

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

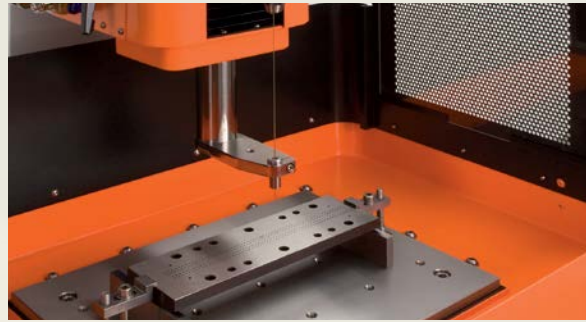


Easy Drill

- 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

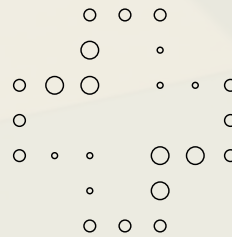
Fine hole drilling

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



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