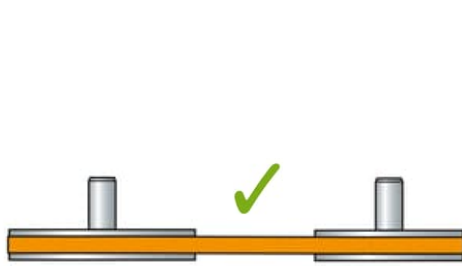


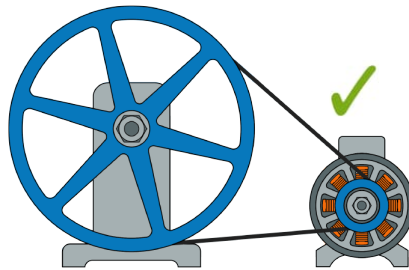


## ALIGNIT247

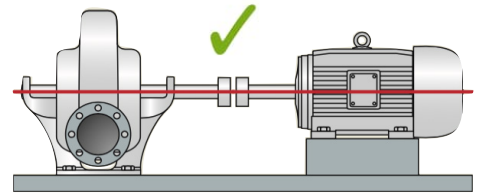
Machines need to be aligned for vertical angle, horizontal angle, and parallel misalignment — including combinations of all three. Consequences of shafts, belt and chain drives misalignment, and incorrect belt tension directly impacts Carbon Tax Reduction, Climate Action Energy Savings, and bottom-line profits.



**BELT / CHAIN ALIGNMENT**



**BELT TENSION**



**SHAFT ALIGNMENT**

### ***A Class Above First!***

Start saving money using Inverter Technologies' ALIGNIT247 services.

-  Misalignment is one of the most significant and most preventable contributors to premature machine failure.
-  Save money on Carbon Tax Reduction and Climate Action Energy Savings by reducing power consumption.
-  Bearings damage accounts for 50% to 60% of motor failures.
-  Reduce unscheduled downtime and maintenance expenses.
-  Increases personnel safety and preventable workplace accidents.
-  Misalignment increases vibration, premature shaft and coupling failure, loosening of bolts/ fasteners, and excessive seal lubricant leakage.
-  Aligning belt drives and chain drives accurately helps to reduce wear on belts, pulleys, sheaves, chains, and sprockets.
-  Addresses improper tensioning which is the leading cause of belt failure.
-  Improved planning and usage of maintenance budgets by reducing onsite spares and parts inventory.

#### **HOW MUCH IS ONE AMP WORTH?**

$$kW = \frac{V \times I \times PF \times \sqrt{3}}{1000}$$



#### **Conditions for this example:**

480V motor drawing 40A, PF is 0.85, and electricity cost \$0.10/kWhr

$$kW = (V \times A \times PF \times 1.732) / 1000$$

$$kW = (480V \times 40A \times 0.85 \times 1.732) / 1000$$

$$kW = 0.707 \text{ power savings}$$

$$\text{Savings (\$)} = \text{hours} \times kW \text{ savings} \times kW \text{ cost}$$

$$\text{Savings (\$)} = 8400 \times 0.707 \times \$0.10/kWhr$$

$$\text{Savings (\$)} = 593.88$$

If your plant has 80 similar motors, and if only half of them had the same amount of savings it would total \$593.88 x 40 = **\$23,755.20!**

**Others will guess what the problem is. Inverter Technologies will Find IT, Show IT, and Prove IT.**

Carbon Tax Reduction

Climate Action Energy Savings

ORBIT365

Drives

Predictive Maintenance

Root Cause Analysis

Motor Starters

Sales

Service

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