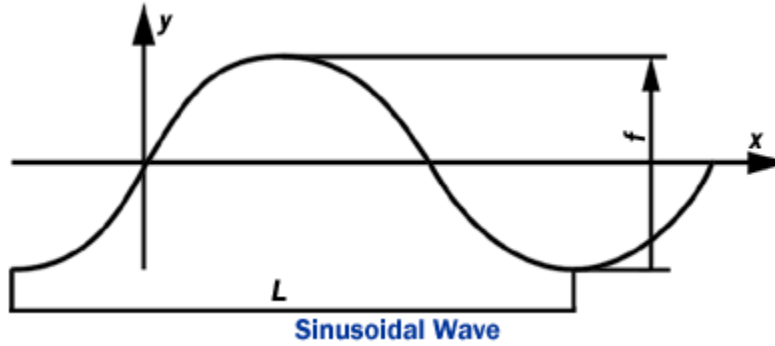


I Units of Flatness

The formula for I - Unit calculation when manual measurement is involved is

$$I = 2.47 (f/L)^2 \times 10^5$$

where f is the wave height and L is the cycle length. This formula is derived from the assumption that the deviation from flatness follows a sinusoidal wave form, as illustrated below.



According to this formula, an out-of-flat condition of 0.125" height in a 18" cycle calculates to 12 I Units.

Height (in.)	Wavelength (in.)																
	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
1/32 0.0312	4	3	2	2	2	1	1	1	1	1	1	1	1	0	0	0	0
1/16 0.0625	15	12	10	8	7	6	5	4	4	3	3	3	2	2	2	2	2
1/8 0.1250	60	48	39	32	27	23	20	17	15	13	12	11	10	9	8	7	7
3/16 0.1875	136	107	87	72	60	51	44	39	34	30	27	24	22	20	18	16	15
1/4 0.2500	241	190	154	127	107	91	79	69	60	53	48	43	39	35	32	29	27