

AgieCharmilles

# DRILL 20



## Drilling starting holes with GF Machining Solutions

# Quick, fine, reliable and powerful

### Short setup time

Process monitoring and optimization are implemented via the operator console. Sensors for short circuits, temperature and liquid level ensure safe operation. Numerical controlled axes X, Y and Z with travel paths of 300 x 200 x 300 mm (11.8 x 7.8 x 11.8 in), and a variety of touching cycles offers convenience for the operator when set up.

### Simple data input and great application spectrum

The high-speed drill DRILL 20 has an integrated rotating spindle. The axes X, Y and Z are motor powered and controlled by CNC. The cast-iron open-front frame construction guarantees optimum temperature stability. The data input on the operator console is quick and simple. Technology settings are selected automatically by material electrode/piece, piece height and electrode diameter. Touching cycles can be programmed and called up with a few commands.



## Main functions of the human-machine interface (HMI)



### Process optimization

- Display erosion parameters
- Display erosion status
- Display erosion time
- Optimizing technology parameters



### Work preparation

- Multi holes, import of position data (ISO, TXT)
- Create, edit and delete job
- Data transfer via LAN and USB

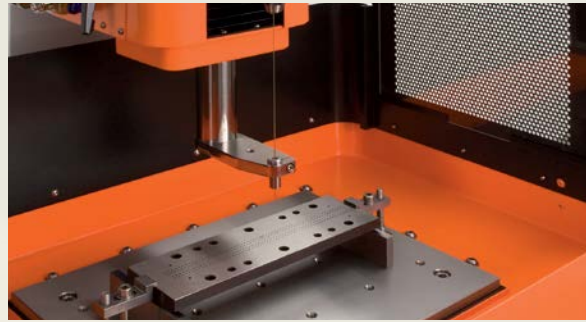


### Easy Drill

- Single and multi-hole pattern, array rectangular or circular
- Automatic technology selection according to: piece material and height, electrode material and diameter
- Graphic control and simulation program
- Onboard operating manual
- Multi holes with multi-technologies

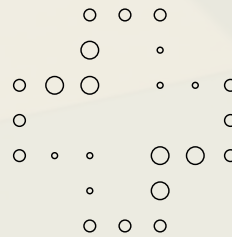
### Fine hole drilling

DRILL 20 is widely used for drilling starting holes with the electrode range  $\varnothing$  0.1–3 mm (0.004–0.12 in) and with electrode materials brass, copper and carbide, and workpiece materials steel and carbide. The newly added technologies for electrode  $\varnothing$  0.1–0.3 mm (0.004–0.012 in) are suitable for drilling fine start holes on lead frames and high-speed stamping molds, etc. DRILL 20 is a sensible complement to GF Machining Solutions wire cut EDM.



### Machine setup

- Automatic and manual axis movement
- Choice of four speeds of axes X, Y, Z:  
high, middle, low or step by step
- Edge find
- Inside/outside center find
- Corner find



Eroding small holes of various diameters and allowing for different materials and workpiece heights



### Technical data

### DRILL 20

Electrode diameter	mm (in)	0.1 up to 3 (0.004 up to 0.12)
Maximum drilling depth	mm (in)	200 (7.78)
Maximum workpiece weight	kg (lb)	300 (660)
Travel paths of axes X, Y and Z	mm (in)	300 x 200 x 300 (11.8 x 7.8 x 11.8)
Work table size (width x length)	mm (in)	400 x 300 (15.7 x 11.8)
Travel path of the electrode guide	mm (in)	100 (3.9)
Heavy duty generator	A	30
Dielectric volume	l (us gal)	16 (4.2)
Mains connections	V, Hz	3 x 400, 50/60
Maximum power consumption	kVA	5
Display	TFT	Touch screen, 12.1"
Pump operating pressure	bar	70
Machine dimensions	mm (in)	1340 x 910 x 1940 (52.7 x 35.8 x 76.4)
Total weight of the machine	kg (lbs)	870 (1918)

Options: fine drill holders and guides, filtration system, deionization unit, AC CAM DRILL

## At a glance

We enable our customers to run their businesses efficiently and effectively by offering innovative Milling, EDM, Laser, Additive Manufacturing, Spindle, Tooling and Automation solutions. A comprehensive package of Customer Services completes our proposition.

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



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