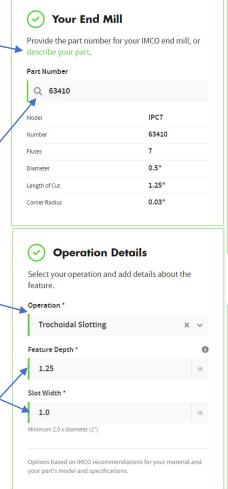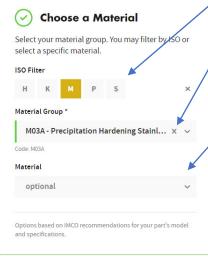# ToolBot Simple User Guide

1. Click here if the EDP number of your IMCO end mill is unknown. You will then be required to enter the information into the following fields to describe your end mill.
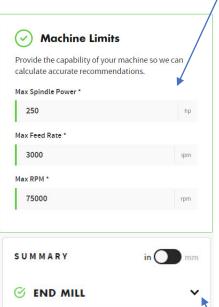
Or

2. Enter your known IMCO EDP number here. All the following fields for the end mill information will automatically be populated.

6. Select 1 of the 9 offered operations (operations that are not suggested for this particular end mill will be omitted from the list).

7. Enter the specific data for your application in these fields.

Your End Mill

Provide the part number for your IMCO end mill, or describe your part.

Part Number

🔍 63410

Model	IPC7
Number	63410
Flutes	7
Diameter	0.5"
Length of Cut	1.25"
Corner Radius	0.03"

Operation Details

Select your operation and add details about the feature.

Operation *

Trochoidal Slotting   ✕ ⌄

Feature Depth * ⓘ

1.25   in

Slot Width *

1.0   in

Minimum 2.0 x diameter (1")

Options based on IMCO recommendations for your material and your part's model and specifications.

Choose a Material

Select your material group. You may filter by ISO or select a specific material.

ISO Filter

| H | K | **M** | P | S | ✕ |

Material Group *

M03A - Precipitation Hardening Stainl...   ✕ ⌄

Code: M03A

Material

optional   ⌄

Options based on IMCO recommendations for your part's model and specifications.
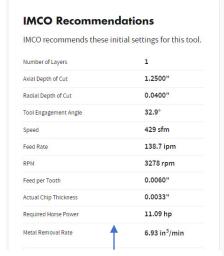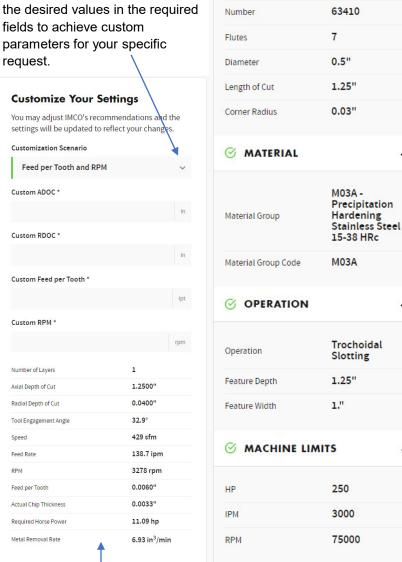
3. Select the correct ISO Code for your material.

4. Select a specific Material Group from the dropdown menu for correct hardness and group.

5. The Material can be selected from the dropdown menu. Or: Type the specific name of the material if it is not an option in the dropdown menu.

Machine Limits

Provide the capability of your machine so we can calculate accurate recommendations.

Max Spindle Power *

250   hp

Max Feed Rate *

3000   ipm

Max RPM *

75000   rpm

SUMMARY   in ⬤ mm

✓ END MILL   ⌄

✓ MATERIAL   ⌄

✓ OPERATION   ⌄

✓ MACHINE LIMITS   ⌄

CALCULATE →

8. You can enter your Machine Limits. This will allow ToolBot to suggest only the parameters achievable with your machine, (These values will be given in IMCO Recommendations on the calculated page) along with the No-limit Settings. The Customize Your Settings will allow you to change specific areas of the parameters you choose.

9. Selecting any of these dropdown menus will show a recap of the information you have entered.

10. Click here to activate the ToolBot for your suggested parameters.

ToolBot Simple User Guide

SUMMARY in ⬤ mm

✓ **END MILL** ^

Model	IPC7
Number	63410
Flutes	7
Diameter	0.5"
Length of Cut	1.25"
Corner Radius	0.03"

12. This dropdown allows you to select three different scenarios for adjusting the parameters. After a scenario is selected, enter the desired values in the required fields to achieve custom parameters for your specific request.

✓ **MATERIAL** ^

Material Group	M03A - Precipitation Hardening Stainless Steel 15-38 HRc
Material Group Code	M03A

IMCO Recommendations

IMCO recommends these initial settings for this tool.

Number of Layers	1
Axial Depth of Cut	1.2500"
Radial Depth of Cut	0.0400"
Tool Engagement Angle	32.9°
Speed	429 sfm
Feed Rate	138.7 ipm
RPM	3278 rpm
Feed per Tooth	0.0060"
Actual Chip Thickness	0.0033"
Required Horse Power	11.09 hp
Metal Removal Rate	6.93 in^3/min

Customize Your Settings

You may adjust IMCO's recommendations and the settings will be updated to reflect your changes.

Customization Scenario

Feed per Tooth and RPM ∨

Custom ADOC *

	in

Custom RDOC *

	in

Custom Feed per Tooth *

	ipt

Custom RPM *

	rpm

Number of Layers	1
Axial Depth of Cut	1.2500"
Radial Depth of Cut	0.0400"
Tool Engagement Angle	32.9°
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RPM	3278 rpm
Feed per Tooth	0.0060"
Actual Chip Thickness	0.0033"
Required Horse Power	11.09 hp
Metal Removal Rate	6.93 in^3/min

✓ **OPERATION** ^

Operation	Trochoidal Slotting
Feature Depth	1.25"
Feature Width	1."

✓ **MACHINE LIMITS** ^

HP	250
IPM	3000
RPM	75000

11. These parameters show the unlimited values IMCO suggests for this end mill without machine limits, a rigid work piece set up, high quality precision tool holding, and proper coolant volume & pressure.

13. These values show the suggested parameters with the applied adjustments you have entered for machine limits and the Customization Scenario changes.