

The N $\mu$ Line Cone & Plate Viscometer is based upon the proven historical concept and long established design of the Research-Equipment London's (REL) Analogue Viscometer which was used as the original instrument for the BS3900 Standard.

The N $\mu$ Line Cone & Plate Viscometer is a self calibrating, highly adaptable 'At-Line' instrument designed to give you a cost effective and robust option between delicate laboratory instruments and the lower end 'Go-No-Go' type viscosity measurement devices currently on the market.

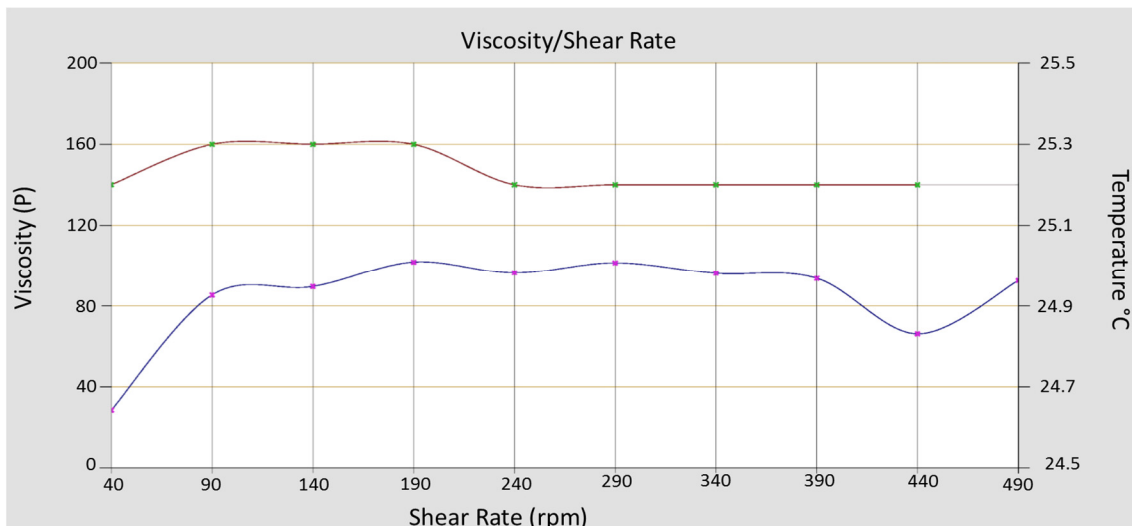
Readings can be taken at variable shear rates, using multiple speeds and at temperatures between 10°C to 230°C.

It's rugged design continues to meet the high demands of cutting edge manufacturing environments due to both it's reliability and it's performance; with many new features designed to meet the diagnostic needs of modern production standards.

With process applications in the paint, varnish, inks, resins, food, bitumen, oil, adhesives and the pharmaceutical industries to name but a few the N $\mu$ Line Cone & Plate Viscometer has been designed to meet these and other manufacturing markets.

Its stand alone, 'At-Line' capabilities are enhanced by new intuitive Windows based software, compatible with windows 7, 8 & 10, which takes on board many of the requirements that customers have, long been asking for; while still maintaining the historical foundations of the original ICI Cone & Plate instruments, on which the N $\mu$ Line Cone & Plate technology is based.

With inbuilt calibration routines and service management tools all supported from our UK manufacturing facility combined with our UK and worldwide service technicians gives you the back-up of a global organisation.



PC Interface output graph showing sample Viscosity plotted against Shear Rate, one of the many new additional features of the N $\mu$ Line Cone & Plate

#### Features & Benefits

- 11 pre-set speeds combined with the ability to set custom speeds, fully variable between 5.86 and 900rpm.
- High Rate of shear - see details below.
- Low Temperature Model REL0100 10°C to 100°C variable Temperature range with sub-ambient capabilities
- High Temperature Model REL0230 25°C to 230°C variable Temperature range.
- Instrument range, plate temperatures and viscosity reading with selectable units all software displayable
- PC Interface Software is provided to allow the user to analyse and record results as well as run sweeps as required.
- The Viscometer is pre-calibrated, certificated and ready to use straight out of the box
- Free cone of choice with all new machines, with easy self-calibrating routines for quick and easy set-up
- Sample Size less than 1ml.
- High quality, value for money product manufactured to BS EN ISO2884-1: 2006
- Designed to withstand use in rugged manufacturing environments.
- Durable design for extended frontline service

Operating the instrument is simple and straight forward, with operator and technician level security to prevent unwanted changes to ranges and temperatures to be made on production & process lines . It is easily cleaned and samples are tested in 60 to 120 seconds depending upon the material.

Multispeed Range Table												
Cone	Viscosity Range (Poise) Vs Speed (rpm)											Shear Rate
	5.86	11.7	23.4	46.9	60	93.7	120	187.5	375	750	900	
2P	0-256	0-128	0-64	0-32	0-25	0-16	0-12	0-8	0-4	0-2	0-1.6	80-10,000 sec <sup>-1</sup>
5P	0-640	0-320	0-160	0-80	0-64	0-40	0-32	0-20	0-10	0-5	0-4	80-10,000 sec <sup>-1</sup>
10P	0-1280	0-640	0-320	0-160	0-120	0-80	0-64	0-40	0-20	0-10	0-8	80-10,000 sec <sup>-1</sup>
20P	0-2560	0-1280	0-640	0-320	0-250	0-160	0-128	0-80	0-40	0-20	0-16	20-2,500 sec <sup>-1</sup>
40P	0-5160	0-2560	0-1280	0-640	0-500	0-320	0-250	0-160	0-80	0-40	0-32	20-2,500 sec <sup>-1</sup>
100P	0-12800	0-6400	0-3200	0-1600	0-1200	0-800	0-600	0-400	0-200	0-100	0-80	20-2,500 sec <sup>-1</sup>

<b>Standard Speed:</b>	5.86, 11.7, 23.4, 46.9, 60, 93.7, 120, 187.5, 375, 750, 900
<b>Cone Types:</b>	Cones available to suit the ranges above
<b>Temperature Ranges:</b>	10°C to 100°C and 25°C to 230°C with variable temperatures, both ranges are available with variable temperatures having a resolution of 0.1°C
<b>Selectable Units:</b>	°C or °F, rpm or sec <sup>-1</sup> , Poise or Pa.s.
<b>Features:</b>	Piezo Read button unaffected by contaminants. Auto - Zero. Recalibration by PC Interface software.
<b>Accuracy:</b>	±2% of full scale, confirmed using calibrated standard oils
<b>Power:</b>	100-240VAC 50/60 Hz Single Phase 150 watts.
<b>Warm Up:</b>	10 minutes from cold.
<b>Digital Display:</b>	Plate Temperature, Instrument Range Poises & Reading Poises.
<b>PC Interface:</b>	USB, instrument range setting and control, with graph plotting and save.