ALICAT SCIENTIFIC

Designed for Diamonds



Mass Flow & Pressure Controllers for Lab Grown Diamond CVD process

Repeatable
Devices measure temperature, pressure, and gas flow to ensure you get the same results every time.

Experience
Alicat's India-based team has helped grow diamonds for nearly a decade.

Delivery
Get the fastest delivery of MFC & PC sets.

ALICAT SCIENTIFIC

alicat.com/diamonds

Designed for Diamonds



MASS FLOW CONTROLLER

Alicat's diamond mass flow controllers control growth rates by creating a precise balance of carbon, hydrogen, and oxygen. During the ionization process, Alicat controllers account for any changes in atmospheric and system temperature and pressure. Any successful recipe can be exactly replicated across thousands of batches. Alicat's multi-gas MFCs can be used for hydrogen, carbon dioxide, methane, argon, oxygen & other gases without any loss in accuracy.

Steady State Control Range:
0.01–100% of full scale

Control response:
30 ms

Repeatability:
±(0.1% of reading + 0.02% of full scale)

Leak Integrity:
MC Leak integrity: 10e−9 atm-cc/sec

Accuracy:
As good as ±0.5% of reading

PRESSURE CONTROLLER

Alicat's diamond pressure controllers provide stable control of system pressure during CVD processes. Devices are equipped with a fast-acting proportional control valve which rapidly responds to maintain a stable pressure in chamber. A streamlined flow body and helium leak testing ensure exceptional leak integrity and no ruined batches.

Steady State Control Range:
0.5–100% of full scale

Control response:
30 ms

Repeatability:
±0.08% of full scale

Leak Integrity:
10e−9 atm-cc/sec

Accuracy: As good as ±0.125% of full scale



Tucson, Arizona, USA
World Headquarters
+1 888-290-6060
info@alicat.com

Thane (W), Maharashtra, India
Sales & Service Center
+91-9930047455
india@alicat.com

With offices in China and Europe, and representatives worldwide

alicat.com/diamonds