

# MARKER

The magazine for the sheet metal working industry

Winter 2017



Manufacturing expertise as a factor of success 10



Blechexpo 2017:  
AMADA presents  
machine highlights

2



LCG-3015AJ with  
9 kW: A versatile  
bundle of power

6



Working together with  
schools: Strong  
for the future

14

Dear readers,

innovative sheet metal working is essential in the age of Industry 4.0. This is one more reason why AMADA has set itself the aim of developing forward-looking machine and software solutions that efficiently respond to customers' needs. Find out more about them on the following pages and discover all types of fascinating information about AMADA's innovations. For example, with the ALPHA V, AMADA is setting completely new standards for the laser cutting of materials with easily damaged surfaces. This machine now works even faster and with enhanced precision (p. 3). The further developments ENSIS-3015AJ RI and FLW-3000ENSIS M5 are representatives of the latest generation of laser technology. Both systems ensure optimum manufacturing quality and flexibility (p. 4-5). The user report focusing on Metallforum Metallbau GmbH in Ahrenberg, Germany, shows once again that sheet metal working with AMADA products brings a competitive advantage (p. 10-13). And to make sure that the next generation of employees can find out all about top-level sheet metal working, AMADA supports German educational institutes in the training of students and budding master craftsmen (p. 14).

We hope you enjoy discovering the contents of this edition.



IMPRINT

Issued by:

AMADA GmbH  
Amada Allee 1  
42781 Haan, Germany  
Tel. +49 (0)2104 2126-0  
Fax +49 (0)2104 2126-999  
info@amada.de  
www.amada.de

Published by:

mk publishing GmbH  
Döllgaststraße 7-9  
86199 Augsburg, Germany  
Tel. +49 (0)821 34457-0  
Fax +49 (0)821 34457-19  
info@mkpublishing.de  
www.mkpublishing.de

Photo credits: AMADA GmbH, mk publishing/Stefan Durstewitz, Franz Bischof, istockphoto.com/stockstudioX

AMADA at Blechexpo 2017:  
Hall 3, Booth 3307

Blechexpo 2017

# Efficiency of the highest level



The 13th international Blechexpo trade show will take place in Stuttgart from November 7th to 10th. Here, AMADA will be presenting its latest innovations for industrial sheet metal working. The focus will be on enhanced production efficiency and digitalized sheet metal working.

Forward-looking manufacturing solutions that offer outstanding economic efficiency and productivity are what AMADA stands for. At Blechexpo 2017, the specialist for sheet metal working will be presenting six state-of-the-art machines in Hall 3 Booth 3307, where it will provide a comprehensive overview of production solutions for the various sectors of the metal working industry, such as automation, software and tooling. Visitors to the exhibition space of approximately 700 square meters will be able to experience systems for fiber laser cutting and welding as well as for punching and bending in live operation. The trade show highlights will include further developments to the fiber laser cutting machines LCG-AJ and ENSIS-AJ RI with pipe cutting unit, the ALPHA V CO<sub>2</sub> laser cutting machine, the AE-NT punching machine, the FLW-3000ENSIS M5 fiber laser welding cell and the HG ATC press brake with automatic tool changer.

Blechexpo, the international trade show for the sheet metal working world, is held every two years in the Stuttgart state trade fair center and is the only event worldwide to embrace the complementary areas of sheet metal working and joining tech-

nology. The aim is to present the entire process chain involved in cold-forming sheet metal working together with the associated thermal or mechanical cutting, joining and fastening technologies.

More information:  
[www.blechexpo-messe.de/en/](http://www.blechexpo-messe.de/en/) •

## CONTENTS

### NEWS

AMADA at Blechexpo 2017	2
ALPHA V: For perfect laser cutting	3
ENSIS-3015AJ RI and FLW-3000ENSIS M5: The latest generation of laser technology	4
LCG-3015AJ with 9 kW: A versatile bundle of power	6
AE-2610NT: Enhanced punching performance	8

### BEST PRACTICE

Manufacturing expertise as a factor of success	10
------------------------------------------------	----

### IN DETAIL

Strong for the future	14
-----------------------	----

### CULTour JAPAN

Japanese for good manners	15
---------------------------	----

The new ALPHA V

# For perfect laser cutting

**The AMADA ALPHA V combines outstanding cutting quality with even faster, more stable and more efficient cutting operation and enhanced convenience and comfort in use. It sets completely new standards for the laser cutting of materials with easily damaged surfaces.**

Right from its initial launch on the market in 1993, the first-generation ALPHA laser cutting system ushered in a new era in the field of high-precision, secure, economical laser cutting. Since then, AMADA has never stopped further developing this machine type, which ranks among the highest-selling semi-flying optic solutions worldwide. The most recent, redesigned and optimized to ensure sustainability, is the ALPHA V.

## Increased cutting speed

One key benefit of the new AMADA ALPHA V lies in the further optimization to the cutting process. Consequently, the machine now features an AF3500i-C resonator that operates in "HyperFine Mode" to ensure even greater productivity and maximum cutting quality. Overall, the AMADA ALPHA V provides considerably faster cutting speeds compared to the predecessor model and ensures outstanding

cutting results, in particular when machining stainless steel and aluminum components. In particular, the AMADA ALPHA V can also machine highly polished or brushed, low-scratch surfaces to absolute perfection and with no back spatters. And with the ALPHA V, it is absolutely impossible to weld the finished part to the material support as used to happen in the past. This is due to the variable cutting gap adjustment which makes it possible to adapt the cutting gap individually to meet the needs of any given task.

## Optimized performance

The enhanced machining performance is also supported by a range of other features in the AMADA ALPHA V. These include a generously-sized end-to-end brush table and user-selectable roller support. This ensures that all the workpieces are positioned exactly where required by the process. Additional rollers at the table edges protect the brushes during loading. In addition, the opening angle of the parts flap has been enlarged to permit process-compliant parts exclusion and direct access to the parts.

## Value added in practice

In the AMADA ALPHA V, the maintenance intervals of all the main components involved in beam guidance have been considerably

lengthened, leading to valuable cost reductions. What is more, energy consumption has been greatly reduced in the AMADA ALPHA V whose intelligent energy management system can cut requirements by up to twenty percent compared to the previous model. The system is now controlled using the AMNC-3i control unit which possesses variable height adjustment, allowing it to be optimally adapted to each individual user. Together, all these benefits mean that the new AMADA ALPHA V is the perfect solution for high-performance laser cutting – reliable, economical and in top quality. ●

The new ALPHA V combines maximum cutting quality with outstanding productivity, even when working with easily damaged materials.



ENSIS-3015AJ RI and FLW-3000ENSIS M5

# The latest generation of laser technology

**The new ENSIS-3015AJ RI laser cutting system and the new FLW-3000ENSIS M5 welding cell are the latest further developments based on the proven ENSIS laser beam source. The two systems are characterized by above-average efficiency which, coupled with their perfect manufacturing quality and outstanding versatility, gives all users a crucial competitive advantage.**

AMADA's laser technology has long been one of the company's core strengths. AMADA presented its first laser cutting system as early as 1980 and ever since then the company has continuously enhanced its laser machine concepts, most recently on the basis of the proven fiber laser, and extended its range of solutions to cater for practically every format, material and batch size. The most recent models are the ENSIS-3015AJ RI laser cutting system and the FLW-3000ENSIS M5 welding cell.

## ENSIS-based pipe and profile machining

To a large extent a logical further development of the AMADA FO-3015MII RI CO<sub>2</sub> laser system, the new ENSIS-3015AJ RI with its innovative rotary index (RI) now possesses its own profile and pipe machining unit. This means that it is now possible to cut not only sheet metal but also pipes and other profiles simply and precisely using a fiber laser. The fiber laser, which is automatically adjusted to the current sheet thickness thanks to AMADA's variable beam adaptation solution, has an out-

put power of 3 kW. It can therefore cut ordinary steel and stainless steel, as well as nonferrous metals such as aluminum, copper, brass and titanium without difficulty. What is more, the rotary index unit, which has been redesigned and optimized for ENSIS, contains a new generation of tubular axes that decisively further improve the speed and precision of the laser cutting system. At the same time, the optimized pipe guide ensures virtually scratch-free machining.

## Integrated material measurement

Another new feature of the AMADA ENSIS-3015AJ RI is the material mea-

surement unit for the fast, precise measurement of pipe reference surfaces. A carbon tray is used to receive the cut pipes and profiles. The practical sliding doors on the ENSIS-3015AJ RI permit optimum machine accessibility, while simultaneously providing reliable protection against reflection and slag projections.

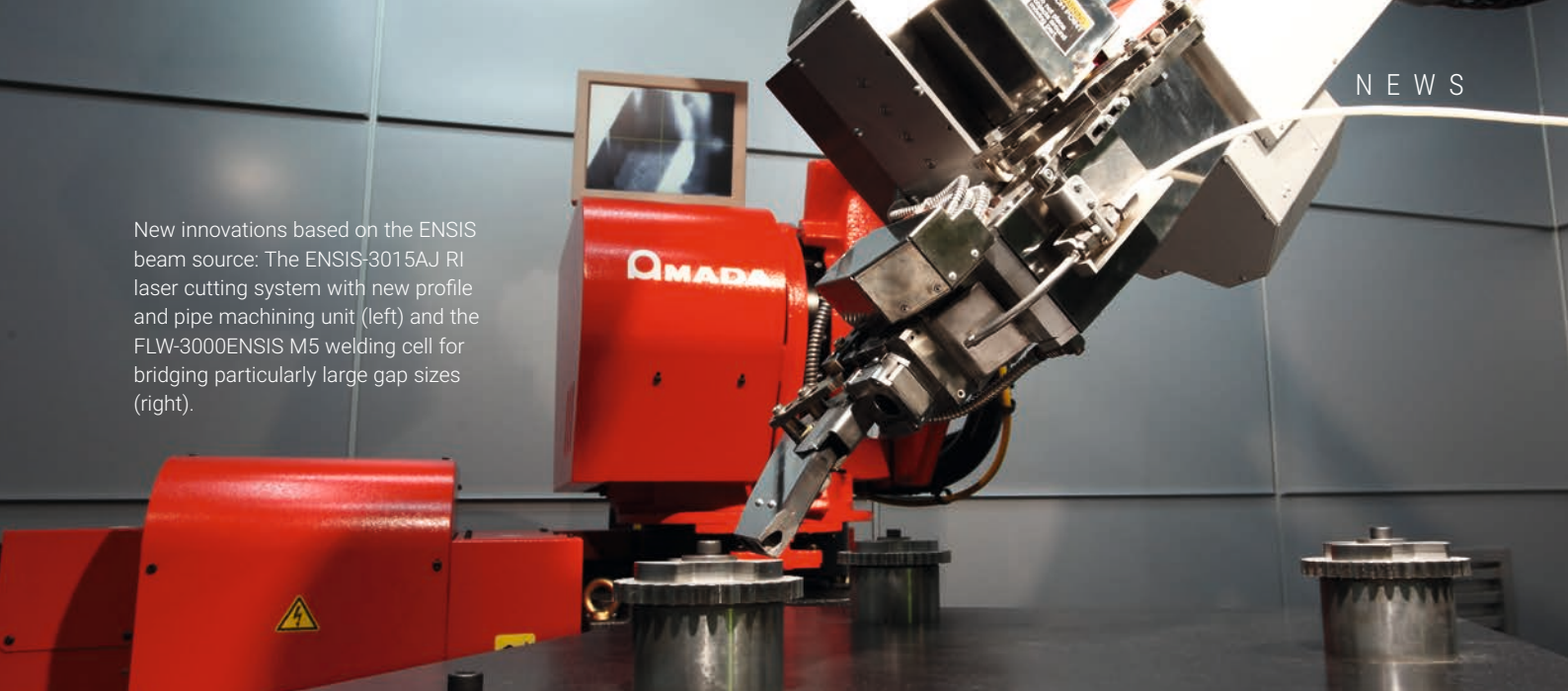
## Long-term productivity

The new AMADA ENSIS-3015AJ RI is operated at the touchscreen of the AMNC 3i control unit. It is simple and intuitive to operate, helps minimize setup times and reliably evaluates the machine data. Because there is no longer any need to change lenses and because nozzle changes are performed fully automatically, the AMADA ENSIS-3015AJ RI permits practically interruption-free production that combines high speeds with optimized cutting quality. Numerous automation options are also available, for example in the form of the ASF-EU automatic material tower or the MP-F

The ENSIS-3015AJ RI stands for smooth, trouble-free production at high speed and with optimum cutting quality.



New innovations based on the ENSIS beam source: The ENSIS-3015AJ RI laser cutting system with new profile and pipe machining unit (left) and the FLW-3000ENSIS M5 welding cell for bridging particularly large gap sizes (right).



loading and unloading unit, that increase the cost-effectiveness of the overall system still further.

### New dimensions in laser welding

As the most recent development in AMADA's FLW series, the new FLW ENSIS laser welding cell is setting completely new standards in laser welding. It is based on the proven 3 kW fiber laser with variable beam adaptation and the innovative weaving technology whose integrated rotating optics allow the laser beam to move from side to side. This AMADA system has now been optimized once more for use in the FLW ENSIS. With the so-called "Ring Mode Beam", the welding beam fans out in a ring shape that allows it to optimally bridge even large gap sizes. In combination with the weaving technology and the push-pull filler wire guide, this makes it possible to work with far larger gap sizes than are possible using conventional laser welding technology.

### Absolute precision

In the FLW ENSIS, the laser beam itself can always be individually adapted to the specific material of the component. In practical use, the new system excels not just through the outstanding quality it offers but also through its particularly fast cutting speeds. Thus the general welding speed is significantly greater than in conventional laser welding systems.

The key: The welding process can be regulated with such precision that no deposits, deformations or discolorations can be seen on the backs of thin sheets. This outstanding quality feature is due to the precisely defined energy penetration of the fiber laser into the workpiece.

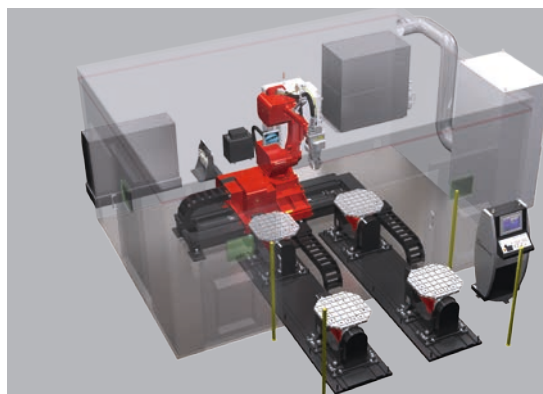
### Unbeatable speed

This is a great benefit to users, including, for example, during overlap welding. Here, there are no visible traces on the back of the metal sheet, in contrast to conventional spot welding operations. The welds that are applied during this process are at least as durable and resilient as joins produced using spot welding – and the entire welding operation is completed in just a fraction of the time that would otherwise be required. The FLW ENSIS also works significantly faster than conventional solutions when manufacturing housings, during which it is necessary to weld the outer edges and apply metal

plates to reinforce the back of the component. And the FLW ENSIS is very often able to weld different materials together extremely effectively in just half the time taken by conventional approaches.

### Completely new M5 model variant with changeover table system

The FLW ENSIS also excels in other welding applications such as butt-welding or flux-cored welding. In this latter process, it is possible to switch between welding with and without filler wire during ongoing operation. What is more, the handling of the FLW ENSIS has also been significantly improved. Thus the M5 version of the system now possesses a changeover table system with two tables. While welding is being performed in the booth at the first station, the second table can be made ready, thus significantly cutting cycle times and greatly reducing idle times. ●



The new changeover table system with two tables boosts the performance of the FLW-3000ENSIS M5 even further.

The new LCG-3015AJ with 9 kW output power

# A versatile bundle of power

**As of now, the LCG-3015AJ is also available with 9 kW of output power. With this performance level, it can make its way quickly and precisely “through thick and thin”. Thin and medium thickness materials are cut extremely quickly with high quality and particularly thick sheets can also be machined reliably. The beam source takes the form of the new AMADA resonator with only three fiber laser modules.**

Wherever fast, top-quality laser machining is required, the AMADA LCG-AJ is the perfect solution. Various laser output powers are available depending on the type and thickness of the materials that are to be cut. A completely new addition to the portfolio is the 9 kW version of the AMADA LCG-3015AJ, which completes the range of proven AMADA fiber laser systems for the high-performance segment. One of the highlights of this machine lies in the fact that it is equipped with the new, third-generation AMADA resonator. It contains the new 3 kW fiber laser

modules which are the most powerful module currently available on the market. Thanks to these high-performance units, the LCG-3015AJ 9 kW now only requires three 3 kW fiber laser modules. The laser energy is routed practically loss-free via fiber optic cable to the cutting head. Less is more: Because fewer fiber laser modules are present, the system is significantly less susceptible to malfunctions than conventional models, in which the required power has to be generated by multiple modules connected in sequence, together with the corresponding number of plug-in contacts. By contrast, the lean AMADA laser unit of the LCG-3015AJ 9 kW minimizes stoppage times during practical operation and once again improves machine availability.

## Enhanced cutting quality

With its new, more powerful beam source, the LCG-3015AJ 9 kW now also provides the ideal conditions for cutting medium material thicknesses quickly and with high quality. In this segment, the 9 kW laser cutting system now delivers perfect cutting quality that leaves nothing to be desired - and that was previously unachievable with the less powerful versions. The high beam quality and the so-called “silky cut” method permit cutting qualities previously unequalled in a fiber laser.

## Attractive alternative

With the newly available cutting quality and the powerful new AMADA resonator, the LCG-3015AJ



The LCG-AJ series is available in the performance classes 2,000, 3,000, 4,000, 6,000 and 9,000 Watt.

The new 9 kW variant of the LCG-3015AJ ensures particularly powerful, fast cutting for all sliceable material thicknesses. The exceptional cutting quality is further boosted by components such as the integrated nozzle changer (below).



9 kW is now also a high-performance alternative to CO<sub>2</sub> lasers. In this respect, the LCG-3015AJ 9 kW also excels in terms of energy consumption. Because even though the output power has increased by half compared to the 6 kW laser, the energy consumption of the 9 kW version is not significantly higher. By contrast, a similar increase in power in a CO<sub>2</sub> laser would require significantly higher consumption levels. Another advantage: The AMADA fiber laser has a modular structure and its short wavelength means that there is no need for a deflecting mirror. By contrast, CO<sub>2</sub> lasers use a laser gas mixture to stimulate the laser beam, which is guided using systems of mirrors.

### Practical all-round versatility

Of course, the new LCG-3015AJ 9 kW can not only be used to cut medium thickness materials. Indeed, thanks to its increased laser strength, it also opens up new possibilities when machining thinner materials, which can now be cut particularly quickly. And it is also possible to machine extremely thick materials or work in areas where nitrogen is used as an assist gas.

And, in particular, applications where the corresponding laser power and gas pressures are required are no problem for the LCG-3015AJ 9 kW. All in all, the LCG-3015AJ 9 kW therefore provides outstanding versatility that covers the entire range of materials. This makes the system a cost-efficient, economical all-rounder that also provides the convenience and operator comfort that make a vital difference in everyday manufacturing activity. Consequently, the system now has generously sized doors along the side and at the end to provide improved access to the working area.

### Automated for even more efficiency

The speed and performance of the new LCG-3015AJ 9 kW can also be further enhanced by the numerous automation options that are available. These include the ASF-EU loading and unloading tower, which is available as a single or twin-tower variant. The storage system automatically loads and unloads the pallets at the laser and also stores the input stock and the machined sheets. Compared to conventional systems, the ASF-EU

impresses through its improved cycle and pallet change times, the increased number of pallet locations and a flexible pallet configuration. This level of automation can be extended still further by means of modules such as the automatic 2nd output station which go right up to parts sorting using the Take-out-Loader (TKL). This automati-



New, generously sized sliding doors for even better access to the working area.

cally removes, sorts and deposits the parts after cutting. Also available for the LCG-3015AJ 9 kW is the MP-Flexit loading and unloading unit which comes as the perfect entry-level automation solution with one loading and one unloading compartment. ●

The new AMADA AE-2610NT

# Enhanced punching performance

The AMADA AE series of punching machines are equipped with servo-electric drives which combine the advantages of mechanical punching technology with the speed and flexibility of hydraulic high-speed systems. In this way, they not only ensure enhanced production speeds and outstanding precision and functionality but also minimize setup times and costs. This applies in particular to the new AMADA AE-2610NT punching machine. This fast, easy-to-use, economical system is ideally suited for so-called parametric use and therefore, for example, the manufacture of control cabinets, housings, doors and claddings that can be produced quickly and cost-effectively.

## Turret punch press with extended station structure

One completely new feature of the AMADA AE-2610NT is its considerably extended working and application area. As a result, the tool turret with 3-track structure now has 45 stations, including the E-station size with a diameter of 114.3 mm. For the first time, these stations

**With larger tool stations in an extended large-format machine, the AMADA AE-2610NT is opening up new possibilities for economical, high-speed punching. This CNC-controlled turret punch press also excels in terms of flexibility, quality and operator convenience.**

make it possible to use particularly large round and forming tools. This enhancement not only permits the punching and forming of particularly large geometries. More importantly, for example, the punching of long external contours can be completed particularly quickly and efficiently because now far fewer strokes are needed for the operation. The appearance of the final punched product is also improved because the reduction in the number of strokes means less deformation as well as fewer transitions and initial punch marks at the contour.

## Large-format machining now a possibility

Another highlight of the new AMADA AE-2610NT lies in the fact that large sheets can now also be

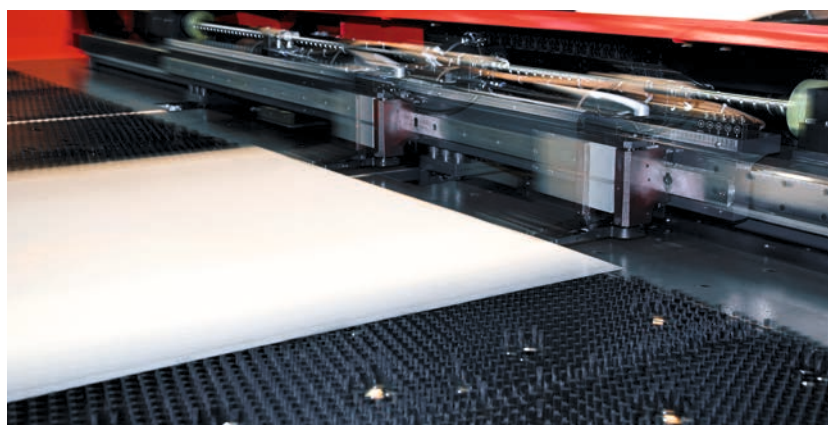
machined precisely and with high quality. This is because the working area has now been extended to a large format. Together with the newly available tool sizes, this extension provides significantly better performance than in the past and again guarantees top-quality results every single time – over a long service life. These qualities are further enhanced by the bridge frame which, together with the high-precision servo-electric drive, represents a major design feature of the AMADA AE-2610NT.

## Efficient and cost-effective

The new AMADA AE-2610NT also boasts a number of other impressive advantages in the fields of efficiency and cost-effectiveness. For example, the average energy



With the new E-station-size and adaptation to large-format work, the new punching machine is perfect for parametric operation.



requirement is a mere 3.5 kW, meaning that the CNC-controlled turret punching machine needs just a third of the energy consumed by a comparable hydraulic system. Another important factor that contributes to the system's energy efficiency is the innovative energy recovery principle that is implemented in the AMADA AE-2610NT. With this, the drive energy that is released during braking is stored and then re-used on the next acceleration. Last but not least, the maintenance effort and servicing costs are significantly lower than for hydraulic systems because the servo-electric drive itself uses no oil as a drive medium and needs only a small number of low-maintenance components. Overall, the AMADA AE-2610NT offers an excellent price/performance ratio and guarantees long-term cost-effective operation thanks to the lower cost of acquisition. Importantly, economic efficiency is also boosted by the AMADA AE-2610NT's compact footprint which minimizes the use of valuable production space.

### Precision at the touch of a button

The system's great ease of operation makes a vital contribution to successful punching with the new AMADA AE-2610NT. This is possible thanks to the AMNC control unit, which combines user-friendly operation with simple handling in order to permit secure, error-free production work. The focus is placed on outstanding manufacturing precision and users are able to activate the so-called "high-accuracy mode" when manufacturing parts that demand exceptional machining quality. This function further increases the precision of the machine quickly and easily. The multimedia AMNC control unit permits simple, intuitive handling by all operators – from first-time users of the technology through to experienced professionals.

### Automation for maximum profitability

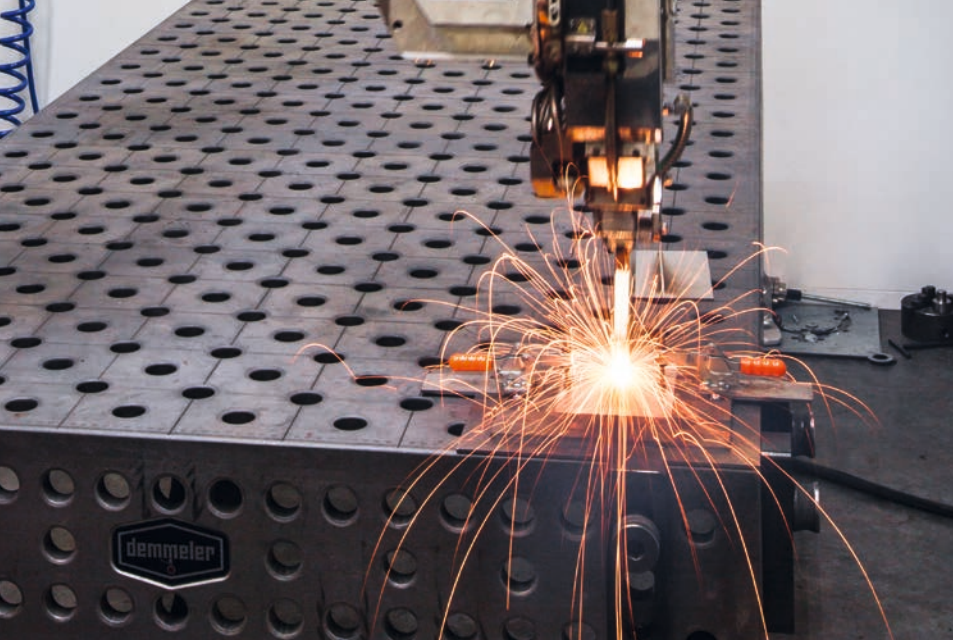
The new AMADA AE-2610NT is further enhanced by numerous automation options that decisively boost the system's economic efficiency. One of

these is the AMADA MP SheetCat, a compact loading and unloading system for punching and laser machines that guarantees maximum profitability even for small and mid-sized batches or for rush jobs. A further machine characteristic takes the form of the separated safety areas. These ensure a safe working environment so that the next sheet can be prepared for machining even while its predecessor is still in production. This efficient, ergonomic procedure minimizes interruptions to the production process, while simultaneously maximizing capacity utilization at the punching machine. By performing loading and unloading operations simultaneously, the MP SheetCat also helps cut material changeover times – a feature that is of particular value to users when manufacturing mid-sized batches. The automation options therefore further extend the already outstanding performance of the AMADA AE-2610NT punching machine, which is setting new standards in terms of productivity, economic efficiency, quality and ease-of-operation in the field of CNC punching technology. ●



Metallforum Metallbau GmbH, Ahrbergen

# Manufacturing expertise as a factor of success



**With an AMADA FLW fiber laser welding system and an FO-3015MII RI laser cutting machine, Metallforum Metallbau GmbH in Ahrbergen in Germany is extending its manufacturing expertise to meet its specific needs. This expertise underpins the company's business success, allowing it to differentiate itself effectively from its competitors as a high-performance solution provider.**

**A**t Ahrbergen-based Metallforum Metallbau GmbH, the large sliding door of the new FLW laser welding system glides silently into place. The robot arm then carefully moves on its track to position itself above the workpiece. And then the sparks start to fly as the laser head applies its weld spots and weld seams with absolute precision. During this operation, the laser table constantly rotates to move to the required machining position and, after the application of eight welds, the stainless steel housing for input control systems is finished

### Sheet metal working underpinned by AMADA

The sheet metal housing is just one of thousands of products manufactured in short runs by the company, which was founded in 1996. "In all our products, the key focus is always on quality," explains Jens Löchel, Managing Director of Metallforum Metallbau GmbH. "However, we are also well known for our flexibility and rapid reaction times, our first-class service and ability to keep our deadlines." To achieve this, the company and its sixteen employees make extensive use of

the growing pool of AMADA machines. This comprises a total of twelve systems covering every aspect of sheet metal working, including three HD ATC, HFP and HFE press brakes, an ENSIS-3015AJ fiber laser cutting machine, an FO-3015MII CI laser cutting machine, an AC-2510NT turret punching machine, a VQC measuring machine – and, since May 2017, the brand new FLW fiber laser welding machine.

### Solution provider with a competitive edge

However, the new FLW fiber laser welding system is not merely an extension to the existing machine pool. Instead, it represents a considerable increase in performance which, in turn, sends a powerful message to the market. "With the FLW laser welding system we can now offer activities, services and, above all, solutions that would previously have been inconceivable for us – and which even today other companies are unable to provide," emphasizes Jens Löchel. "In this way, the FLW laser welding system has decisively increased our manufacturing expertise. In turn, this new expertise clear-

The new AMADA FLW fiber laser welding system perfectly complements the company's sheet metal working operations.



ly differentiates us from the competition and, ultimately, is a crucial factor in our success." With its clear positioning as a solution provider, factors such as the offered price or manufacturing volumes play only a subordinate role for Metallforum Metallbau GmbH – unlike for many of its competitors.

### Value added in practice

Despite this, efficiency and cost-effectiveness are of vital importance for the business success of Metallforum Metallbau GmbH. And here again, the new FLW fiber laser welding system excels in practical application. This was demonstrated during the construction of the first fifty stainless steel housings for input control systems. In this case, welding at the FLW system made it possible to save a total of approximately 100 working hours compared to conventional manufacturing using TIG welding methods. Löchel: "What is more, we are able to manufacture extremely quickly with practically no setup times and with outstandingly high quality, with the result that absolutely no time-consuming reworking is necessary." At the same time, however, the system ►



For Managing Director Jens Löchel (left), the new system is an important extension to the company's in-house manufacturing expertise.



▶ also permits the trouble-free welding of a range of materials such as brass, copper and stainless steel as well as highly tempered steels which can be used for a correspondingly large number of different components. Last but not least, the FLW fiber laser welding system also excels through its simple, intuitively designed control unit that guarantees safety at a highest grade and outstanding ease-of-operation for all users. And if there is ever a problem or malfunction, then the AMADA Support Team is there to help. As Löchel says: "Any questions we have, for example about the robot or the system itself, are answered quickly in a straightforward and solution-focused way."

### Sheet metal working from a single source

With the many advantages it brings, the FLW fiber laser welding system perfectly complements the sheet metal working operations at Metallforum Metallbau GmbH. A key role here is also played by AMADA's software which runs on all the existing systems and ensures the automatic

handling of even the most demanding component geometries. The manufacturing process starts with AMADA SheetWorks, the CAD software for 3D design work. The next stage is handled by the Dr. ABE Blank software for the fully-automatic generation of cutting data which is then implemented on one of the existing AMADA laser cutting machines. The required bending data is created by the Dr. ABE Bend software and used as the basis for the operation of an AMADA HD-1003 press brake. Finally, the FLW-CAM software comes into its own and is used to control the FLW fiber laser welding system. As a result,

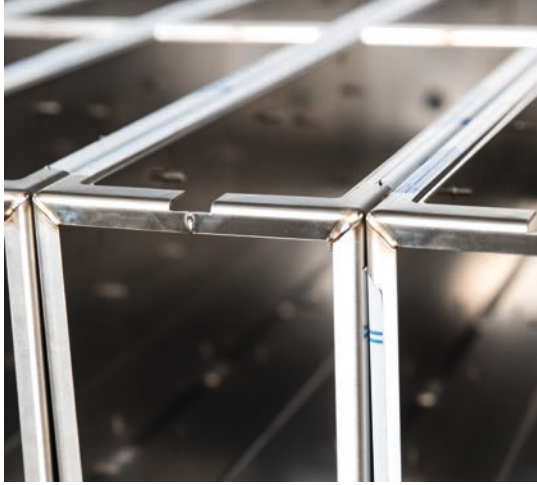
the sheet metal working process chain at Metallforum Metallbau GmbH is optimally organized and permits uniform, comprehensive manufacturing services from a single supplier.

### Investment with a long-term impact

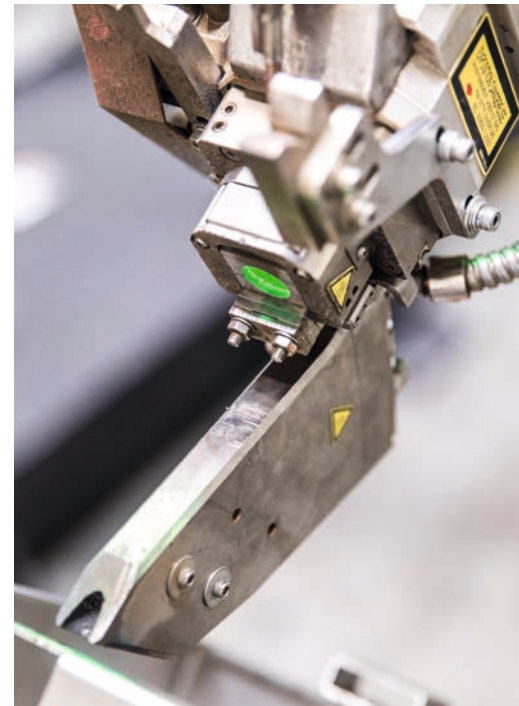
"Of course, the purchase of an FLW fiber laser welding system is a major investment, but one that will pay for itself in the long run," is the way Mathias Raulf, Sales Representative Northern Area at AMADA GmbH, sums things up.



Mathias Raulf, Sales Representative Northern Area at Amada GmbH.



Currently, the FLW fiber laser welding system is being used to manufacture stainless steel housings. All the welding processes can be controlled and monitored from outside of the cell.



“For users, the technology is a unique selling point with which they can successfully pull ahead of their competitors and generate new orders.” And this is exactly the potential that has been identified at Metallforum Metallbau GmbH. Which is why the company has now gone on to order its next AMADA system in the form of a new FO-3015MII RI laser cutting machine. This all-rounder, which is equipped with a CO<sub>2</sub> laser, stands for the high-performance cutting of sheets and pipes and excels through its unfailing precision irrespective of the type or thickness of the material. Compared to the predecessor model, which has been running successfully at Metallforum Metallbau GmbH since as early as 2010, the new system offers considerably improved overall performance with optimized work-flows and many more possibilities

for cutting sheets and pipes. Jens Löchel has no doubts: “The new laser cutting machine gives us an even higher level of vertical integration and further boosts our expertise in the production and solution fields.” The new system will start operation on site in late 2017.

### Successfully positioned for the future

With the new FLW fiber laser cutting system, the soon-to-arrive FO-3015MII RI laser cutting machine and its many other AMADA machines, Metallforum Metallbau GmbH is excellently equipped to face the challenges of the present and the future. “We have put ourselves in a good position for the long term and will benefit from our investments both now and for long into the future,” is how

Löchel assesses things. However, the central role in these successful developments is played not just by machine technology alone but also by humans. That is why Metallforum Metallbau GmbH also places value on a positive, supportive network of other AMADA users, partners and customers. Löchel: “I see great potential arising from further improving the networking of AMADA customers. In this way, it will be possible to bundle together capacities and skills in focused ways, for example to cope with manufacturing peaks or to solve new tasks – all of which ultimately again benefits the end customer.” Although this approach makes a vital contribution to the company’s success, the most important factor continues to be its own workforce. “Our employees are and will continue to be our most valuable asset,” is the firm conviction of the Managing Director. ●



Collaboration with the Ludwigshafen T1 vocational technical training institute and the Münster Chamber of Crafts

# Strong for the future

**In its cooperation with the Ludwigshafen T1 vocational technical training institute (BBS T1) and the Münster Chamber of Crafts (HWK), AMADA is helping young students to learn about sheet metal working at the highest level. For AMADA, this is an excellent opportunity to position itself as a high-performance partner and manufacturer of machine and software solutions in this sector.**

Experiencing state-of-the-art machines live and in practical application: This is what the budding master craftsmen from the Münster HWK and the technicians and students at the Ludwigshafen BBS T1 have the opportunity to do at the AMADA Practical Days. “Once a year, we invite the students to our Solution Center in Haan so that they can gain an impression of our machines,” says Ronald Schildt, AMADA Sales Manager for North, East and West Germany and the Netherlands. Together with his team, he supervises the Practical Days for the up-and-coming master craftsmen from Münster HWK. Alongside general information on bending technology and programming using the AMADA software solutions, the days of the event are rounded off by open question sessions and practical tests. “This year,



The budding master craftsmen from the Münster Chamber of Crafts at the Practical Days in Haan (top, bottom).

our guests were asked to estimate how long they need to program and bend a component. Afterwards, we showed them on an HG ATC how much time was actually required. The students and new generation of master craftsmen are always extremely astonished at just how much setup time can be saved with our machines,” says Ronald Schildt.

## Making the most of the opportunities

AMADA has been working together with the Münster HWK for five years and with the technical and vocational training classes of the Ludwigshafen BBS T1 for eleven. This collaboration has been beneficial for everyone involved. “We are able to communicate directly with the students. We can familiarize the next generation with AMADA’s products and solutions at an early stage in their development,” says Markus Scheurig, Sales Executive South and leader of the Practical Days for the BBS T1 Lud-

wigshafen. “The students greatly appreciate being able to gain a practical insight into our modern manufacturing concepts. We get a lot of positive feedback from them.” Alongside the visits to the Solution Center, the teachers at the Ludwigshafen BBS T1 also receive software training and information and educational material for their metal working and mechanical engineering students. And the Münster HWK also uses software and machine solutions from AMADA. “The workshop of the HWK is now equipped with one of our press brakes. It is used for training and advanced courses in the field of sheet metalworking,” explains Ronald Schildt who considers this type of cooperation with educational establishments to represent an important opportunity for the future. “The shortage of skilled workers is an issue that is facing everyone at the moment. This type of collaboration is an ideal way of supporting students with state-of-the-art equipment so that they can benefit from top-class training.” ●



Business rules

# Japanese for good manners

**Japan is the land of lowered voices – restraint is the order of the day. This also applies to business life, where personal interactions are more formal and obey stricter rules than in Germany. Here, we point out what you need to be aware of on your next business trip to Japan.**

Bowing when greeting someone is an important part of Japanese culture.

## Tip 1: Punctuality

There is practically no other country where punctuality is taken quite so seriously as Japan. Here, punctual means arriving five to ten minutes before the time of an appointment. If you are going to be late, even by just a few minutes, you are expected to inform the person you are meeting by phone, SMS or e-mail. A short sentence and sincere words of apology suffice. Longer explanations are thought of as excuses.

## Tip 2: The right greeting

In Japan, it is traditional to bow when greeting someone. Men place their hands on their upper thighs and bend forward straight with their upper body. Women cross their hands in front of their body. The more polite one wishes to be toward the other person, the deeper the bow. For western business partners, it is usually sufficient to bend for-

ward and give a clear nod of the head. If you are unsure, wait to see how the person you are meeting behaves.

## Tip 3: A paper with weight

Business cards (Jap. Meishi) are a must in the Japanese business world. The proffered business card is always accepted with both hands and one's own is passed over in the same way together with a slight bow. The card is then read attentively and a question may be asked to show your interest in the other person. The business card is then respectfully put away. But most definitely not in your trouser pocket – that would be considered impolite.

## Tip 4: Business meals the Japanese way

“Itadakimasu” is the phrase spoken at the start of a meal in Japan. However, this has little in common with

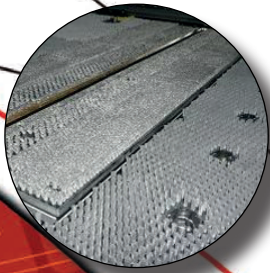
the western “bon appétit” or “enjoy your meal”. Instead, it expresses your humble thanks for the food offered. It also indicates that you can now begin to eat. Speaking with your mouth full or slurping, in particular when enjoying a Japanese noodle soup (ramen, soba, udon), is not considered unseemly. On the contrary, it is even expected and considered to be a sign that you are enjoying the meal.

## Tip 5: Stay in contact

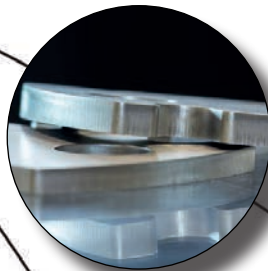
After your business meeting – preferably within 24 hours, if possible – you should send a short e-mail to express your gratitude for the meeting and the time taken by your business partner. In Japan, maintaining relations is the be all and end all. Keeping in regular contact, even if there is nothing pressing to discuss in relation to business, is a sign of continued strong interest. Also do not hesitate to issue an invitation to Germany. ●

# SCRATCHES ON SENSITIVE MATERIAL?

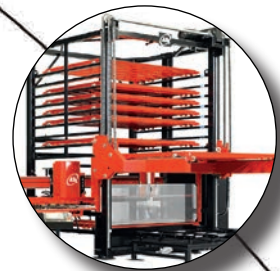
Explore the new standard of ALPHA V!



**Perfect results up to 10 mm**  
Scratch less, spatter/burr free,  
no contamination with material support



**Quick, neat cut edges**  
by hyper fine cut with 3.5 kW oscillator



**Automated**  
Process safe automation with loading and  
unloading units and part removal



**LC-2415 ALPHA V**

