

# Thermal Growth Recording and Calculation Form

Equipment ID:	Location:
Stationary Machine:	Movable Machine:
Performed By:	Date:

### Stationary Machine

On-Line	Off-Line Temps	On-Line	Off-Line Temps

Sum   $\div$  # of temps  = Avg.

Avg. On-Line - Avg Off-Line

X Height

X Coefficient

Movement =

### Movable Machine

On-Line	Off-Line Temps	On-Line	Off-Line Temps

Sum   $\div$  # of temps  = Avg.

Avg. On-Line - Avg Off-Line

X Height

X Coefficient

Movement =

Material	Coefficient (mils/in <sup>3</sup> /F)	Coefficient (thou/in <sup>3</sup> /F)	Coefficient (mils/in <sup>3</sup> /C)	Coefficient (mm/mm/ <sup>3</sup> C)
Carbon Steel	.0063	.0000063"	.01134	.00001134
Stainless Steel	.0095 - .0098	.0000095" - .0000098	.01764	.00001764
Aluminum	.0125	.0000125"	.02255	.00002255
Nickel Steel	.0073	.0000073"	.01314	.00001314
Brass	.0110	.0000110"	.01980	.00001980
Cast Iron	.0059	.0000059"	.01062	.00001062
Concrete	.0065 - .0080	.0000065" - .0000080"	.01296	.00001296