## **BLADE OPERATION**

OPERATING THE "RIGHT BLADE" PROPERLY	
Variable	Selection Guidelines
Speeds	Excessive speed generates excessive heat and can dull or strip teeth, particularly in carbon blades. See recommended speeds for various applications on Pages 16 - 17.
Feeds	Excessive feed can strip teeth or break blades. Insufficient feed pressure can "work harden" material and dull teeth. Always check chips.  (See Figure 5 on Page 18)
Tension	Excessive tension can break blades. Insufficient tension can damage blades and/or cause crooked cuts. On machines where blades are tensioned by hand it is better to slightly over tension than under tension if exact tension measurements are unknown. <b>Recommended tension</b> is 15,000 – 20,000 PSI for Flex Back; 20,000 – 25,000 PSI for Hard Back 30,000 – 35,000 PSI for Bimetal.
Machine Condition	Poor guide or wheel alignment can destroy blade or shorten useful life. Problems with other machine components (bearings etc.) can also negatively effect performance. Maintain and operate the machine in accordance with machine manufacturer's instructions. (See Page 18 for additional guidelines concerning machine condition.)
Coolant	Coolant is required in most metal applications for maximum cutting efficiency. (D - 2 and cast iron normally cut dry.)