



## **Technical Tip #149 – Boring Bar Diameter and Length**

A common problem in boring applications is that the boring bar is extended further than recommended, or the diameter-to-length ratio is exceeded for that particular bar.

Boring bars are made of different materials, and they all have different diameter-to-length ratios. Where one boring bar will work, another may not.

The most common materials for boring bars and their diameter-to-length ratios are:

<b><u>Bar Materials</u></b>	<b><u>Diameter-to-Length Ratio</u></b>
• Steel	4:1
• Heavy Metal	4:1 to 6:1
• Steel Devibrator	6:1
• Tungsten Carbide	6:1
• Carbide Devibrator	8:1
• Standard Tunable	6:1 to 10:1
• Special Carbide Devibrator	over 10:1
• Special Tunable	10:1 to ...

When choosing a boring bar, look at the diameter and length of the hole to be bored. Then choose the proper boring bar based on the diameter-to-length ratio that will work best for the application.