

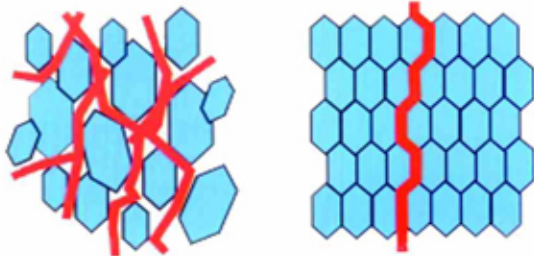


# Thermal Cycling

The patented Thermal Cycling process strengthens metal components by increasing the density and the uniformity of the metal molecules. This relieves the stress in metals.



**The Result:** The reorganization tightens and optimizes the particulate structure of the material and makes it denser, stronger, and much more resistant to wear while amplifying the ability to dissipate heat. Therefore, minimizing "stress" and increasing tensile strength without causing fatigue or cracking.



Before

After

**The Bottom Line:** The molecular reorganization means that the metal is no longer under excess stress even when applied in extreme environmental conditions.

Certified By Independent Labs

# Key Benefits

- ✓ 70% Less Corrosive
- ✓ 10% increase in Tensile Strength
- ✓ Less Vibration
- ✓ Less Stress
- ✓ More Heat Resistant
- ✓ Reduces Friction

## We Process:

Aluminum  
Brass  
Carbon fiber  
Copper  
Nickel  
Nylon  
Steel  
Cast Iron  
Stainless Steel

## We DO NOT Process:

Diamond Impregnated blades or bits  
High Boron / Low Carbon Metals  
Rubber

Reduced Maintenance Cost

# Product Analysis



The wear patterns do vary, due to soil, types, and conditions, but it is somewhat of a common analogy that the sweeps last 500 to 600 acres. [approx. 1 square mile.] The sweep pictured has been Thermal Cycled and has lasted 6000 acres, which is 9.38 square miles. An exception to the more common processed results of 2000 to 3000 acres.



Farmers who are treating cultivator sweeps are getting 3 times the life increase without adding carbide to the component. One Farmer who spends \$15,000.00 each year on

replacing these components has since seen a 75% savings using Thermal cycled cultivator sweeps.



It is typical for a stock cutter edge to be ready to flip @ 120,000 cubic yards of material, [utilizing a 2 1/2" wear area] our processed cutting edge

has moved 160,000 cubic yards of material to date and only has acquired 1/8" of wear. At that rate the blade edge will last in excess of 20 years as opposed to the typical 2 years.



Farmers are seeing 3 times life increase on their Thermal Cycled roller chains and sprockets.

Reduced Down Time