

**FORM 2**  
**FORM 3**



**Die Sinking EDM**

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**FORM 2**



**FORM 3**

The best price-performance ratio, the answer to the most varied application requirements

## Highlights

High performance entry-level models

### Swiss original high performance generator

FORM 2 and FORM 3 are equipped with the advanced generator of GF AgieCharmilles. In a number of patented technology to establish the world latest quality and performance standards.

Intelligent discharge process collection control, improves the uniformity and quality of the erosion surface.

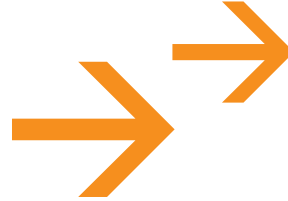
Max. removal rate 400mm<sup>3</sup>/min  
(copper-steel )

### AC FORM HMI

- The latest GF MS HMI
- Clear icons, easy to use
- Reasonable interface layout, flexible operation

# Mechanical structure

High Rigidity, High Precision



### Main machine

Short C-frame to maintain precise spark gap.

Finite element analysis and full physical verification achieve high rigidity and unwavering precision.

Z-axis plate surface for different manual chucks.

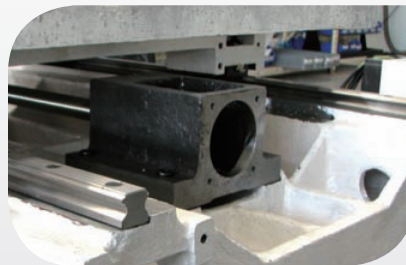
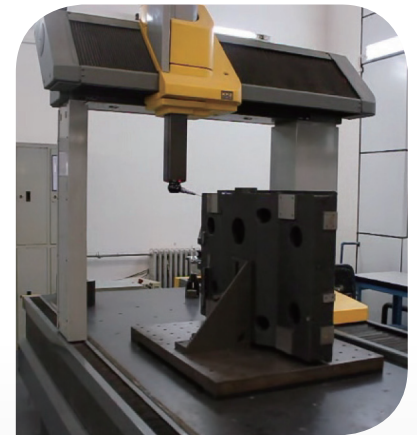


### Dielectric unit

Reduce the floor space thanks to dielectric unit with U-frame structure.

### Coordinate measuring machine (CMM)

The machining accuracy of key parts is checked with CMM to guarantee the manufacturing accuracy.



### Guideway and ball screw

High precision linear guideway and ball screw are used for achieving better positioning accuracy.

### Laser verification

Before delivery, every machine is measured with a laser interferometer to verify the positioning accuracy according to ISO 230-2.

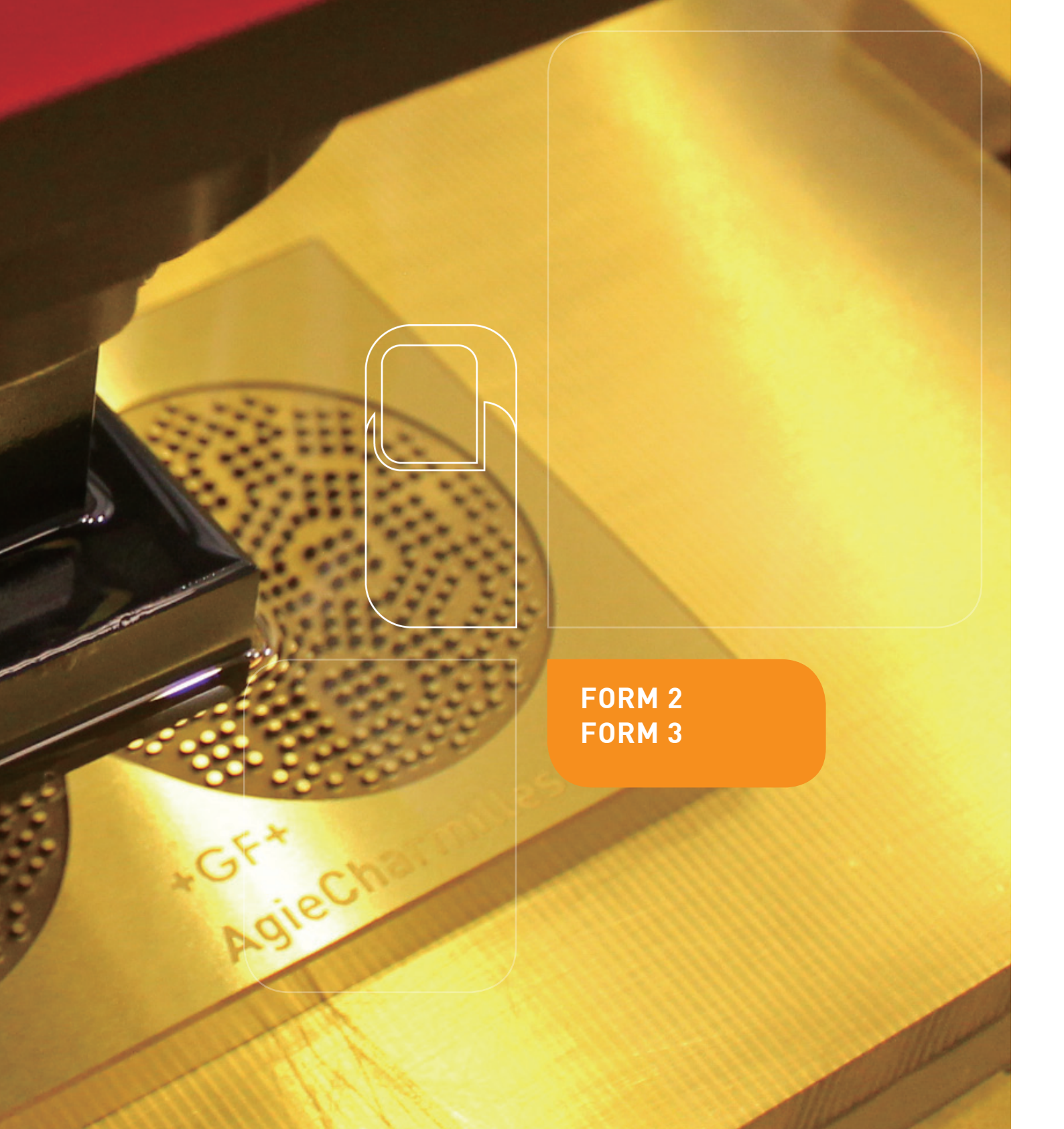






Achieve more...





FORM 2  
FORM 3

FORM 2

FORM 3

# Generator

High performance, high reliability



## Advanced generator and wide application

The EDM process is continuously optimized with every impulse, drastically reducing electrode wear and improving the quality of surface finish.

The excellent quality of surface finish can be obtained with machining large area or large cavity.

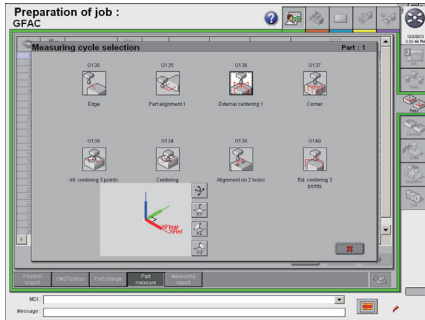
The fast lifting speed meets the requirements of machining "rib" workpiece and "subgate" workpiece.

The high-power generator has maximum output of 80A on FORM 2 and 140A on FORM 3 with an option.



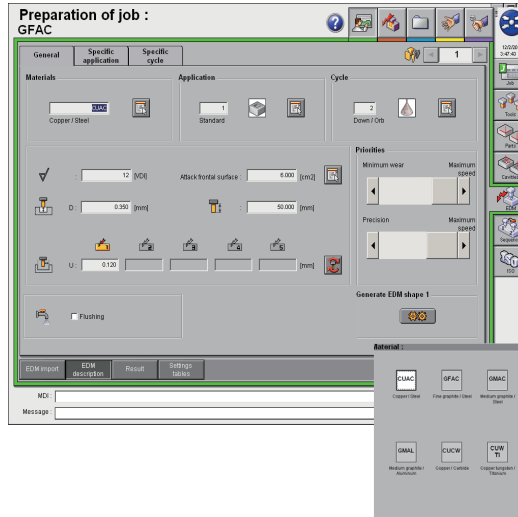
# AC FORM HMI

The latest HMI of GF AgieCharmilles



## Workpiece measuring

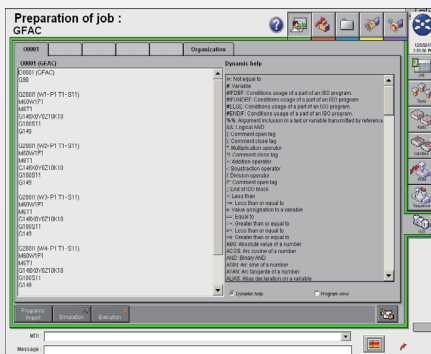
Various workpiece measurement functions, easy to use.



## Application type and processing method

Reliable "TEC expert system" has a lot of parameters for complicated processing type.

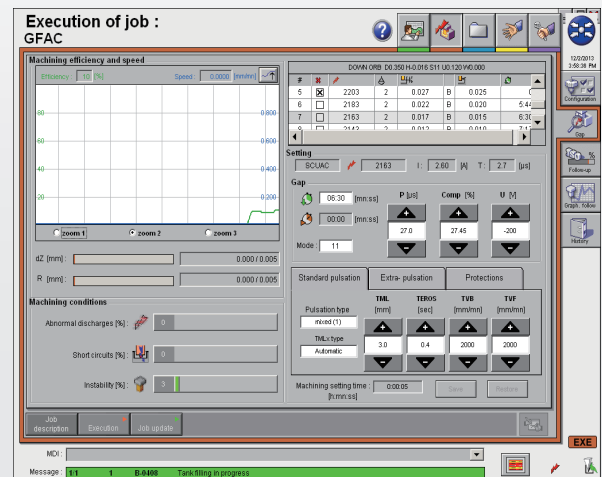
As many as 11 types of electrode/workpiece material and a variety of applications, can be widely applicable to various machining field.



## ISO

To generated automatically ISO program according to setting task elements: electrode list, workpiece list, cavity list, TEC expert system and the processing sequence.

In the vast majority of cases, the program can be executed directly or modified. The system also supports to edit ISO program.



## Real-time monitoring process

The current state of the processing stability and discharge efficiency is clear at a glance.

The information of whole process will be automatically memorized, and a detailed report file will be created after the erosion is finished.

## Milling

### High-Speed and High-Performance Milling Centers

In terms of cutting speed, HSM centers are 10 times faster than conventional milling machines. Greater accuracy and a better surface finish are also achieved. This means that even tempered materials can be machined to a condition where they are largely ready to use. One essential advantage of HSM is that with systematic integration, the process chain can be significantly shortened. HSM has developed alongside EDM into one of the key technologies in mold and tool making.

## EDM

### Electric Discharge Machines

EDM can be used to machine conductive materials of any hardness (for example steel or titanium) to an accuracy of up to one-thousandth of a millimeter with no mechanical action. By virtue of these properties, EDM is one of the key technologies in mold and tool making. There are two distinct processes – wire-cutting EDM and die-sinking EDM.

## Laser

### Laser Ablation

Laser ablation supplements and extends the technologies offered by GF AgieCharmilles. With our laser technology we enable you to produce texturizing, engraving, microstructuring, marking and labeling of 2D geometries right through to complex 3D geometries. Laser ablation, compared to conventional surface treatment using manual etching processes, offers economic, ecological and design advantages.

## Customer Services

### Operations, Machine and Business Support

Customer Services provides with three levels of support all kind of services for GF AgieCharmilles machines.

Operations Support offers the complete range of original wear parts and certified consumables including wires, filters, electrodes, resin and many other materials.

Machine Support contains all services connected with spare parts, technical support and preventive services.

Business Support offers business solutions tailored to the customer's specific needs.

## Automation

### Tooling, Automation, Software

Tooling for fixing workpieces and tools; automation systems and system software for configuring machine tools and recording and exchanging data with the various system components.





**Contact**

[www.gfac.com](http://www.gfac.com)

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**AgieCharmilles**

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