Questions for preparing an offer for viscosity measuring systems

Do you require a kinematic (using glass tubes) or rotational viscosity system?
(Please note: Camlab are only able to supply kinematic systems)

Regarding application:

Please answer as many questions as possible, to ensure that our offer will meet your requirements.

1 What kind of product/ products (polymers, oils, …) should be analyzed?

a) ..... b) ..... c) .....

1.1 If sample is a polymer solution (e.g. PET, polyamide): Which solvent is used?

a) ..... b) ..... c) .....

Polymer concentration

☐ none (pure substance) ☐ 0.5 %
☐ 1.0 % ☐ 8.4 %
☐ > 8.4 % ☐ others: .....%

1.2 If sample isn't polymer solution: Which is absolute viscosity or viscosity range of your sample?

Approx. Viscosity = ... mm²/s

1.3 Does sample contain particles or fillers, e.g. glass fibres in case of reinforced polymers?

☐ no
☐ yes: ……(description of non-solubles)

1.4 Are samples transparent or opaque / colour-intensive?

☐ transparent
☐ opaque: ……. .....

2 Measuring temperature

☐ 20°C ☐ 25°C ☐ 30°C
☐ 37°C ☐ 40°C ☐ 100°C
☐ 135°C ☐ other temperature: ..... °C

3 Flow time range you want to work, preferably?

☐ max. 100 s ☐ > 100 s to max. 200 s ☐ > 200 s

4 Please mention any standard you work according to (if there is any):

☐ DIN ..... ☐ ISO ..... ☐ ASTM .....
☐ other .....

5 How many samples should be measured per day (working shift)?

☐ 1 – 5 ☐ 6 – 10 ☐ 11 – 20
☐ 21 – 50 ☐ more than 50

Regarding viscometry system:

6 Which instrument or instrument combination should be offered, preferably?

☐ Manual time measurement by stop watch
☐ ViscoClock *plus*
☐ AVS 370 system (PC controlled system)
☐ AVS 370 system for dilution series (for intrinsic viscosity only)
☐ AVS 470 (Stand alone system)
☐ AVSPro III

In case of AVS 370: Configuration with or without waste system?

☐ Without waste system: For discharge and rinse, viscometer is taken out of the thermostat bath
☐ With waste system: Viscometer keeps installed during discharging / rinsing

7 How many measuring positions are required, for measurement at the same time?

☐ 1 ☐ 2 ☐ 4 ☐ 8

8 Which detection system for flow time measurement should be applied, preferably?

☐ Optical (by light barriers) ☐ Thermal (by TC sensors)

9 What type of viscometer is preferred?

☐ DIN-Ubbelohde (DIN, ISO)
☐ ASTM-Ubbelohde (ASTM, ISO)
☐ DIN Micro-Ubbelohde
☐ Cannon-Fenske routine (ISO, ASTM)
☐ Cannon-Fenske opaque (DIN, ISO, ASTM)
☐ Ubbelohde for dilution series
☐ Micro-Ostwald

10 If known: preferred capillary size
(here: sizes for DIN Ubbelohde viscometers, of course other sizes are possible for other)

☐ 0	☐ 0c	☐ 0a	☐ I	☐ Ic	☐ Ia
☐ II	☐ IIc	☐ IIa	☐ III	☐ IIIc	☐ IIIa
☐ IV	☐ IVc	☐ IVa	☐ V	☐ unknown	

11 Which thermostat should be used, preferably?

☐ CT 72/P (10 … 60°C; 2 measuring positions)
☐ CT 72/2 (up to 150°C; 2 measuring positions)
☐ CT 72/4 (up to 150°C; 4 measuring positions)
☐ other ……..