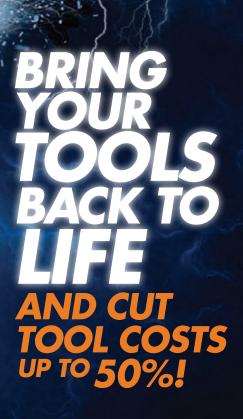


**Power. Precision. Performance.** 

# RECONDITION OF CONTRACT OF CON





# **Tool renewal saves money.**

#### Resharpening, restoration, reconditioning: What's the difference?



#### **RESHARPENING**

All work is focused at the end of the tool. We return the cutting end and radii to their original sharpness (which may require cutting off the original end to grind a new one) and recoating.



#### BEFORE:

- Dull cutting edges
- Chips and notches
- Damaged coating



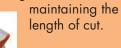
#### AFTER:

- End cutting edges as sharp as new; radii back to original dimensions
- Chips, notches repaired
- Full coating protection



#### **RESTORATION**

This service is recommended when length of cut is critical and for tools with light-tonormal wear on the OD. We will rework the OD and radii and restore geometries while



Corner view



#### BEFORE:

- Worn flutes
- OD inconsistent, unbalanced
- Damaged coating

#### AFTER:

- Cutting end, radii restored
- Small chips, notches removed
- Flute edges sharp
- OD balanced
- Full coating protection

AFTER:

• Cutting edges as

back to original

dimensions

sharp as new; radii

• Chips, notches repaired

# Ż

#### **RECONDITIONING**

Work extends to all cutting edges. In addition to sharpening the cutting end and radii, we clean and sharpen the full length of each flute and repair the OD.



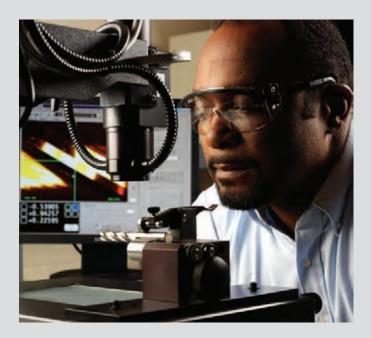
#### BEFORE:

- Dull, worn cutting edges
- Chips and notchesWorn flutes
- Material buildup
- OD inconsistent, unbalanced
- Damaged coating



- Flute edges sharp
- Buildup removed
- OD balanced
- Full coating protection

Most IMCO tools can be reground multiple times, stretching tool life – and your tool budget – a lot further. With IMCO tools, that can be a very, very long time.



#### How does either process affect the tool?

Loss of length will depend on the amount of wear:

	Resharpening	Restoration	Reconditioning
Flute length	Shorter*	Maintained	Shorter*
LBS	Shorter*	Maintained	Shorter*
OD	None	Smaller	Smaller
OAL	Shorter*	Maintained	Shorter*
Radius	Restored to same**	Restored to same**	Restored to same

\*With ball-end tools and tools with corner radii, resharpening and restoration can result in tangents that are slightly off. We work very hard to avoid this, but it occasionally cannot be prevented.

\*\* If end wear is excessive, we may have to shave a minimal amount from the end to restore its proper geometries.

#### What kind of recoating can we get?

Tools are recoated with the best IMCO advanced coating for that style of end mill.

# What kind of tools can we have resharpened, restored or reconditioned?

We can work on all manufacturers' carbide end mills.

NOTE: For double-ended tools, the cost will be double the price for a single-end tool of that type and size.

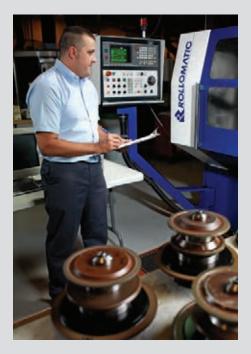
## What if we don't have the tool specs?

No problem. We can build a profile from your tool using special 3D software.

### What happens if the tool just can't be reground?

You decide and tell us on the order form whether you want us to:

- Send it back to you to be scrapped.
- Recycle the tool here.
- Place an order for an identical new IMCO tool.







**Power. Precision. Performance.** 

#### We make worn tools like new.

- Specialty and standard tools
- Average 10-day turnaround
- Minimum order of 6 tools

# One more advantage of using IMCO-tough tools.

Other tools may do the job. But IMCO tools do the job better... and go back for more.

#### Start saving today.

Find out more. Visit www.imcousa.com for information and order forms, call 800.765.4626 or see your IMCO sales representative.



IMCO Carbide Tool Inc. 800-765-4626 www.imcousa.com