
Infineum's Comment on the Proposed 3.5 cP Minimum HTHS for Fresh 10W30 Oils

Presented to HDEOCP

August 15, 2001

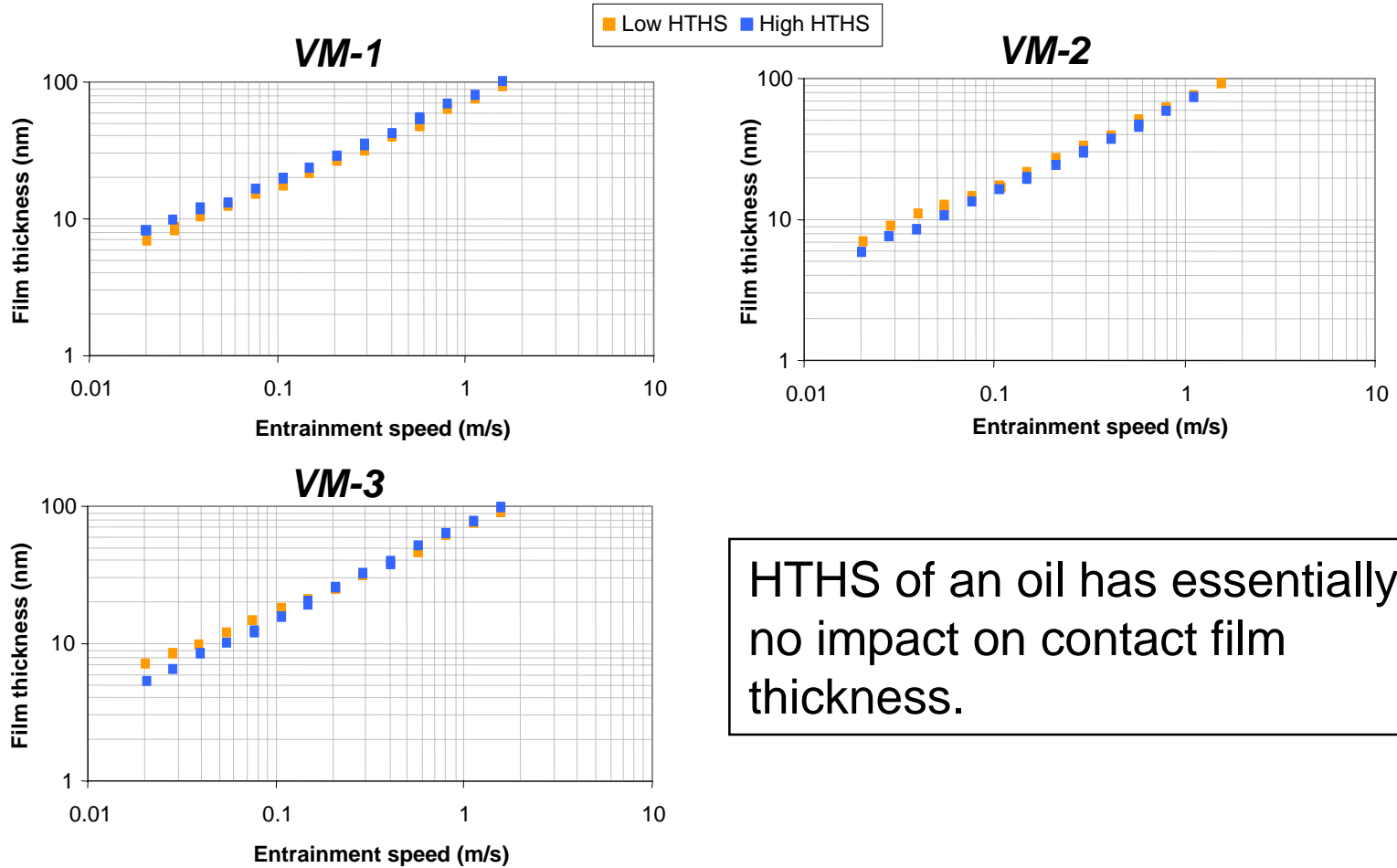
Blend Information:

- 10W30 and 10W40 grades
- Same base stocks were used in all blends.
- PC-9 prototype DI at constant treat rate.
- Identical LOFI at constant treat rate.

Blend Viscometrics

Low HTHS	VM-1	VM-2	VM3
HTHS @ 150C (cP)	3.24	3.22	3.24
KV100 (cSt)	10.66	10.42	10.38
CCS @ -25C (cP)	6817	6704	6933
High HTHS	VM-1	VM-2	VM3
HTHS @ 150C (cP)	3.94	3.93	3.90
KV100 (cSt)	15.18	14.88	13.84
CCS @ -25C (cP)	7239	6874	7239

Contact Film Thickness vs. Entrainment Speed under High Pressure (Elastohydrodynamic [EHD] Regime)



HTHS of an oil has essentially no impact on contact film thickness.

All film thickness measurements were carried out at 100 °C.

Closing Remark:

- Incorporation of more polymer into formulation to raise HTHS does not guarantee increased contact film thickness.