

Product flyer



## CAD/CAM software solutions



**The most comprehensive CAD/CAM software  
product range for 2D/3D cutting,  
sheet-metal working and robotics**

## Applicative software

### 2D cutting Punching-nibbling Routing

#### A comprehensive range of CAD/CAM software products for cutting, sheet-metal working and mechanized welding.

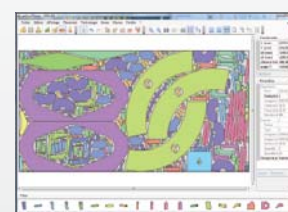
Alma offers the most comprehensive range of CAD/CAM software products for any type of cutting, sheet-metal working and mechanized welding. This includes in particular: 2D cutting, punching, routing (aluminium, wood, etc.), 5-axis cutting, robotized cutting, tube and profile cutting, shearing, folding/unfolding, robotized arc welding, etc.

Piloting all technological processes relative to sheet-metal working and mechanical welding, from standard machines to the most complex installations, our user-friendly CAD/CAM software fits all production configurations and offers gains that can be immediately measured.

**act/cut** software suite is an integrated programming solution designed for any kind of fluid jet cutting machines (laser, plasma, oxy-cutting, waterjet) as well as for 2D routing, punching-nibbling and combined-technology machines. Whichever the machines you operate, **act/cut** is optimally configured to rationalize your programming process while taking into account the specificities of each technology or machine.

#### Complementary modules can be optionally integrated to act/cut:

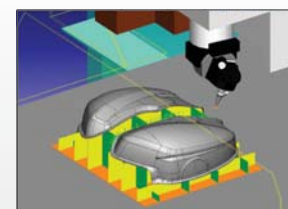
- 3D import and unfolding of sheet metal parts,
- 3D import and automatic machining for wood parts (routing),
- library of developed shapes for boiler making,
- transformation of pictures and fonts into CAM ready files for cutting,
- cutting process management (manufacturing orders, stock, launching orders) and data import from/export to production management and ERP systems.



### 3D cutting

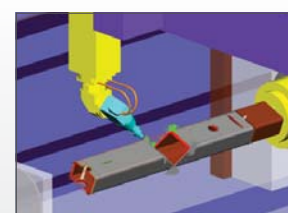
Alma has developed a highly-efficient solution for the programming of 5-axis cutting machines and cutting robots.

Through a simple and intuitive user interface, **act/cut 3d** is dedicated to the programming of any type of 3D-cutting machines regardless the number of axes or the cutting technique used (laser, plasma, waterjet, or routing). **act/cut 3d** can meet any kind of requirements, including high-level manufacturing requirements for the cutting of complex parts.



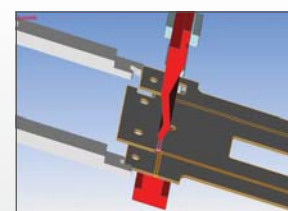
### Tubes cutting

**act/tubes** is a dedicated and comprehensive CAD/CAM solution that can control any type of tube-cutting machines and robots (2D machines with rotative axis, 4-axis machines dedicated to tubes cutting, 5-axis machines with one or several rotative axes, robot cells aimed at cutting tubes) and manage all the steps of the tube-cutting process, from the tube modeling to the CNC program generation.



### Bending Sheet metal unfolding

**act/bend** enables you to program any kind of CNC press-brakes and to simulate the overall bending process. It interacts with the **act/unfold** module for 3D sheet-metal part import and unfolding.

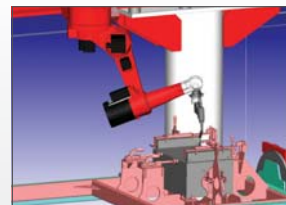


## Applicative software

### Robot welding

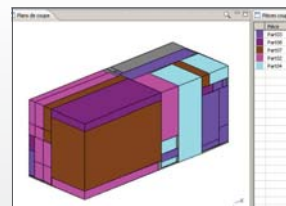
**act/weld**, dedicated to the offline programming of arc-welding robots, helps optimize the utilization rate of your robots, resulting in increased flexibility and improved productivity.

**act/weld** enables you to program a robot from a virtual scene and qualified welding conditions. **act/weld** combines welder know-how together with programming and simulation tools that enables you to create programs in optimal conditions.



### 3D nesting for cutting materials in blocks

**act/cube** is a powerful 3D nesting software intended for professionals specialized in cutting materials such as foam, polystyrene, marble, wood but also deep-frozen food. From a set of raw-material blocks and a set of outputs to be produced, **act/cube** automatically calculates the 3D layout using a powerful optimization algorithm. This results in an optimized use of material, and therefore, significant material and time savings.



## Software components

### Alma's algorithms delivered in the form of mathematics libraries to software developers.

In the sheet-metal working/robotics CAD/CAM market, Alma is the only publisher to sell an application software and some of its algorithms in the form of software components. These components can be integrated to applications developed by third parties: CAD/CAM software developers/publishers working on specific market segments or manufacturers developing their own software.

### Nesting

As a pioneer since 30 years in the field of cutting optimization and automatic nesting of complex shapes for the cutting of materials in sheets, Alma provides CAD/CAM software developers with its unique experience in nesting:

- **PowerNest** is powerful and comprehensive library for automatic nesting. This library has been designed to develop optimization applications for 2D nesting or CAM cutting and can be used in a wide range of sectors.
- **Opaline** is a software component for optimized bar, rectangle and parallelepiped nesting. Opaline provides nesting algorithms in one, two or three dimensions.



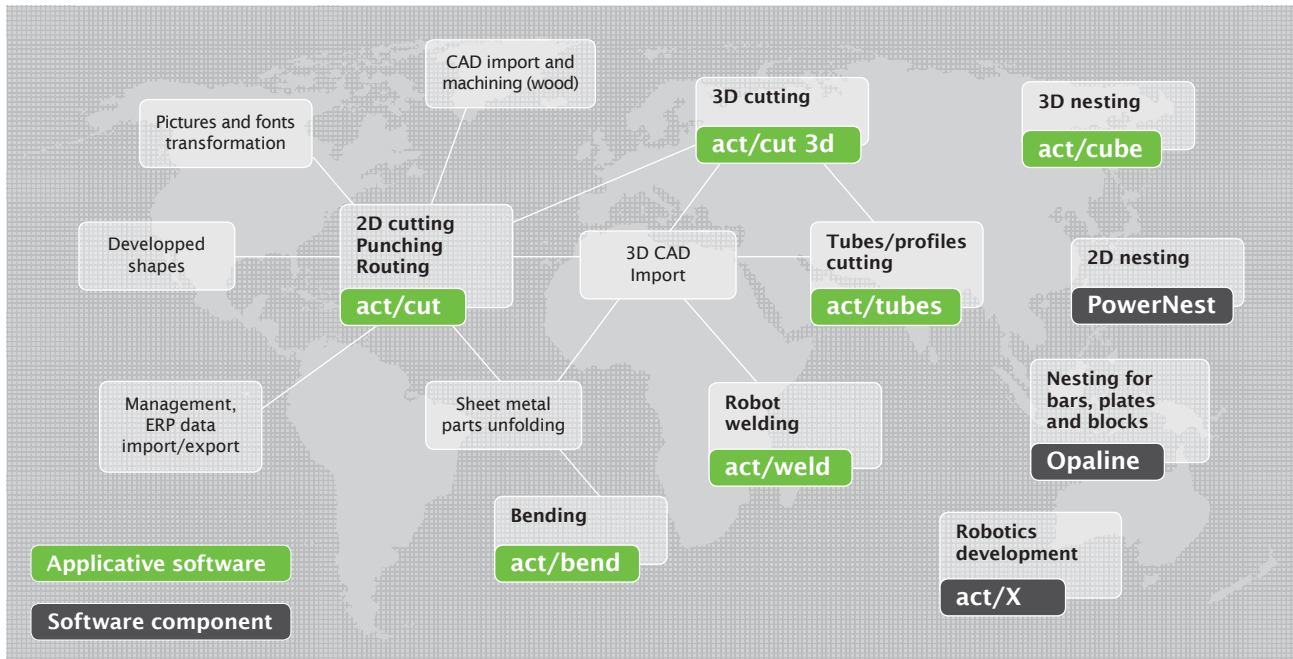
### Robotic applications development

**act/X** is an activeX component library that enables you to develop robotics software or animation applications involving 3D articulated objects (3D simulation software, robot programming software, simulation of machines moving in space, etc).





# The most comprehensive CAD/CAM software product range for cutting, sheet-metal working and robotics



## A CAD/CAM software company that combines innovation and international presence

**Known for over 30 years for its expertise in automatic nesting of complex shapes for cutting, Alma is a leading company in the field of software for sheet-metal working, cutting and robotics, and is well established worldwide.**

Our application software is marketed via a worldwide distribution network that includes country subsidiaries (Italy, Germany, China, Brazil and USA), dedicated distributors, integrators, partners, manufacturers or software publishers.

While developing applicative software, we also sell our algorithms in the form of "software components". Both activities complement each other and benefit from our valuable technical expertise guaranteeing a complete control of our products, which enables us to better meet our customers' needs..



## Research and innovation

Since the very beginning, Alma has been designing and developing innovative solutions to optimize material consumption and machine production capacity. Alma has also contributed to the development of emerging technologies by closely working with machine manufacturers. Every year, 20% of Alma's turnover are reinvested in R&D.

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