

LASER HEAT™

Pinpoint Treating

Laser Cladding Services is proud to introduce **LaserHeat™**, a specialized heat treating program with the unique ability to pinpoint your heat treating requirements to precise areas dramatically enhancing the metallurgical properties within a specific critical wear area.

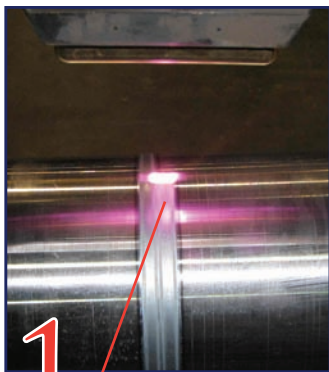
High power lasers are an excellent source for the materials surface hardening to improve the hardness rating with very minimal distortion to the base material. The laser hardened surfaces provides excellent

wear and abrasion resistance now due to the rapid solidification rates and finer grain structure.

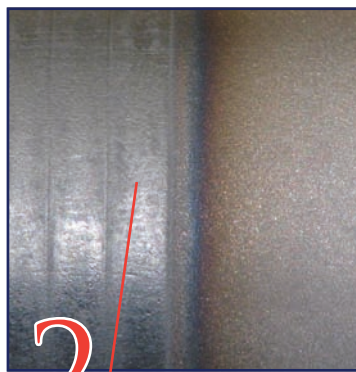
LaserHeat™ pinpoint surface hardening can be applied to localized designated areas without altering the chemistry of the entire part. A good example is a spindle made of 4140 steel; the surface hardness can be increased up to 55 HRC with only 0.020" case depth.

This process has several advantages over flame and induction hardening methods.

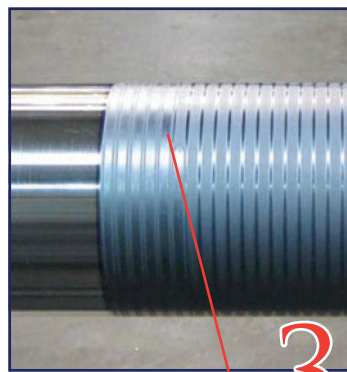
Advantages of LCS's LaserHeat™ over other Heat Treatment Methods



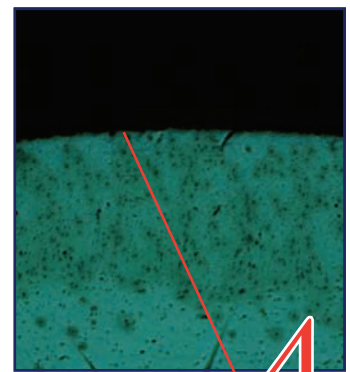
1
Low Thermal Input



2
Very Minimal Distortion



3
High Processing Speeds



4
Very Precise Case Depths

LaserHeat™ surface hardening can be applied to many critical, high-wear components:

- Spindles • Transmission Shafts • Pump Shafts • Sleeves • Locomotive Engine Cylinders • Hydraulic Cylinder Rams • Mixing Paddles to name a few.**

For complete information on **LaserHeat™** surface hardening processes and all our laser cladding capabilities and services, Visit our website at www.lasercladding.com, or call us toll free at 1-800-856-8082 today!



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