

# DRILL 20

## DRILL 20 At a glance

Quick, simple, precise and reliable:  
drilling starting holes with GF AgieCharmilles



### Small drill holes

DRILL 20 is the sensible complement to ED wire cutting systems. Electrodes of 0.3 – 3 mm (0.012 – 0.12 in), optional 0.15 – 3 mm (0.0059 – 0.12 in), are used on the CNC-controlled highspeed vertical drill from GF AgieCharmilles. With this field of application, DRILL 20 is optimally suited for the majority of workpieces in which starting holes have to be made for ED wire-cutting.

### Short set-up time

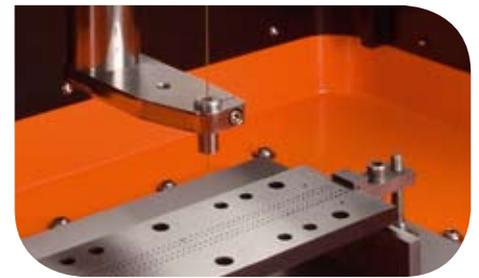
Process monitoring and optimization are implemented via the operator console. Sensors for short circuits, temperature and liquid level ensure safe operation. With an optimum price/performance ratio, the high-speed drill DRILL 20 is the ideal complement for ED wire cutting. DRILL 20, with drilling depths of up to 200 mm (7.78 in) and electrodes of 0.15 up to 3 mm (0.0059 up to 0.12 in) diameter, is the ideal vertical drill for an extensive range of applications.

#### Machine Setup

- Automatic and manual axis movement
- Choice of 4 speed of axes X,Y,Z: high, middle, low or step by step
- Edge find
- Inside/outside center find
- Corner find

### Simple data input and great application spectrum

The high-speed drill DRILL 20 has an integrated rotation 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. With travel paths of 300 x 200 x 300 mm (11.8 x 7.8 x 11.8 in) of the X, Y and Z axes and a permissible workpiece weight of 300 kg (660 lb), DRILL 20 is the ideal starting hole drill for a wide spectrum of applications. The data input on the operator console is quick and simple. Touching cycles can be programmed and called up with a few commands.





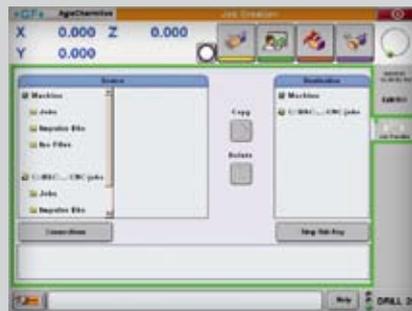
Technical Data		DRILL 20
Electrode diameter	mm (in)	0.3 up to 3 (0.012 up to 0.12)
Option small holes	mm (in)	0.15, 0.20, 0.30 (0.0059, 0.0078, 0.012)
Maximum drilling depth	mm (in)	200 (7.78)
Maximum workpiece weight	kg (lb)	300 (660)
Travel paths of axes X, Y and Z	mm (in)	300 x 200 x 300 (11.8 x 7.8 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 dimension	mm (in)	1340 x 910 x 1940 (52.7 x 35.8 x 76.4)
Total weight of the machine	kg (lb)	870 (1918)

### Main functions of the human/machine interface



#### Control and process optimization

- Display erosion parameters
- Display erosion status
- Display erosion timer
- Optimizing technology parameters



#### Data management Transfer

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



#### Safe and easy to program

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

## DRILL 20

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

## At a glance

### Achieve more

We commit to a promise.  
That promise is "Achieve more".  
It's a commitment to create the  
right conditions for our customers  
to obtain competitive results.  
When our customers win, we win.

### GF AgieCharmilles

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

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**+GF+**

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**Achieve more...**