

Rollomatic Introduces Capability in Sharpening of Diamond Coated Carbide Tools

Mundelein, June 2020. Rollomatic, a leading machine tool manufacturer based in Switzerland is announcing new capabilities related to the LaserSmart 510 laser cutting and ablation machine.

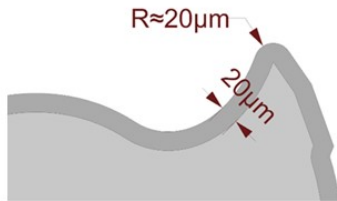


Diamond coated carbide cutting tools are a great option when machining highly abrasive materials, as the coating properties help to significantly increase tool life relative to uncoated carbide tools. The drawback of diamond coating is the fact that thick-film coating makes the cutting edge dull and thin-film coatings often wear prematurely.

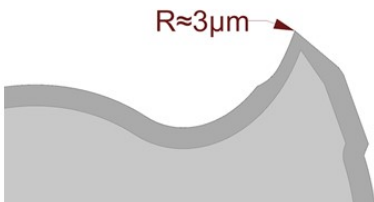
Rollomatic has developed a process that allows sharpening of thick-film diamond coated cutting tools. The Rollomatic CNC Laser Cutting Machine LaserSmart incorporates technologies that facilitate the probing the surface of the coated cutting edge to detect the exact shape and position. Then the laser cutting process will remove just enough diamond coating to make the cutting edge sharp. Only a predetermined amount of the coating, just around the cutting edge, is removed by the laser process.

In-field tests have demonstrated that the tool life can increase significantly with a sharpened thick-film coated tool compared to a conventional diamond coated cutting tool. Such cutting tools are a cost-effective alternative to the far more expensive PCD tools.

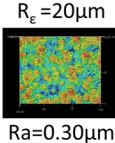
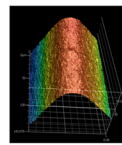
- Significant increase in tool life
- Near-perfect TIR
- Fast cycle time
- Simulation of the tool path after edge detection
- Same machine can laser cut PCD and other super-hard materials



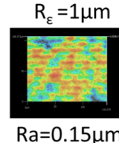
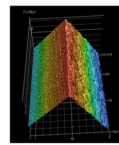
After diamond coating



After sharpening on a Rollomatic LaserSmart using a proprietary laser cutting process to sharpen the diamond coating



Cutting length 7mm
dia. 3 mm
2 teeth



Rollomatic provides outstanding service/support from its North American headquarters in Mundelein, IL, and satellite offices in CA, FL, IN, MA. For more information visit: www.RollomaticUSA.com or e-mail solutions@RollomaticUSA.com.