>> ALWAYS A STEP AHEAD – METAL PROCESSING BY LISSMAC



METAL PROCESSING

### MILESTONES

2002: First drafts of a machine for double-sided processing in a single pass

2003: The innovative processing method is patented and the first SBM-B is introduced to the market.

2004: Edge rounding capabilities are added through the development of the SBM-S.

2006: The SBM-XL G2S2 for doublesided deburring and edge rounding of thick plates is introduced. LISSMAC's unique machine technology is awarded an Innovation Prize.

2009: Under new design, and with the expansion of the tooling systems to include a slag removal process, the "new generation" emerges. 2012: Acquisition of Buetfering's metal processing division leads to the integration of the Steelmaster Premium brand into the LISSMAC Portfolio. All applications (oxide removal, deburring, edge rounding, slag removal, and surface finishing) are now offered from a single source.

2015: The innovative small parts machine SBM-XS G1E1 allows for double-sided processing of small parts in a single pass.

2016: With the introduction of the ECOline, LISSMAC for the first time offers entry-level machines - made in Germany.

Thanks to its continuous innovative capabilities, LISSMAC is today amongst the leading suppliers of metal processing solutions.

#### >> TECHNOLOGICAL LEADER

LISSMAC has driven innovation in the metal processing industry with the development of a proprietary line of machines for oxide removal, grinding, and deburring. The highly effective method of processing inside and outside edges on both sides in a single pass is unique to the market.

Today, LISSMAC is known for its outstanding innovation, technological competence, and first-rate systemsand service solutions from a single source.



OUR MISSION – WE WANT YOU TO BE SUCCESSFUL: LISSMAC STANDS FOR INNOVATION, EXPERIENCE, AND QUALITY. AS A MARKET LEADER AND INVENTOR OF DOUBLE-SIDED SHEET METAL PROCESSING IN A SINGLE PASS, WE STRIVE TO ALWAYS BE A STEP AHEAD. THIS AMBITION LEADS US TO EXPLORE NEW POSSIBILITIES ON A DAILY BASIS.

Klaus Kiefer, Managing Director, LISSAMC Maschinenbau GmbH



#### >> HIGH VERTICAL MANUFACTURIN INTEGRATION

Not only do we possess a full in-house engineering- and construction department, we also own a cutting-edge production facility, with an innovative machine park. Our highly educated and trained employees ensure premium quality - "Made in Germany".

#### >> RESEARCH AND DEVELOPMENT

We realize that only a vigorous research and development program can support our continuous innovative lead. In collaboration with our customers and professional end users, we drive market oriented development, supported by our experienced partners, through field tests, and by our proverbial Swabian inventive spirit.

#### >> HIGHLY TRAINED EMPLOYEES

We provide our employees with numerous opportunities for development and advancement, in a fascinating environment. Our specially trained personnel is offered a variety of continuous education programs, as we know that any company can only be as good as its people.



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OUR ASPIRATION – WE STRIVE FOR CONTINUOUS IMPROVEMENT: OUR INNOVATIVE RESEARCH AND DEVELOPMENT DEPARTMENT CHAMPIONS OUR TECHNOLOGICAL LEAD. ALMOST ALL OF OUR MACHINE COMPONENTS ARE MANUFACTURED IN-HOUSE AT OUR LISSMAC HEADQUARTERS IN BAD WURZACH, BY OUR EMPLOYEES, AND WITH UTMOST PRECISION. LISSMAC USA Waterford, New York Sales and Service

#### LISSMAC GERMANY Bad Wurzach und Beckum Production, Sales, and Service

LISSMAC CHINA Tianjin Sales and Service



To expertly address the needs of our customers, we offer a dedicated Service Center. Our knowledgeable service staff supports you competently in all areas of product and process engineering.

Our international subsidiaries provide sales and service to our international customers, and ensure global LISSMAC availability.

#### >> SPARE PARTS

To date, thousands of LISSMAC machines have been placed in the market. We keep an extensive stock of spare parts to ensure quick and easy handling. Additionally, we offer preventative maintenance through our worldwide service network.

### FOUR LOCATIONS

300 employees worldwide care for our customers at four locations in Germany, the USA, and China. Our international customers appreciate our top quality products - "Made in Germany".

OUR PROMISE – WE ARE THERE FOR YOU -WORLDWIDE: WE WILL ALWAYS GIVE OUR BEST FOR OUR CUSTOMERS, AND ANALYZE YOUR NEEDS WITH ATTENTION TO DETAIL AND UTMOST APPRECIATION OF YOUR BUSINESS. WE SUPPORT OUR CUSTOMERS THROUGHOUT THE ENTIRE LIFE CYCLE OF OUR PRODUCTS AND OFFER ECONOMICALLY SOUND, COMPLETE SOLUTIONS FOR HIGHEST CUSTOMER SATISFACTION.

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# >> INDIVIDUAL SOLUTIONS

Our customized solutions facilitate work processes worldwide, and simplify our customer's applications on a daily basis.

LISSMAC strives to find an optimal solution, on an individual basis, for every customer application. We analyze your needs with attention to detail and utmost appreciation of your business. Through the ideas and know-how of our development department, we generate solutions for the highest expectations.

Our flexible range of applications spans from stand-alone machines, all the way to fully integrated automated production lines.

We automate our customers' processes with their highest productivity and profitability in mind. We combine our expertise from all of LISSMAC's business divisions to create integrated comprehensive solutions from a single source.



07

OUR MOTIVATION – WE ARE READY TO RISE TO YOUR CHALLENGES: IN OUR CUSTOM PLANT ENGINEERING DIVISION, THROUGH OUR TECHNICIANS AND ENGINEERS, WE DEVELOP INDIVIDUAL SOLUTIONS, CUSTOM TAILORED TO YOUR SPECIFIC REQUIREMENTS.



#### >> TESTING AND EVALUATION

Experience our unique innovation: send us your parts for sample processing, or feel free to drop by in person.

In collaboration with our experts we have successfully solved thousands of challenging grinding tasks.

Assess our results and compare them to your customers' or production department's requirements.

### ANALYZING

We continuously perform various analyses regarding our processing results. Examples are salt spray tests or a probe into the effects of edge rounding with regards to paint adhesion.

OUR OFFER – WE LOOK FORWARD TO YOUR VISIT: OUR MODERN PRACTICAL APPLICATIONS CENTER OFFERS INFORMATION ABOUT OUR EXTENSIVE RANGE OF PRODUCTS AND SERVICES. WATCH LIVE DEMONSTRATIONS OF ALL OF OUR TECHNOLOGIES AND TOOLS, AND ENJOY PERSONALIZED CONSULTATION BY OUR EXPERTS. 09



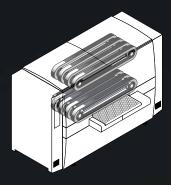


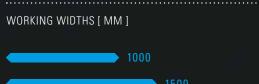


# SBM-SERIES DOUBLE-SIDED DRY

The SBM series sets the standard for innovative sheet metal processing. In this dry process, both sides of the parts are processed simulaniously (all outside and inside edges), in a single pass. Double-sided processing offers highest productivity and superior results.

#### MACHINE FRAME / OPERATING METHOD









#### HIGHLIGHTS

- Wide range of applications: oxide removal, deburring, deslagging, edge rounding
- Dry processing for all metals, non-ferrous metals, and synthetic materials
- Double-sided processing in a single pass
- Processing time savings of up to 80% compared to manual processing
- Even wear of tools across the entire working width due to tool belts running perpendicular to feed direction
- Wide selection of available aggregates and aggregate pairings
- Fast and easy tool changes due to rapidclamping system
- · Low per-part costs
- · Space saving, compact and modular design
- Intuitive operation either manual or via touch screen

#### PROCESSING METHOD









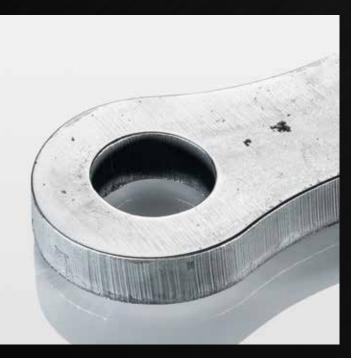


DEBURRING - BEFORE

**DEBURRING - AFTER** 







EDGE ROUNDING - AFTER

# SBM-SERIES APPLICATION EXAMPLES





**OXIDE REMOVAL - BEFORE** 

**OXIDE REMOVAL - AFTER** 







**DESLAGGING - AFTER** 

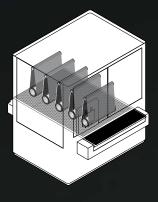




# SMD-SERIES SINGLE-SIDED DRY

The SMD series machines set the standard for superior surface finishing in a dry grinding process. These flexibly configurable dry grinding machines are true "multi-talents" for deburring and surface finishing. They feature a modular design, and their innovative technology uses up to five processing aggregates, which can be flexibly outfitted to suit customers' varying needs.

### MACHINE FRAME / OPERATING METHOD



### WORKING WIDTHS [ MM ]



1 – 160

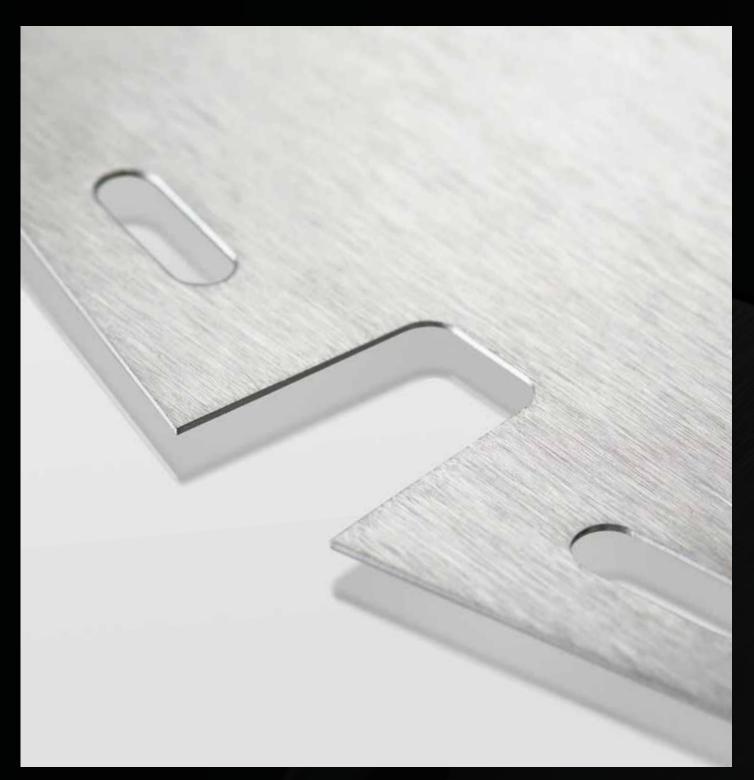


- Wide range of applications: oxide removal, deburring, deslagging, edge rounding, defined surface finishing
- · Customized polishes / decorative finishing, as well as technical polishes available
- Dry, single sided processing for all metals, non-ferrous metals, and synthetic materials
- Fast and easy tool changes within a few minutes
- · Low per-part costs
- Machine can be flexibly configurated available with up to five aggregates
- · Intuitive operation via touch screen

#### PROCESSING METHOD







# SMD-SERIES APPLICATION EXAMPLES





**DEBURRING - BEFORE** 

**DEBURRING - AFTER** 





OXIDE REMOVAL - AFTER

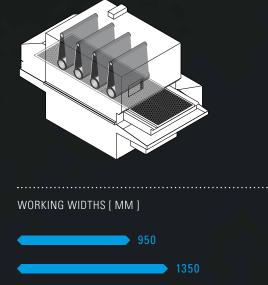
**OXIDE REMOVAL - BEFORE** 



# SMW-SERIES SINGLE-SIDED WET

The SMW series machines set the standard for superior surface finishing in a wet grinding process. These flexibly configurable wet grinding machines offer precise deburring and defined surface finishing for high-quality parts. They feature a modular design, and their innovative technology uses up to four processing aggregates, which can be flexibly outfitted to suit customers' varying needs.

### MACHINE FRAME / OPERATING METHOD



1650

MATERIAL THICKNESS [ MM ]

| 0,5 | - | 120 |
|-----|---|-----|
|     |   |     |

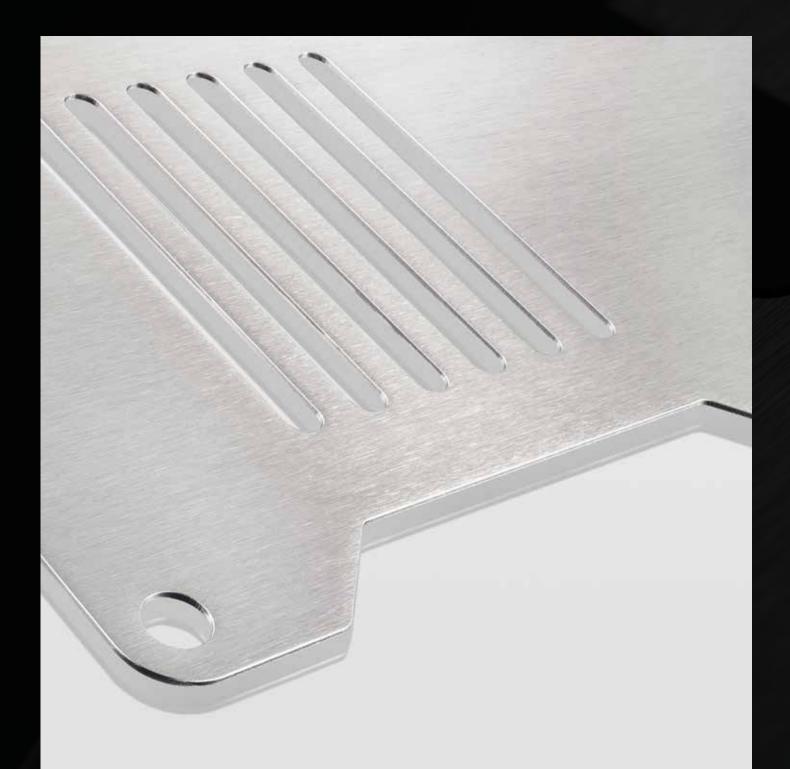
HIGHLIGHTS

- Wide range of applications: deburring, edge rounding, defined surface finishing
- Customized polishes / decorative finishing, as well as technical polishes available
- Wet, single sided processing for all metals, non-ferrous metals, and synthetic materials
- No cross contamination concerns and no retooling necessary with mixed material use
- No heating or thermal stress of the work pieces, which positively effects the bending process
- · Fast and easy tool changes within a few minutes
- · Low per-part costs
- Machine can be flexibly configurated available with up to four aggregates
- Intuitive operation via touch screen

PROCESSING METHOD







# SMW-SERIES APPLICATION EXAMPLES





**DEBURRING - BEFORE** 

**DEBURRING - AFTER** 

LISSMAC Maschinenbau GmbH Lanzstraße 4 D-88410 Bad Wurzach Germany Phone +49(0)7564/307-0 Fax +49(0)7564/307-500 lissmac@lissmac.com www.lissmac.com



Partner of the Engineering Industry Sustainability Initiative