/open innovation
- Innovation success

The Pioneering Spirit of a Medium-Sized Company IDEAL's product portfolio ranges from welding machines for the joining of wires, wire strands and band saws for wood and metal to wire processing, the manufacture of sheet metal products, and the joining of metal strips.

Our machines range from smaller series production machines up to modular standard configurations and all the way up to custom-designed and customer-oriented special solutions. Our commitment to consistent further development of the product range, as well as competent, problem-oriented consulting have helped us to attain a leading position in the market and made us a reliable partner for the industry. Our knowledgeable representatives in more than 45 countries ensure that we are always close to our customers.

Since 1995 our own sales and service offices in the USA have been directly offering machines and spare parts to our customers in the USA and Canada. In order to meet the requirements of our demanding and international industrial clientele we build upon fair teamwork with customers, suppliers and our employees. Our 180 employees contribute towards the success of IDEAL by way of their commitment, knowledge and close ties to our company. Thanks to our own apprenticeship program and continuous training, we are able to sustain in-depth knowledge and experience.

Your reliable service

We help you quickly and easily with the selection and ordering of spare parts. Provision of spare and wear parts lists for stocking.



Inhouse repairs

When we receive your machine, it will be checked by our IDEAL service technicians and a cost estimate will be prepared:

After approval of the cost estimate, the repair will be carried out.



Maintenance and inspections

For this we can offer you the following:

Maintenance contracts (Our service technicians maintain your machines at your plant)

Installation services (Should a repair still be necessary at your site, we provide a fast and reliable repair service)



Digital remote maintenance

IDEAL can intervene in a supportive manner with remote access in the event of a fault. For this purpose, we recommend digital remote maintenance to our customers.

The use of a router with PLC interface and a CLOUD service is essential so that the IDEAL service technician can connect to the machine.



Assisted Reality audiovisual service from IDEAL

Safe, fast, inexpensive and very close – IDEAL's audio visual service makes machine maintenance child's play and repair a simple exercise.

Downtime is minimised with the Assisted Reality connection. Our customers are supported via mobile phone, tablet or virtual data glasses by our service engineers in the best possible way.

With live audiovisual transmission, our specialists receive detailed information allowing them to swiftly identify problems and to quickly correct them with the aid of instructions and projection.



Upgrades - Retrofit

If your IDEAL machine is getting on in years - we can offer you „upgrades“ for it:

- Control conversion (S7 or also Schneider > Siemens)
- Router with interface (Siemens requirement)
- New stop system (BAS 300 series)
- Thyristor shutdown (series)
- NC underwire feeding (retrofitable to all underwire machines of the type GAM 530)
- Welding control conversion

Our machine talks IDEAL 4.0

Via the internationally known communication medium OPC-UA, we are able to provide all production-relevant and all energy-relevant data of the production infrastructure.

As an option, a „monitoring function“ is possible via WLAN.



LBS coil welding machines

For smaller coil dimensions, we offer arc welding machines, semi-automatic or fully automatic versions, with integrated coil end shears. Reliable **MIG/MAG, TIG or plasma welds** are created that ensure a continuous coil change without stops.

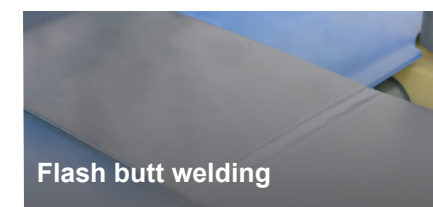
Technische Anwendungen

- etching lines
- coating lines
- inspection lines
- kiln lines
- press and punch lines
- profiling lines
- pipe fabrication lines
- galvanising lines
- pitch lines

For individual requirements, the type LBS coil welding machines offer perfect solutions for the reliable welding of coils. Depending on the model and requirements, different degrees of automation with respect to the handling of the coil end can be realised. From manual to fully automated handling – everything is possible. With the welding method used, the coils are joined efficiently and cost-effectively. Optionally, the machines can be upgraded with various accessories.

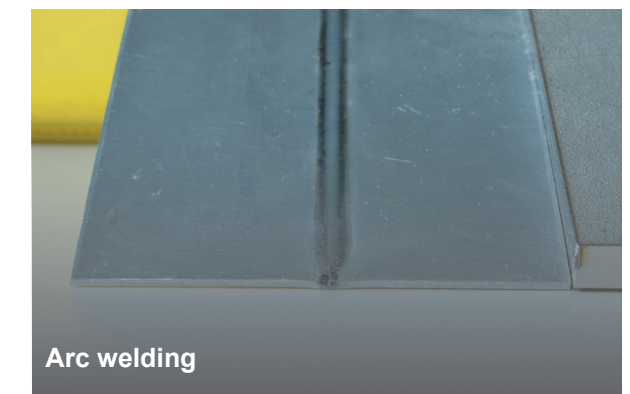


ASO 220 B-P



Flash butt welding

With all machine types, the compact and rugged machine design with intuitive operation is made for industrial use in production. When the LBS machine type was designed, the focus was on the employees operating them, so special attention was paid to easy and ergonomic operation. Used the world over, the IDEAL coil welding machines day after day deliver proof of their quality, durability and reliability – and that has been so for many decades.



Arc welding



Arc Welding
for High Performance
Strip joints

LBS 041/043/044

The type 041/043/044 LBS coil welding machines are extremely cost-effective models for the reliable welding of coils with manual handling of the coil ends.

The LBS 041/043/044 process coils with a width of max. 350 mm and a thickness of up to 3 mm. Optionally, with these models, you will receive an undercarriage for moving out of the production line as well as a manual smoothening roller for levelling the weld zone.

Persuasive advantages of the 041/043/044 LBS series

- Affordable coil welding machine
- Precision coil shears for burr-free cuts
- Pneumatic clamping devices
- Alignment of the coil ends against the rear stops
- Use in punching and profiling lines



Optional modules for the LBS 041/043/044

- Undercarriage for moving out of the production line
- Manual smoothening roller for levelling the weld zone

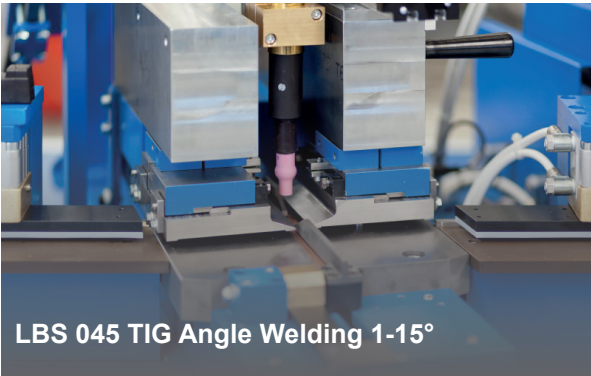


Machine type	LBS 041	LBS 043	LBS 044
Coil width mm	40 – 240 mm	15 – 320 mm	40 – 350 mm
Coil thickness mm	0,5 – 2 mm	0,3 – 3 mm	0,5 – 2,5 mm
Coil strength N/mm²	500	500	500

LBS 045

For the production of narrow-strip joints with the same cross-section without boundary craters – suitable for both steel and non-ferrous coils.

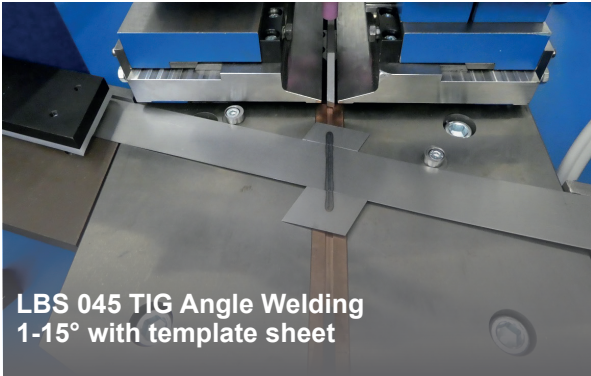
IDEAL coil welding machines are in widespread use in industry. Leading manufacturers of coil joints rely on IDEAL coil welding machines of the LBS 041 to LBS 055 type series in order to join coils flexibly and cost-effectively. From the affordable coil welding machine with manual handling of the coil ends that require welding, through the fully automatic machines in light and heavy construction with short welding cycle times up to the heavy model line for the welding of coils in pipe works and smelting works operation – IDEAL is your partner for secure and efficient coil joints.



Machine type	LBS 045/040/1,0	LBS 045/65/1,2	LBS 045/180/3,0
Coil width mm	8 – 40 mm	8 – 65 mm	40 – 180 mm
Coil thickness mm	0,2 – 1,0 mm	0,2 – 1,2 mm	0,3 – 3,0 mm
Coil strength N/mm²	650	650	750

Persuasive advantages of the LBS 045 series:

- Creation of narrow strip joints with the same cross section without boundary craters
- Suitable for both steel as well as non-ferrous coils
- Pneumatic high-precision double-cutting shears with twosided brackets for burr-free cuts
- Pneumatic clamping device during the coil handling in the rear rest position allows for unobstructed insertion of the coil ends and positioning fingers on an open machine table
- Alignment of the coil ends to a rear and centre stop with pre-tensioning of the coil ends over the positioning cylinder
- Use of positioning fingers to ignite the arc on the positioning finger so as to avoid boundary craters
- Dynamic drive of welding torch driven via servo motor with PLC controller for programming of torch speed, welding path and welding current
- Smoothening roller with manual or automatic control



LBS 050: Coil joining at its best!

Our arc coil welding machines of the LBS 050 series join steel coils through MIG/MAG, TIG or plasma arc-welding, standing in front of each other in an I butt joint.

The LBS 050 series achieves highly secure processes on account of the automated run with one-off fastening. Unlike with other machines, the material is fixated at the beginning of the process and cut, positioned and welded from the position. This ensures a perfect I-joint and a consistently high quality at each weld.

With the LBS 050, you can weld coils of a width of up to 1,250 mm!

Coil joining at its best!

Particularly suitable for coated Si-electrical sheets from >t-0.2mm in conjunction with our Micro Plasma welding technology.

Machine type	LBS 050/320/2,5	LBS 050/400/2,5	LBS 050/500/2,5	LBS 050/650/2,5	LBS 050/1250/2,5
Coil width mm	70 – 320 mm	70 – 400 mm	80 – 500 mm	100 – 650 mm	400 – 1250 mm
Coil thickness mm	0,2 – 1,2 mm	0,3 – 0,7 mm 0,2 – 1,2 mm	0,3 – 0,7 mm 0,5 – 3,0 mm	0,3 – 0,7 mm 0,5 – 2,5 mm	0,5 – 2,5 mm
Coil strength N/mm²	500	500	500	500	500



Persuasive advantages of the LBS 050

- Highest possible reproducibility by the automated run
- With pneumatic clamping device for joining coils of a thickness of up to 2.5 mm using TIG or plasma welding
- With hydraulic clamping device for joining coils of a thickness of up to 5 mm thick using TIG or plasma welding
- Hydraulic double-cutting shears in heavy design, rest position outside the belt run
- Clamping the coil ends for the cutting and welding of the coil ends in just one clamping
- Coil centring either manually or automatically
- Cross slide for the alignment of the coil ends in clamped condition
- Automatic welding torch guidance

Optional modules for the LBS 050*

- Punch press for the seam detection
- Driving roller for automatic positioning of the coil end in front of the shears
- Light barrier

Machine type	LBS 050/320/5,0	LBS 050/500/5,0	LBS 0550/800/5,0	LBS 050/1000/5,0	LBS 050/800/7,0
Coil width mm	40 – 320 mm	60 – 320 mm	80 – 800 mm	100 – 1000 mm	80 – 800 mm
Coil thickness mm	0,65 – 5,0 mm	0,8 – 5,0 mm	0,8 – 5,0 mm	1,0 – 5,0 mm	1,5 – 7,0 mm
Coil strength N/mm²	500	500	500	500	500

*Also for coated Si-electrical sheets from >t-0.2mm in conjunction with our plasma welding technology.



LBS 055 – for pipe and smelting operations

The special solution for pipe and smelting operations – for coil widths of up to 1,000 mm and coil thicknesses of up to 10 mm:

Our heavy LBS 055 series with all the advantages of the basic type LBS 050. For the distortion-free welding of high coil strengths in combination with extensive automation in MIG/MAG, TIG or plasma process.

Optional modules for the LBS 055

- Milling attachment for the removal of excess material from the weld seam
- Chip extraction
- Light curtain for the protection of the operator
- Driving roller for automatic positioning of the coil end in front of the shears
- Punch press for the seam detection



MAG-Schweißung auf Spanntisch



Fräsvorrichtung zur Glättung der Schweißnaht

Machine type	LBS 055/320/7,0	LBS 055/500/8,0	LBS 055/750/10,0	LBS 055/1000/7,0
Coil width mm	40 – 320 mm	8 – 65 mm	40 – 180 mm	100 – 1000 mm
Coil thickness mm	1,5 – 7,0mm	2,0 – 8,0 mm	2,0 – 10,0 mm	2,0 – 7,0 mm
Coil strength N/mm²	500 (DC01)	500 (DC01)	500 (DC01)	500 (DC01)

Persuasive advantages of the LBS 055 series

- Light barrier for the coil end stop
- Hydraulic double-cutting shears in heavy design, rest position outside the belt run
- Automatic removal of the cut coil ends from the machine
- Clamping the coil ends for the cutting and welding of the coil ends in just one clamping
- Automatic 4-roller coil centring on the feed in and feed out side
- Water-cooled welding bar with stop for variable air gap width in MIG/MAG welding for material thicknesses of up to 10 mm
- Cross slide for the alignment of the coil ends in clamped condition
- Automatic welding torch guidance
- Automatic milling off of the weld on the top and extraction of chips

LBS 055 - processed up to 10 mm strip thickness



Coil strip weldingmachines

Our laser coil welding machines are used the world over in inspection lines, galvanizing plants, coil coating systems, etching lines, pitch lines and continuous annealing lines. Leading steel manufacturers rely on these reliable machines to join their strips and coils and manufacture their products in a flexible and highly cost-effective way.

The coil welding machines can be extended to include further modules, e.g. smoothening device and weld seam monitoring. Laser cross seam coil welding machines by IDEAL are widely used in the steel industry because they meet the most stringent requirements for the weld seam quality.

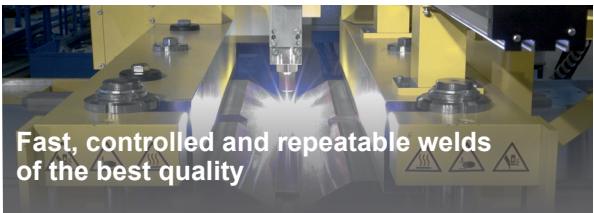
Optional modules for the LAS series

- Coil centring
- mechanical hole punching
- Side punching, by means of laser or mechanical
- Smoothing device
- Annealing device
- Drivers
- Weld monitoring
- MIG/MAG/WIG/Plasma welding
- IDEAL 4.0

Machine type	LBS 060	LBS 060	LBS 060
Coil width mm	1300 mm	1300 mm	1800 mm
Coil thickness mm	1,0 – 3,0 mm	1,0 – 5,0 mm	1,0 – 5,0 mm
Coil strength N/mm²	500 (DC01)	250 (Alu)	250 (Alu)

Persuasive advantages of the LAS series

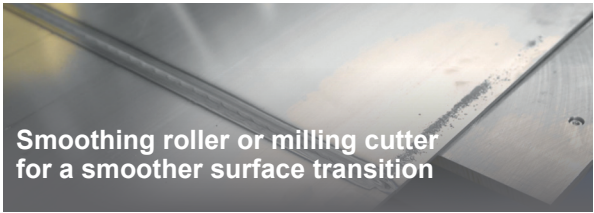
- Coils with different widths and thicknesses
- Coil joints from the same or different materials
- Processing materials with high strengths
- Joining coils with high silicon content
- Welding of coated materials



Fast, controlled and repeatable welds of the best quality



Automatic ejection



Smoothing roller or milling cutter for a smoother surface transition



LBS 060



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