Why is viscosity expressed in ISO grades?

The ISO-VG classification standard is the result of a cooperative effort by ISO (International Standards Organization), ASTM, STLE, BSI, and DIN to create a common viscosity classification scale for use mainly with industrial lubricants. Each ISO-VG grade is established by observation at 40ºC. The range of the grade is defined as ±10% from the mid-point. The steps between one grade and the next higher grade is approximately 50% of the the lower grade as is demonstrated below:

ISO 3448 Viscosity Class[°C]	Kin. Viscosity [mm²/s] Mid-point	Kin. Viscosity [mm²/s] Minimum	Kin. Viscosity [mm²/s] Maximum
ISO VG 2	2.2	1.98	2.42
ISO VG 3	3.2	2.88	3.52
ISO VG 5	4.6	4.14	5.06
ISO VG 7	6.8	6.12	7.48
ISO VG 10	10	9	11
ISO VG 15	15	13.5	16.5
ISO VG 22	22	19.8	24.2
ISO VG 32	32	28.8	35.2
ISO VG 46	46	41.4	50.6
ISO VG 68	68	61.2	74.8
ISO VG 100	100	90	110
ISO VG 150	150	135	165
ISO VG 220	220	198	242
ISO VG 320	320	288	352
ISO VG 460	460	414	506
ISO VG 680	680	612	748
ISO VG 1000	1000	900	1100
ISO VG 1500	1500	1350	1650