COMMITTED TO THE CUSTOMER SINCE - 1996

VAIDYANATHESHWARA INSTRUMENTS

No. 301/A, 9th Main Road, 3rd Cross, Rajiv Gandhi Nagar, J.B. Kaval, Nandhini Layout Post, Bangalore - 560 096.
Contact : 080-23377266, Mob : 9448080177 / 9632221171 / 9964308118 | Email : viplgroup65@gmail.com | Web : www.viplgroup.com

CALIBRATION CERTIFICATE

"CALIBRATION LABORATORY"

1 Name and Address of the Customer : M/s. MAG ENGINEERING UNIT A
(A Unit of Sandhar Technologies Ltd.)
No. 46A, 3rd Main, 2nd Phase, Peenya,
Bangalore, Karnataka - 560 058.

2 Customer Reference

2.1	SRF No.	: 8525
2.2	Certificate No.	: VI/22-23/8525-16
2.3	Format No.	: VI-FRM-ME-083
2.4	DC No & Date	: SIA/RGP21-22/0365 & 13-03-2023
2.5	Date Of Receipt	: 14-03-2023
2.6	Date Of Issue	: 17-03-2023

3 Details Of Device Under Calibration(DUC).

3.1	Nomenclature	: Viscosity Cup (Ford Cup)
3.2	Make	: ---
3.3	ID No.	: MS16
3.4	Calibration Procedure No./ Ref Doc	: SOP-16-82 / Comparision Method
3.5	No.of Pages	: 2
3.6	Calibration Date	: 17-03-2023
3.7	Calibration Due	: 16-03-2024
3.8	Calibration done at	: VI Mechanical Lab
3.9	Discipline	: Mechanical

4 Environmental Condition

Temperature 20.1-20.3 °C Humidity 53-55 %RH

5 Standards Used for calibration

Sl. No.	Nomenclature	Make / Model	SL No	Traceable Cert. No.	Traceable to	Validity
1	Time Totalizer	Beltronics / 501	251	VI/22-23/INT-ETH-426	VI-Bangalore	20-02-2024

6 Note:

6.1. The Calibration Certificate relates only to the above DUC
6.2. Publication or reproduction of this Certificate in any form other than by complete set of the whole report & in the language, written, is not permitted without the written consent of VI Lab.
6.3. Corrections/erasing, invalidate the Calibration Certificate.
6.4. Calibration of the DUC are traceable to National standards/International Standards
6.5. Any error in this Certificate should be brought to our knowledge within 30 days from the date of this Cert.
6.6. Results Reported are valid at the time of and under the stated conditions of measurements.

Calibrated By
Hemanth Kumara G
(Calibration Engineer)

Checked By
P.Santhosh Kumar
(Lab-In-Charge)

Authorised By
Gangadhar U K

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CALIBRATION CERTIFICATE

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Certificate No. **VI/22-23/8525-16**

Results:

Sl.No.	Kinematic Viscosity Oil Used	Time,x in Sec	Temperature in °C	Viscosity, y in mm²/s	Calculated Viscosity using equation in mm²/s	Error in %	Remarks
1	C 20	21.287	21.5	34.38	34.94	-1.62	Pass
2	C 35	27.324	21.7	65.36	66.06	-1.07	Pass
3	C 100	60.854	21.1	236.67	238.94	-0.96	Pass

Conclusion

The Best Estimate of Viscosity of Oil at Reference Temperature as Shown in Tabular Column Using This Ford Cup is Given by the Equation.

$$v = 5.1559\ t - 74.8177$$

where,

v = kinematic Viscosity in mm²/s

t = Flow Time in Sec

Note

1. Accuracy is Claimed as per ASTM Standard ASTM D 1200
2. Measured Uncertainity : ± 0.45% with 95.45% confidence level with coverage Factor K=2.

Calibrated By
Hemanth Kumara G
(Calibration Engineer)

Checked By
P.Santhosh Kumar
(Lab-In-Charge)

Authorised By
Gangadhar C.K