

Questionnaire for artificial diamonds

For a customized quotation please fill out this form.
Your information will help us recommend the best solution for your application.

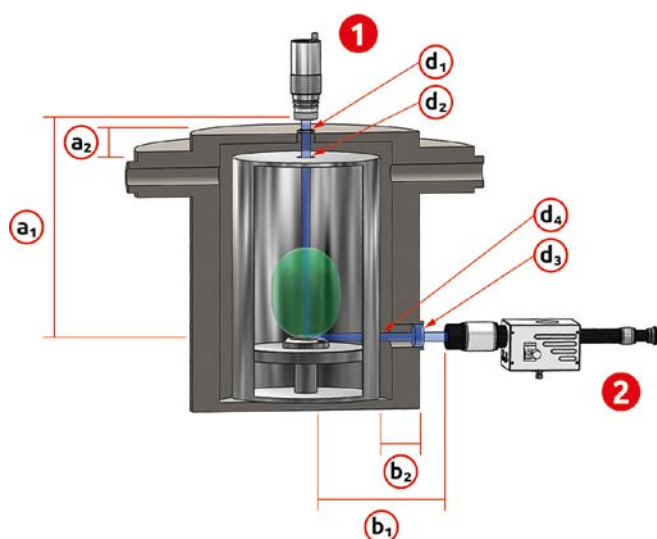
Client Address

Company	Department	Web
P.O. Box	Street	
City Code	City	Country
Contact Person	Tel.	E-mail

Industry

Application

Description of the measurement (Please attach pictures or drawings if possible).



Measuring position of the pyrometer

From the top (1)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
From the side (2)	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Other	_____	
Measuring distance	a ₁ = _____ mm	b ₁ = _____ mm
Length of sighting tube	a ₂ = _____ mm	b ₂ = _____ mm
Diameter of sighting window (free opening)	d ₁ = _____ mm	d ₃ = _____ mm
Diameter of opening	d ₂ = _____ mm	d ₄ = _____ mm

CVD with plasma

Nature of the plasma	<input type="checkbox"/> evolving CH ₄	<input type="checkbox"/> other gas compounds _____
Is the plasma produced by microwave?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

Temperatures

Temperature of the diamond	from _____ to _____ °C
Temperature of the support	from _____ to _____ °C
Temperature inside the furnace/plasma	from _____ to _____ °C

Dimension of the diamond

What is the size of the seed crystal at the beginning?	_____ mm	Number of seed crystals _____	
What is the expected size of the diamond at the end?	Width _____ mm	Depth _____ mm	Height _____ mm

Information on the process

How long does the growing process take? _____ hours days

Speed of growth _____

At what point do graphite deposits occur? _____ hours

Is the crystal moving? Yes No

Is the crystal permanently visible? Yes No

How is the temperature measured so far? not at all Thermocouple Pyrometer

other _____

Ambient temperature of the pyrometer _____ °C

Material of the sighting window? Quartz Sapphire Borosilicate

other _____

Specification of the measured value recording

Measure at the beginning of the process before the first carbon/graphite deposition? Yes No

Measure once the carbon/graphite deposition? Yes No

Type of pyrometer portable stationary

Sighting device Through-the-lens Video camera Laser spot light

Signal processing

Output signal/Digital interface 0/4-20 mA RS 485 USB IO-Link

other _____

Should the measured values be recorded? Yes No

Is a central data recording existing? Yes No

Additional details or description

