



ΤΕΧΝΙΚΗ ΠΡΟΔ/ΦΗ			
ΤΙΤΛΟΣ	ΑΥΤΟΜΑΤΗ ΣΥΣΚΕΥΗ ΜΕΤΡΗΣΗΣ ΙΞΩΔΟΥΣ ΚΑΙ ΠΥΚΝΟΤΗΤΑΣ STABINGER VISCOMETER		
ΟΝΟΜΑΤΕΠΩΝΥΜΟ/ ΥΠΟΓΡΑΦΗ	ΕΛΕΝΗ ΓΑΡΓΑΛΙΩΝΗ		
ΕΓΚΡΙΘΗΚΕ		ΗΜΕΡΟΜΗΝΙΑ	

## TECHNICAL SPECIFICATIONS

### AUTOMATIC DEVICE FOR MEASURING VISCOSITY AND DENSITY STABINGER VISCOMETER

- It must be consisted by two (2) separate cells embodied in the same block for simultaneous measurement of dynamic viscosity and density.
- It must be able to perform automatic calculations of kinematic viscosity from both the aforementioned measurements
- It must comply on performing the measurements according to ASTM D 7042
- It must be suitable for measurements of kinematic viscosity, in samples of liquid petroleum products and synthetic lubricants.
- All bellow analytical specifications must be met accordingly

Range of measurements:      0.2 to 10000 mPa · s for dynamic viscosity  
   0.2 to 10000 mm<sup>2</sup> / s for kinematic viscosity  
   0.65000 to 2.000 g/cm<sup>3</sup>for density  
   -40 to 100 °C for temperature

Accuracy:                              five (5) significant digits for viscosity  
   0.0001 g/cm<sup>3</sup> for density  
   0.001 °C for temperature

Repeatability:                        0.10% for dynamic and kinematic viscosity

Reproducibility:                    0.35% for kinematic viscosity CRM  
   0.0005 g/cm<sup>3</sup> for density

Maximum sample quantity:    5ml

- It must include an embodied air pump for cell drying
- It must be able to automatically calculate Viscosity Index (VI)
- It must have method storage memory including factory developed methods, while being able of storing new methods, user-developed
- Storage memory must be capable for storing at least 40 measurement results



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- It must include log storage for calibration results
- It must have RS 232 output for connecting with PC and printer
- It must include a digital reading screen
- It must have connectivity with an external controls input device (keyboard) which must be supplied.
- It must have connection capacity to an automatic sampling device and a washing pump with appropriate solvents
- It must be accompanied by a suitable printer
- It must include device installation service, for bringing it in a ready-for-use state, as well as users training
- Supplier should have certified ISO quality conformance in the field of installation and maintenance for the relevant devices
- All quotes must include the clientele where this device is also installed in Greece

During delivery, the device must be accompanied by all necessary replaceable parts for its smooth operation for two (2) years. In addition the device has to be accompanied by detailed installation, operation, and maintenance instruction handbooks both in English and Greek.

All quote submissions should explicitly report satisfaction or dissatisfaction over every single requirement out of our abovementioned technical requirements list.