



GatesFacts™ Technical Information Library
Gates Compass™ Power Transmission CD-ROM version 1.2



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Denver, Colorado USA

Misalignment

Sheave misalignment on V-belt drives should not exceed $\frac{1}{2}$ or $\frac{1}{10}$ " per foot of centers. For micro-v or synchronous belts it should not exceed $\frac{1}{4}$ " or $\frac{1}{16}$ " per foot of centers. For V-belts the generally accepted maximum misalignment before stability (turnover) becomes a serious concern is 6° . Obviously other factors can also influence stability such as insufficient tension, worn grooves, and shock loading. We also need to note that within the $\frac{1}{2}$ for V-belts we would expect no significant impact on belt fatigue life. At 6° misalignment, not only is belt stability an issue, but stress fatigue to the belt would be very significant.