

AMADA MACHINE TOOLS EUROPE

GRINDING, TURNING AND SAWING TECHNOLOGY



> Head office in Japan (Isehara): Here the requirements of the customer are analysed for the best product group and support strategy



> High-tech development centre in close proximity to Mount Fuji: Fujinomiya Works. A remarkable place for innovative solutions

| AMADA GROUP

The AMADA Group is one of the world's major machine tool manufacturers with over 6,000 employees and a turnover of some 2 bn Euro. Internationally AMADA is renowned for its innovation in technology within its machine tool types.

The technology within AMADA is trendsetting production solutions, with a high level of economic efficiency and productivity together with maximum effort to sustain the environment.

The objective for Europe is the expansion and promotion of the group's machine tool technology, AMADA established a new organization in 2009; AMADA MACHINE TOOLS. The aim of this company is to be a 'Total Solution Provider' geared to the individual customer needs. The same philosophy is used in the development of new machines, therefore meeting the ever increasing demands in production for technically advanced machines and tooling.

| AMADA IN EUROPE

AMADA is growing in Europe

With 15 enterprises in 9 European countries and over 1,500 employees, AMADA aims to be the partner working side by side with its customers in Europe and will continue to grow in close co-operation towards the realisation of high profile customised technical solutions.

Saw Blade Technology "Made in Europe"

In Ternitz, Austria, AMADA has a production and development centre for high quality bandsaw blades. These bandsaw blades are used on AMADA's own bandsaw machines and also on bandsaw machines of other producers.

Technologies of AMADA



Sheet Metal Fabrication



Stamping Technology



Turning Technology



Grinding Technology



Sawing Technology



> AMADA France (Paris) head office



> New manufacturing Plant of AMADA MACHINE TOOLS including Research, Development and Solution Centre in Toki (Japan)



> AMADA Italy (Piacenza) new Technical Centre



> AMADA saw-blade manufacture - Austria (Ternitz)

| AMADA MACHINE TOOLS EUROPE

AMADA MACHINE TOOLS - The European Headquarters

In order to further the development and to enforce the position in the important European market, AMADA MACHINE TOOLS EUROPE GmbH was established in October 2009. Including the established brands of WASINO turning technology, WASINO grinding technology, Profiltec/PeTeWe/Doebeli grinding technology and AMADA sawing technology.

AMADA MACHINE TOOLS invests

In order to make the advancement possible, AMADA MACHINE TOOLS invests in High-tech locations for development and production.

In 2010 is the opening of the Technical Centre in Haan, near Düsseldorf, and in 2011 a completely new manufacturing plant including research and development departments will be completed in the Japanese city of Toki, with a total area of 123.000 m².

AMADA France

Established in close proximity to Paris, is the French centre for the AMADA sheet metal working and AMADA MACHINE TOOLS technology. The assembly of the AMADA sheet metal working machines for the world market takes place in Château-du-Loir and Charleville-Mézières.

AMADA Italy

AMADA Italy is responsible for selling and servicing the AMADA group sheet metal working products. Machine tool technology will be supported by the AMADA MACHINE TOOLS EUROPE Italy. Starting from May 2010 the activities on the Italian market will be steered by the new Technical Centre in Vigolzone, Piacenza.



➔ Grinding Technology

AMADA is a world market leader for optical profile grinding and high precision surface and profile grinding.

With the combination of the extensive technologies from Wasino, Petewe, Doebeli and Profiltec all under the ownership of AMADA, we will lead profile grinding into new dimensions:

- With integrated measuring Technology – Winner of the Innovation Award
- Maximum accuracy is optimised through use of the most modern construction/design
- High-Speed for increased economy
- Automation solutions for higher efficiency
- Automatic swivelling grinding head during the grinding cycle
- External programming software to optimise part production
- Modular conception for the most economical specification
- High precision surface and profile grinding of larger work pieces

DV-7M

Fully automatic profile grinding centre with swivelling grinding-head



Meister G3

Universal excellence in surface and profile grinding



Techster Series

High precision surface and profile grinding for larger work pieces



GLS-5T

The most popular optical profile grinding machine



DV-1

Fully automatic profile grinding centre with CCD Camera Technology.



MM-Award: Winner of the MM-Award for Innovation in Germany and Switzerland



➔ Turning Technology

The turning technology of Wasino, with its high degree of popularity, has also been transferred to the AMADA product portfolio.

These products are characterised by:

- High precision achieved through optimising the most modern construction/design
- Intelligent and economical automation solutions
- Exceptional reliability during high production
- Large product portfolio with many different models

MI-8

High accuracy 5-Axis turning and milling centre for precise and complex work pieces

- Automatic tool changer
- Integral Fanuc robots for loading / unloading of work pieces



JJ-3

2-spindle turning centre with high precision and powerful machining ability and compact in design

- 2-Spindle turning centre
- 12 station turrets with milling function
- integrated handling



A18-S

Flexible turning and milling centre for high precision and complex components

- Simultaneous 4-axis machining
- 18 station turret with Y-axis and milling function
- Integrated handling



G-Series

This series is distinguished by Gang slide type with large capacity and extreme accuracy, and offers a flexible approach suitable for many requirements

- Machine design is particularly suitable for hard-turning
- Very short cycle times
- Fast and simply set
- Ultra precision



➔ Sawing Technology

AMADA has the unique advantage of producing both band saw machines and also band saw blades. This advantage results in a continuous development of new and optimized products

The AMADA factory in Ternitz, Austria has their ear to the ground in order to respond directly to market demands. Here, they develop and produce bandsaw blades specifically for the European market. The current bandsaw blade development is the AXCELA, combining maximum cutting performance, and the substantial reduction of cutting times, thus meeting the highest customer demands.

Standard band saws

AMADA's Standard band saws

- Work on materials of the smallest diameter to over 2m



Pulse Cutting Band saws

The latest band saw with CNC Control

- With the AMADA Pulse Cutting Technology



High performance carbide tipped circular saws

AMADA's high performance carbide tipped circular saws

- Fulfills the highest requirements for both precision and cutting rates on material diameters from 15mm to 150mm



Vertical Band saws

Vertical Band saws

- Ability to saw large blocks and formed materials with high precision and cutting accuracy



AMADA 's latest machine technology:

- Pulse Cutting – "Making good Vibrations"

In the PC Series AMADA offer their own unique pulse cutting development. The advantages are:

- Substantial reduction of the cutting resistance
- Maximum cutting performance with simultaneous reduction of the noise level
- Reduction of swarf to 25%
- The PC Series is also available in larger models, for example the PCSAW 700

Carbide tipped saw blades

AMADA carbide tipped high performance saw blades

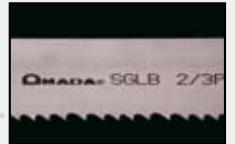
- Fulfill the most exacting requirements of hardness, wear resistance and temperature stability
- Particularly suitable for hard to cut materials



HSS Bi-Metal saw blades

AMADA's Bestseller

- The use of M42 cobalt HSS steel results in excellent wear resistance, applicable for nearly all materials and dimensions.



HSS Bi-Metal blades for sectional steels

AMADA's saw blades exclusively for sectional steel

- Offers high ruggedness against tooth breakage and possesses a high wear resistance
- Specially designed tooth geometry to avoid tooth overloading





> AMADA Village - Haan Solution Centre and Technical Centre



> Head office of AMADA MACHINE TOOLS EUROPE GmbH

| THE NEW EUROPEAN CENTRE AND TECHNICAL CENTRE HAAN/DÜSSELDORF

The new European Solution Centre of AMADA GmbH and the Technical Centre of AMADA MACHINE TOOLS EUROPE GmbH extends in total to over 71,000 m².



The conception

The master plan for the AMADA Solution and Technical Centre is to create a unique atmosphere for all visitors to the very highest standard, where the latest manufacturing technology may be discussed and demonstrated. AMADA's policy is to build long term partnerships on the basis of comprehensive consultation and support to the benefit of its customer's profitable future.

The design and philosophy of the Solution Centre and Technical Centre shows the Japanese roots of the AMADA Group and its high esteem to their customers and society.

Demonstration Centre

The latest technology in each product group can be shown here 'live'. Customers' requests and requirements can be better analysed, in order to find, jointly, the individual optimum solutions.

Optimised logistics centre

Enabling flexible and fast response times for an optimised customer service.

Presentations & Proposals Rooms

The P&P Rooms occupy a central position as conference rooms for 'Proposals and Presentations'. Here AMADA staff analyse the individual requirements and present suitable manufacturing solutions. Light-tables for design/drawings presentation, large sized flat-screens, multimedia engineering and access points for customer notebooks, all belong to the basic equipment of the P&P Rooms. These conditions are just part of the efforts made to achieve highly-qualified analysis and consultation possible and pleasurable.

SE Studio

The SE studio is the spacious presentation room in the Technical Centre. SE stands for 'Support Engineering'. In this multimedia room product presentations and training courses for groups up to 35 persons are accommodated.



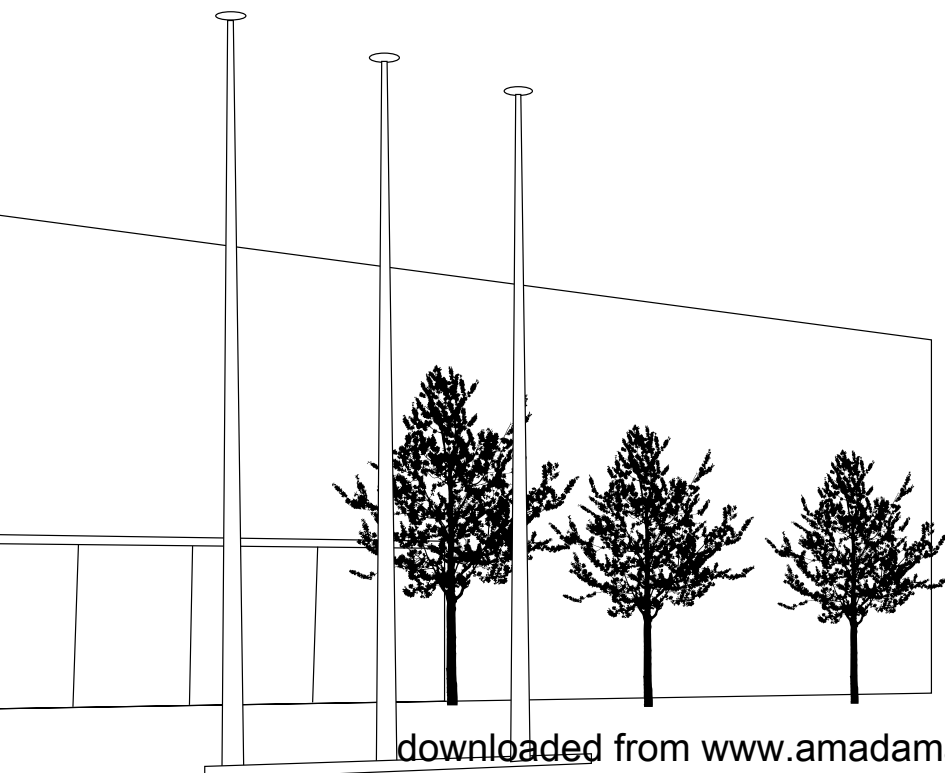
> Reception



> P&P Room



> SE Studio





> „Architectural masterpiece, the Solution Centre of the AMADA GmbH in Haan“



> Pleasant relaxed atmosphere for meetings



> Royal Room



> Harmoniously, working together with the surrounding nature

| AMADA AT ONE WITH NATURE

AMADA lives its philosophy

The concept of the AMADA Solution and Technical Centre is not coincidental. Rather – it follows a philosophy, which rests consistently on two strong columns: to live hospitably with the customer and to protect the surrounding nature. Components of AMADA's managements philosophy is the respect for the environment and the attention of ecological principles - which goes far beyond the protection of nature and its ecology as the balance between the enterprise and its natural surroundings.

AMADA sets its focus on generating alternative energies at its new location in Haan. Geothermal generating energy is used, with the principle, which is not only renewable, but has further crucial advantages; neither the surrounding vegetation is damaged in any way nor is the landscape or agriculture affected. The Geothermic field of AMADA consists of 53 deep producing wells and is one of the largest in North Rhine-Westphalia. For AMADA this way of generating energy forms the ideal possibility for fulfilling its ecological requirement with the environment: invisibly emission-free and economical.



| GROWING TOGETHER WITH OUR CUSTOMERS

Maximum support for customer needs

In close co-operation with its customers, AMADA optimises existing technologies and develops new solutions. These respond to the requirements of the users and are always innovative, in order to secure the long-term competitive ability of the customers for today and in the future.

Customer proximity - one of AMADA's goals

As an international company AMADA sets its goal; to be as close as possible to the user. We have organised the manufacturing plants to be de-centralised, together with the research and development centres, Solution and Technical Centres, to guarantee this goal world-wide.

Innovations from research and development

The AMADA company has built a network of research and Development Centres world-wide, where solutions are developed for applications within industrial manufacturing.

AMADA - THE TOTAL SOLUTION PROVIDER

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