



Encoder Installation Instructions

Proper mounting of the line encoder is critical to the production of accurate part lengths. Follow all instructions carefully to ensure a proper installation.

Encoder Placement

Proper placement of the encoder is crucial to ensure it can track material accurately without interference. We strongly recommend placing the encoder in a location that is away from vibration and cooling fluids. It should be placed where the material being tracked is most stable and the amount of material between the encoder and cut-off press should not be allowed to fluctuate. It is best to allow the encoder to ride directly on the material.

Equipment Needed for Installation:

Machinist's square	Calipers
Machinist's rule	Bracket

Remove power from the system and encoder cable. Power should be removed from the machine and lock out tag out procedures followed.

The encoder should be attached to a bracket. Use the screws included with your encoder to mount the encoder to the bracket. AMS Controls provides brackets that fit most applications: a simple version (BRKT-1) and a more advanced version that eliminates interference from vertical motion (BRKT-2).

The encoder should be mounted such that the wheel is firmly pressed against the material, the wheel rotates in exactly the same direction as material flow, there is not an excessive side torque on the encoder shaft and it is free from excessive oil or other lubrication splatter.

When mounting the encoder, follow these simple guidelines:

NO SLIPPAGE. The encoder should be mounted so that the wheel is firmly pressed against the material, rotating in exactly the same direction as material flow. Seven to nine pounds of pressure per square inch (PSI) between the wheel and the material is generally acceptable. Excessive pressure will cause premature wear on the bearings and shorten the useful life of the encoder. Also, check the tightness of the tightening screw for the cross-clamp hub.

NO WOBBLE / PERPENDICULAR ALIGNMENT. The encoder wheel must be square to the material. Measure this accurately with a machinist's square. If the wheel marks the material, make sure that both edges of the wheel leave tracks which are clearly equal.

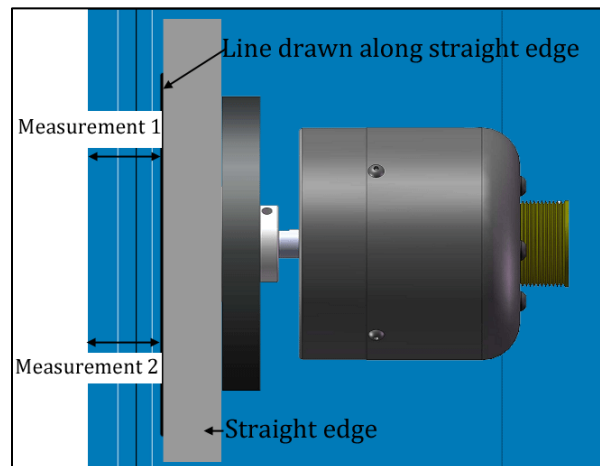


Encoder is not square



Encoder is square

PARALLEL ALIGNMENT. The wheel should be mounted parallel to material flow and parallel alignment must be verified. Place a straight edge along the encoder wheel in the direction of material flow and draw a line along the length of the straight edge. If the wheel is out of alignment, the error will be exaggerated by this line.



Using a straight edge to check alignment

Using a set of calipers, the distance from each end of the line to the edge of the material should be measured. The difference between the two measurements should be less than 0.010" (0.254mm) over 12" (304.8 mm). If the error is greater than that, the bracket assembly should be realigned. Square and parallel alignment should be rechecked each time the encoder bracket is loosened and retightened.

Ensure that there is not an excessive side torque on the encoder shaft and that the encoder is free from excessive oil or other lubrication splatter.

The encoder wheel should not be set to track on curved surfaces of the material or on areas that are not flat or are unstable unless no alternative is possible. Special adaptations may be required for round, curved or hard-to-track products.

Having tracking difficulties? Check out our Encoder Troubleshooting Handbook online at <http://www.amscontrols.com/support/kb/length/EncoderTroubleshooting.aspx>.