

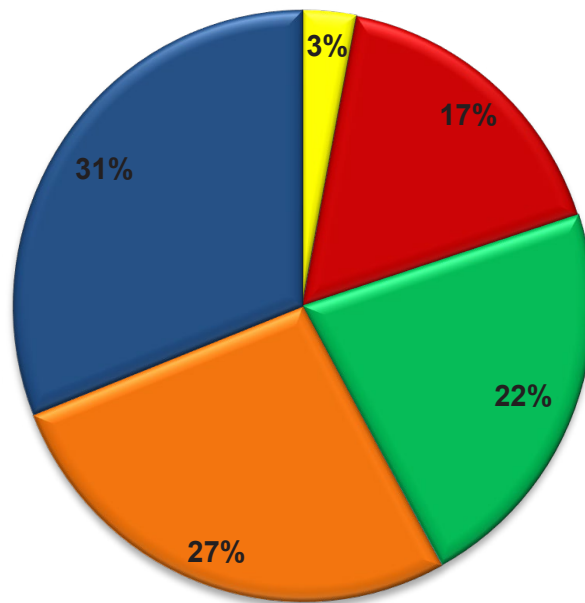


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The REAL cost of cutting tools

Machine Part Cost Breakdown



■ Tooling ■ Materials ■ Facilities ■ Machines ■ Labor

Did you know?

1. **Tooling contributes a very small portion of the overall cost.**
2. **Facilities and materials categories are generally subject to market forces beyond the control of the manufacturer.**
3. **Nearly 60% of the cost associated with manufacturing a part can be attributed to labor and machining costs.**





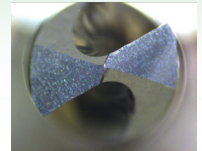
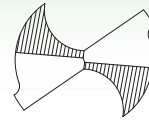
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9 Ways for Saving Money

1. Recommend a split point drill

- Drill faster - no "walking" and requires less pushing force



2. On hard materials, see a cobalt drill

- Cobalt resists heat allowing drill to last longer
- Always recommend for stainless steel



3. Use a spiral point tap in through holes

- Forward-exiting chips don't clog flutes
- Tap up to 40% faster, increasing productivity



4. Upgrade to a coated drill

- Increase tool life 5-6 times, and double drilling speed with high-performance coatings - TiN, TiCN, TiAlN



5. Offer a parabolic flute drill for deep holes

- No pecking up to 12x drill diameter for faster drilling
- Wide flute spacing means a cooler-running drill



6. Suggest a high performance tap to increase productivity

- Double tap life and double machine speeds
- Designed for tapping hard materials and stainless steel



7. Recommend a shorter length drill

- More rigid for less breakage
- More accurate holes - better concentricity



8. Carbide end mills

- Carbide substrate for longer life and increased machining speeds and feeds
- Available in standard helix and 4, 5 & 7 flute variable index design
- Use high helix design for Aluminum applications
- Also available in a powdered metal material for Aluminum applications

