



**INGERSOLL PERFORMANCE ADVISOR
USER GUIDE**

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1. Introduction

1.1 Ingersoll Performance Advisor Overview

The new **IPA** web app offers a wide range of functions, recommendations, and outputs to support the customer's needs for operating machining centers, Lathes, Swiss-Type Machines, Multi Spindles / Automatics, and for multitasking machinists, technologists and CAD/CAM designers. **IPA** features advanced AI and Big Data analytics using machine learning engine to support **Ingersoll** customers and salesforce teams to contend with the most complicated machining tasks and challenges while assuring highly advanced machining and tooling technological recommendations.

1.2 Ingersoll Performance Advisor Structure

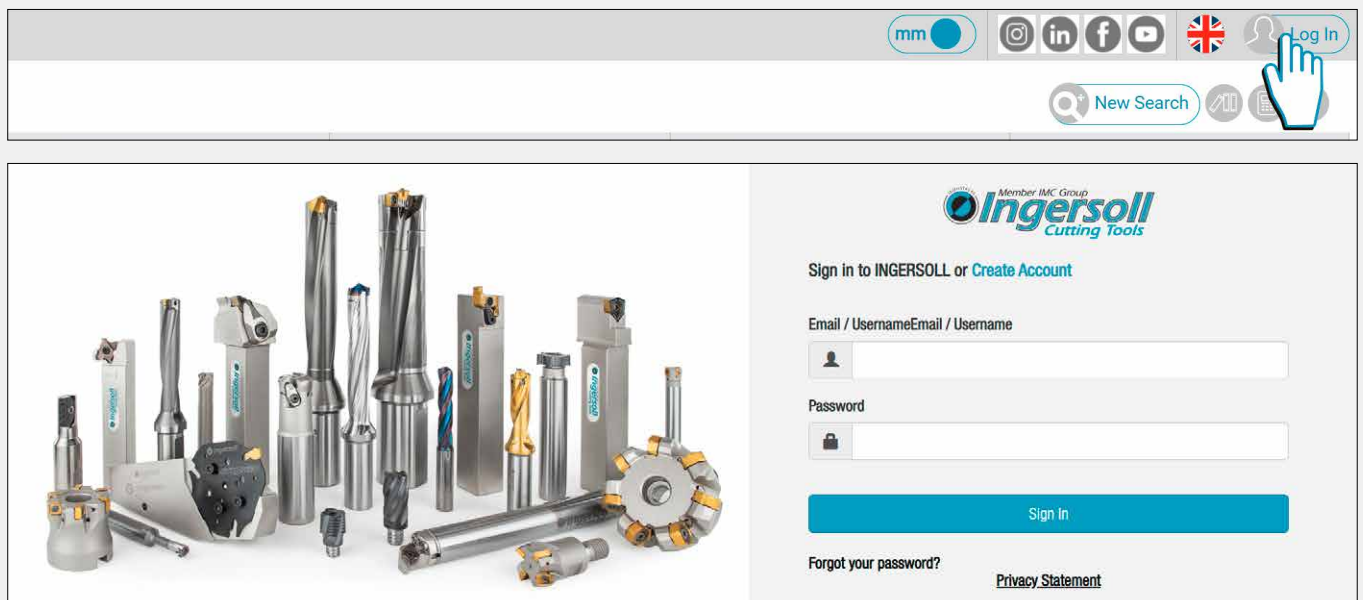
IPA comprises five main tabs: Machine, Material, Application, Operation data and Results.

2. Header Overview

2.1 Login

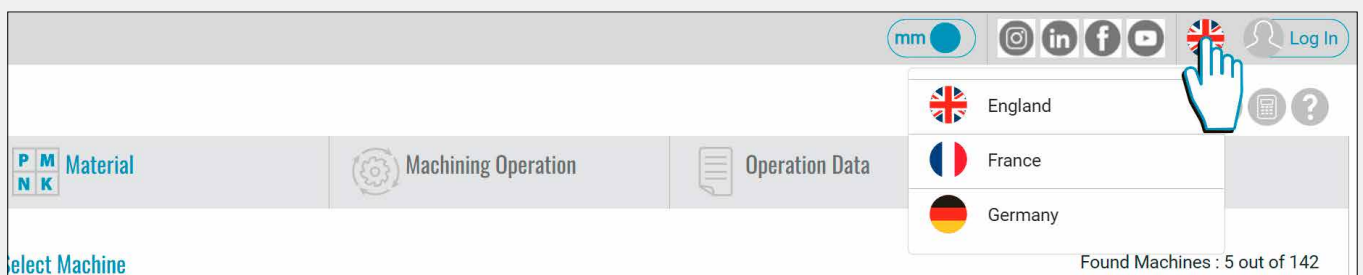
Registered users will be able to:

- Add and save own machines and raw materials in the **IPA** new "My Machines "&"My Materials" cloud storage.
- Create & save tool assemblies in the **IPA** with automatic forwarding to the **Ingersoll** online store.

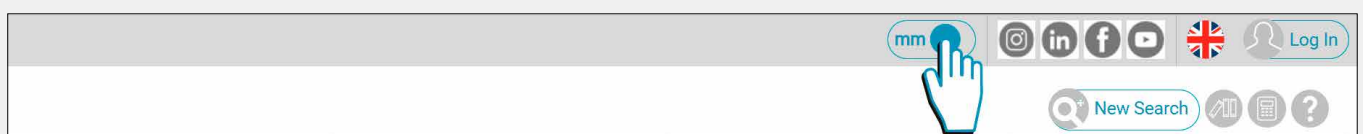


2.2. Settings

- Click on the flag icon will open the option to choose a language:

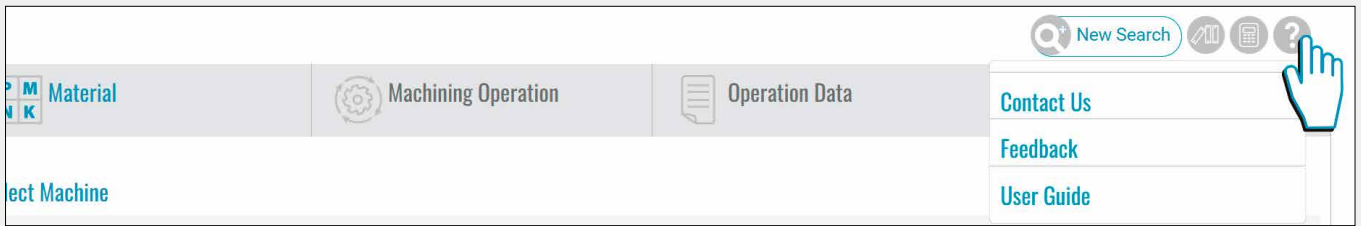


- Option to choose units: **Metric or Inch**



2.3 Help Section

Clicking on the "Help" icon (?) opens a menu with three options: Contact us, Feedback and User manual.

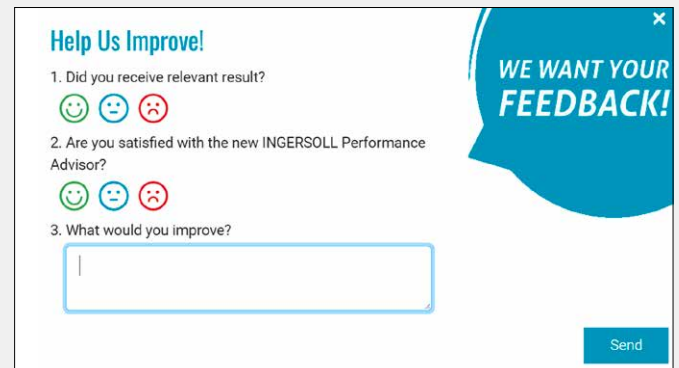


A "Contact us" form:



The 'Contact Us' form includes fields for Name, Email, Country, Company Name, and a Message box. A 'Submit' button is located at the bottom right of the form.

A short "Feedback" form:



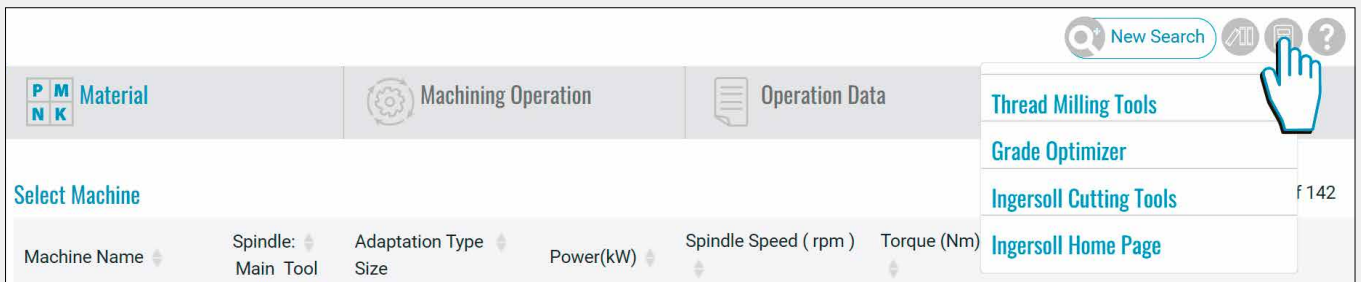
The 'Help Us Improve!' feedback form contains three questions with smiley face rating options:

- Did you receive relevant result?
- Are you satisfied with the new INGERSOLL Performance Advisor?
- What would you improve?

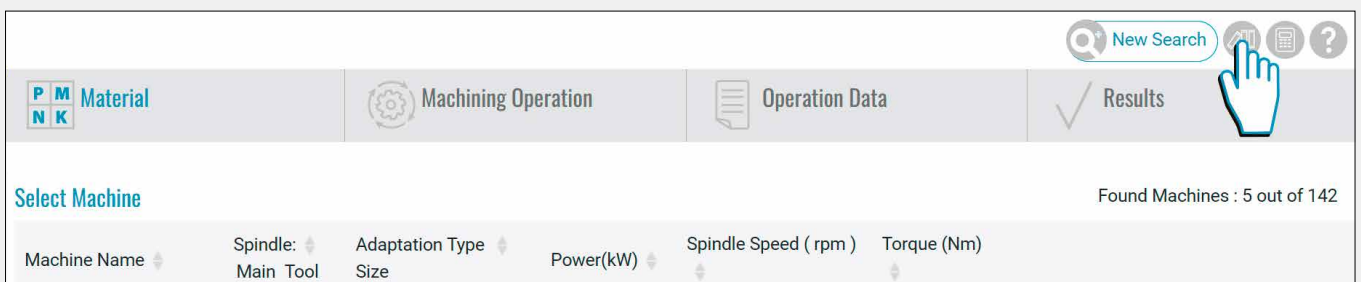
 A text input field is provided for the third question. A 'Send' button is at the bottom right. A blue banner on the right says 'WE WANT YOUR FEEDBACK!'.

2.4 Calculators

Under the "Calculators" icon, there is a sub-menu with links to technical support software and apps.

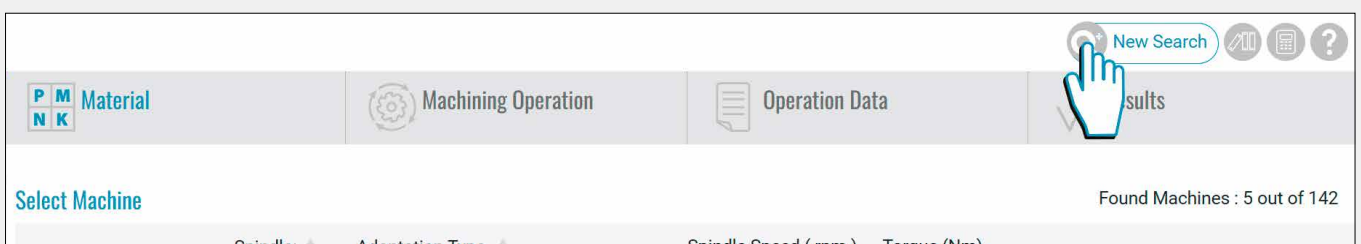


2.5 E-Catalog link



2.6 "New Search" Button

Click on the "New Search" button will reset all data and restart the software.



3. Main Software Section

3.1 "Machine" Tab

- Select a machine by clicking "Select" button.
- Please notice that "Machining Center 6" has been chosen as a default machine.
- Another option is to proceed to "Material" tab with this default machine.
- If you click on view all machines, you can select machines from our TechCenter.
- Search field is available. Insert an input and click "enter" to search for a specific machine.
- As a registered user, you can define your own machine and save it to your personal "My Machines" place.

Machining Center 6	<input type="radio"/>	<input checked="" type="radio"/>	BT MAS 403 - 40	19	14000	162.1			Select
Lathe 1	<input checked="" type="radio"/>	<input type="radio"/>	SQUARE - 25	15	7000	409			Select
Multi Task 1	<input type="radio"/>	<input checked="" type="radio"/>	CAMFIX ISO 26623-1 - C8	30	7000	955			Select
Multi Spindle 1	<input checked="" type="radio"/>	<input type="radio"/>	SQUARE - 12	2	8000	478			Select
Swiss Type 1	<input checked="" type="radio"/>	<input type="radio"/>	SQUARE - 8	2	8000	478			Select

Machining Center 6	<input type="radio"/>	<input checked="" type="radio"/>	BT MAS 403 - 40	19	14000	162.1			Select
Lathe 1	<input checked="" type="radio"/>	<input type="radio"/>	SQUARE - 25	15	7000	409			Select
Multi Task 1	<input type="radio"/>	<input checked="" type="radio"/>	CAMFIX ISO 26623-1 - C8	30	7000	955			Select
Multi Spindle 1	<input checked="" type="radio"/>	<input type="radio"/>	SQUARE - 12	2	8000	478			Select
Swiss Type 1	<input checked="" type="radio"/>	<input type="radio"/>	SQUARE - 8	2	8000	478			Select

Multi Task 1
Multi Spindle 1
Swiss Type 1

Multi Spindle 1

Cancel

Save

Define the leading spindle for multi-function machines for rotating or non-rotating tools:

Machining Center 6	<input type="radio"/>	<input checked="" type="radio"/>	BT MAS 403 - 40	19	14000	162.1			Select
Lathe 1	<input checked="" type="radio"/>	<input type="radio"/>	SQUARE - 25	15	7000	409			Select
Multi Task 1	<input checked="" type="radio"/>	<input type="radio"/>	SQUARE - 32	30	7000	955			Select
Multi Spindle 1	<input checked="" type="radio"/>	<input type="radio"/>	SQUARE - 12	2	8000	478			Select
Swiss Type 1	<input checked="" type="radio"/>	<input type="radio"/>	SQUARE - 8	2	8000	478			Select

- By default, five machines are presented. To view all machines, select "View All Machines" on the filters section on the left.
- More filters are available: Machine type, Adaption size, Power, Spindle and Torque.
- To view more machine details, click on a row:

Machining Center 6	<input type="radio"/>	<input checked="" type="radio"/>	BT MAS 403 - 40	19	14000	162.1			Select
Lathe 1	<input checked="" type="radio"/>	<input type="radio"/>	SQUARE - 25	15	7000	409			Select
Multi Task 1	<input type="radio"/>	<input checked="" type="radio"/>	CAMFIX ISO 26623-1 - C8	30	7000	955			Select
Multi Spindle 1	<input checked="" type="radio"/>	<input type="radio"/>	SQUARE - 12	2	8000	478			Select
Swiss Type 1	<input checked="" type="radio"/>	<input type="radio"/>	SQUARE - 8	2	8000	478			Select

Define and customize machine specifications:

Power & torque, Spindle speed, Feed, Coolant type, pressure, flow, Cost per hour

The screenshot shows the 'Machine' tab in the IOPA software. It includes sections for 'Multi Task 1' with a 'Select' button, 'Tool Spindle - ATC' with settings for Spindle Speed (7000 rpm), Power (30 kW), Torque (955 Nm), and Face Contact Connection. There are also graphs for Torque and Power vs. RPM. The 'Main Spindle' section has similar settings. The 'Turn (Stationary Tools)' section includes a 'Select' button and a table for cutting parameters. The 'Coolant' section has settings for Emulsion Pressure (30 bar), Emulsion Flow Rate (20 L/min), and Emulsion (Air Blast, MQL).






3.2 "Material" Tab

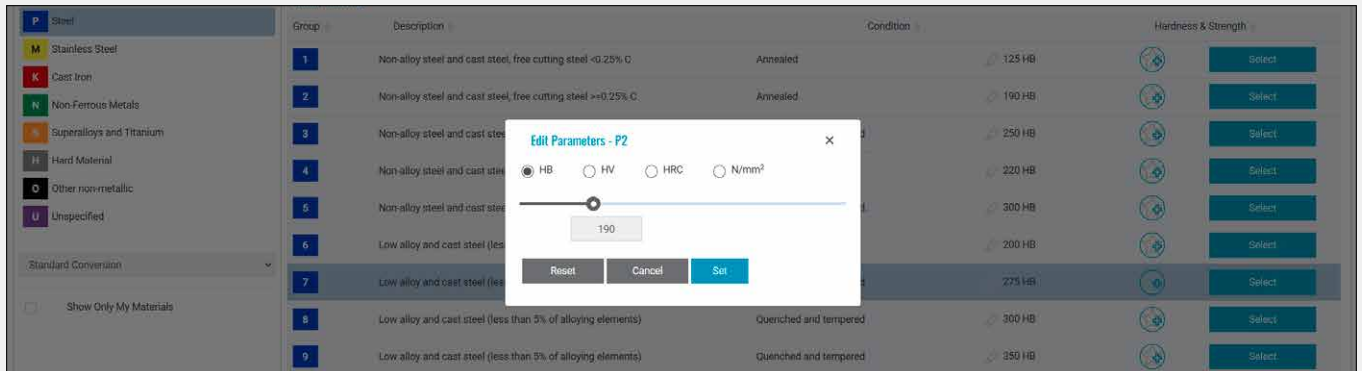
- Select a Material by clicking "Select" button.
- Please notice that "P7" has been chosen as a default material.
- Another option is to proceed to "Machining Operation" tab with this default material.
- Search field is available. Insert an input and click "enter" to search for a specific material.

The screenshot shows the 'Material' tab in the IOPA software. It includes a 'Material Search' field, a list of material categories (Steel, Stainless Steel, Cast Iron, Non-Ferrous Metals, Superalloys and Titanium, Hard Material, Other non-metallic, Unspecified), and a table of materials. The table has columns for Group, Description, Condition, Hardness & Strength, and a 'Select' button. A hand icon is pointing to the 'Select' button for material group 7.






Group	Description	Condition	Hardness & Strength	Select
1	Non-alloy steel and cast steel, free cutting steel <0.25% C	Annealed	125 HB	Select
2	Non-alloy steel and cast steel, free cutting steel >=0.25% C	Annealed	190 HB	Select
3	Non-alloy steel and cast steel, free cutting steel <0.55% C	Quenched and tempered	250 HB	Select
4	Non-alloy steel and cast steel, free cutting steel >=0.55% C	Annealed	220 HB	Select
5	Non-alloy steel and cast steel, free cutting steel >=0.55% C	Quenched and tempered	300 HB	Select
6	Low alloy and cast steel (less than 5% of alloying elements)	Annealed	200 HB	Select
7	Low alloy and cast steel (less than 5% of alloying elements)	Quenched and tempered	275 HB	Select
8	Low alloy and cast steel (less than 5% of alloying elements)	Quenched and tempered	300 HB	Select
9	Low alloy and cast steel (less than 5% of alloying elements)	Quenched and tempered	350 HB	Select
10	High alloyed steel, cast steel and tool steel	Annealed	200 HB	Select
11	High alloyed steel, cast steel and tool steel	Quenched and tempered	325 HB	Select
12	Stainless steel and cast steel	Ferritic/martensitic	200 HB	Select
13	Stainless steel and cast steel	Martensitic	240 HB	Select

Clicking the "Pencil" icon will open a window with the option to change material hardness:

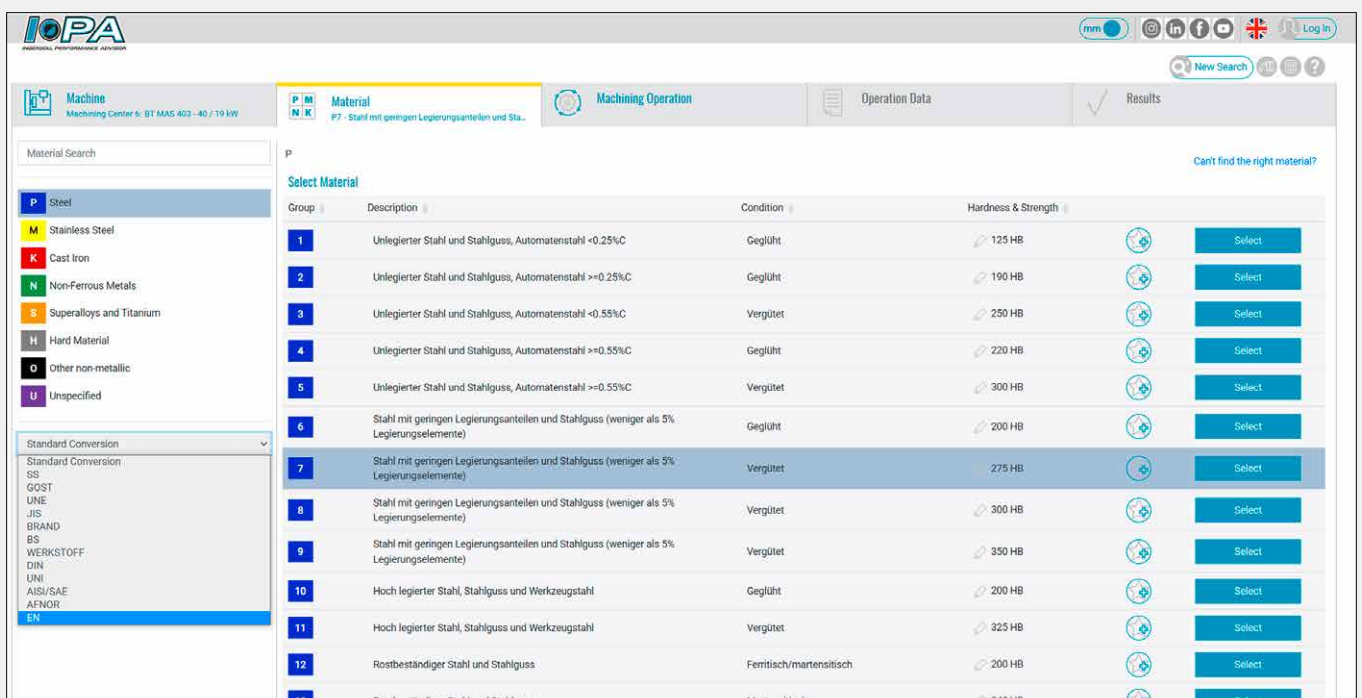
1	Non-alloy steel and cast steel, free cutting steel <0.25% C	Annealed	125 HB		Select
2	Non-alloy steel and cast steel, free cutting steel >=0.25% C	Annealed	190 HB		Select
3	Non-alloy steel and cast steel, free cutting steel <0.55% C	Quenched and tempered	250 HB		Select
4	Non-alloy steel and cast steel, free cutting steel >=0.55% C	Annealed	220 HB		Select
5	Non-alloy steel and cast steel, free cutting steel >=0.55% C	Quenched and tempered	300 HB		Select
6	Low alloy and cast steel (less than 5% of alloying elements)	Annealed	200 HB		Select



As a registered user, you can define your own material and save it to your personal "My Materials" place:

1	Non-alloy steel and cast steel, free cutting steel <0.25% C	Annealed	125 HB		Select
2	Non-alloy steel and cast steel, free cutting steel >=0.25% C	Annealed	190 HB		Select
3	Non-alloy steel and cast steel, free cutting steel <0.55% C	Quenched and tempered	250 HB		Select
4	Non-alloy steel and cast steel, free cutting steel >=0.55% C	Annealed	220 HB		Select
5	Non-alloy steel and cast steel, free cutting steel >=0.55% C	Quenched and tempered	300 HB		Select

To view a "Standard conversion table" for a specific material group, click the "Standard conversion" button:



Can't find the right material? [Click the link and send a request to Ingersoll HQ:](#)

Machine
Multi Task 1 - CAMFIX ISO 26623-1 - C8 / 30 kW

Material
P7 - Low alloy and cast steel

Machining Operation

Operation Data

Results

Material Search

P - Steel

M Stainless Steel

K Cast Iron

N Non-Ferrous Metals

S Superalloys and Titanium

H Hard Material

O Other non-metallic

U Unspecified

Standard Conversion

Show Only My Materials

P - N* groupe:7

Select Material

Group	Description	Condition	Hardness & Strength	Select
1	Non-alloy steel and cast steel, free cutting steel <0.25% C	Annealed	125 HB	Select
2	Non-alloy steel and cast steel, free cutting steel >0.25% C	Annealed	190 HB	Select
3	Non-alloy steel and cast steel, free cutting steel <0.55% C	Quenched and tempered	250 HB	Select
4	Non-alloy steel and cast steel, free cutting steel >0.55% C	Annealed	220 HB	Select
5	Non-alloy steel and cast steel, free cutting steel >0.55% C	Quenched and tempered	300 HB	Select
6	Low alloy and cast steel (less than 5% of alloying elements)	Annealed	200 HB	Select
7	Low alloy and cast steel (less than 5% of alloying elements)	Quenched and tempered	275 HB	Select
8	Low alloy and cast steel (less than 5% of alloying elements)	Quenched and tempered	300 HB	Select
9	Low alloy and cast steel (less than 5% of alloying elements)	Quenched and tempered	350 HB	Select
10	High alloyed steel, cast steel and tool steel	Annealed	200 HB	Select
11	High alloyed steel, cast steel and tool steel	Quenched and tempered	325 HB	Select
12	Stainless steel and cast steel	Ferritic/martensitic	200 HB	Select
13	Stainless steel and cast steel	Martensitic	240 HB	Select

Can't find the right material?

Machine
Multi Task 1 - CAMFIX ISO 26623-1 - C8 / 30 kW

Material
P7 - Low alloy steel and cast steel

Machining Operation

Operation Data

Results

Material Search

P - Steel

M Stainless Steel

K Cast Iron

N Non-Ferrous Metals

S Superalloys and Titanium

H Hard Material

O Other non-metallic

U Unspecified

Standard Conversion

Show Only My Materials

P - Group No.3

Select Material

Group	Description	Condition	Hardness & Strength	Select
1	Non-alloy steel		125 HB	Select
2	Non-alloy steel		190 HB	Select
3	Non-alloy steel		250 HB	Select
4	Non-alloy steel		220 HB	Select
5	Non-alloy steel		300 HB	Select
6	Low alloy & cast steel		200 HB	Select
7	Low alloy & cast steel		275 HB	Select
8	Low alloy & cast steel		300 HB	Select
9	Low alloy & cast steel		350 HB	Select
10	High alloyed steel		200 HB	Select
11	High alloyed steel		325 HB	Select
12	Stainless steel and cast steel	Ferritic/martensitic	200 HB	Select
13	Stainless steel and cast steel	Martensitic	240 HB	Select

Can't find the right material?

Request a New Material

Email *

Description *

Group

Standard

Condition

Hardness

HB HV HRC N/mm²

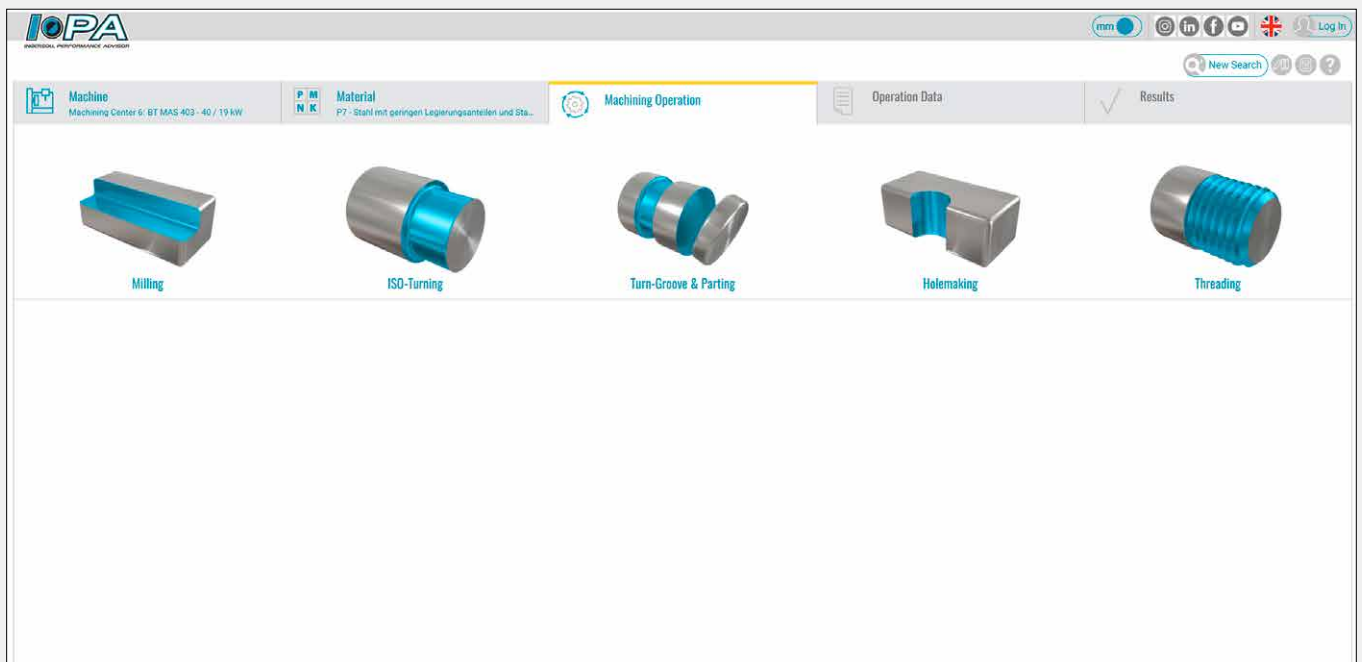
225

Manufacturer/Other [E-Catalog]

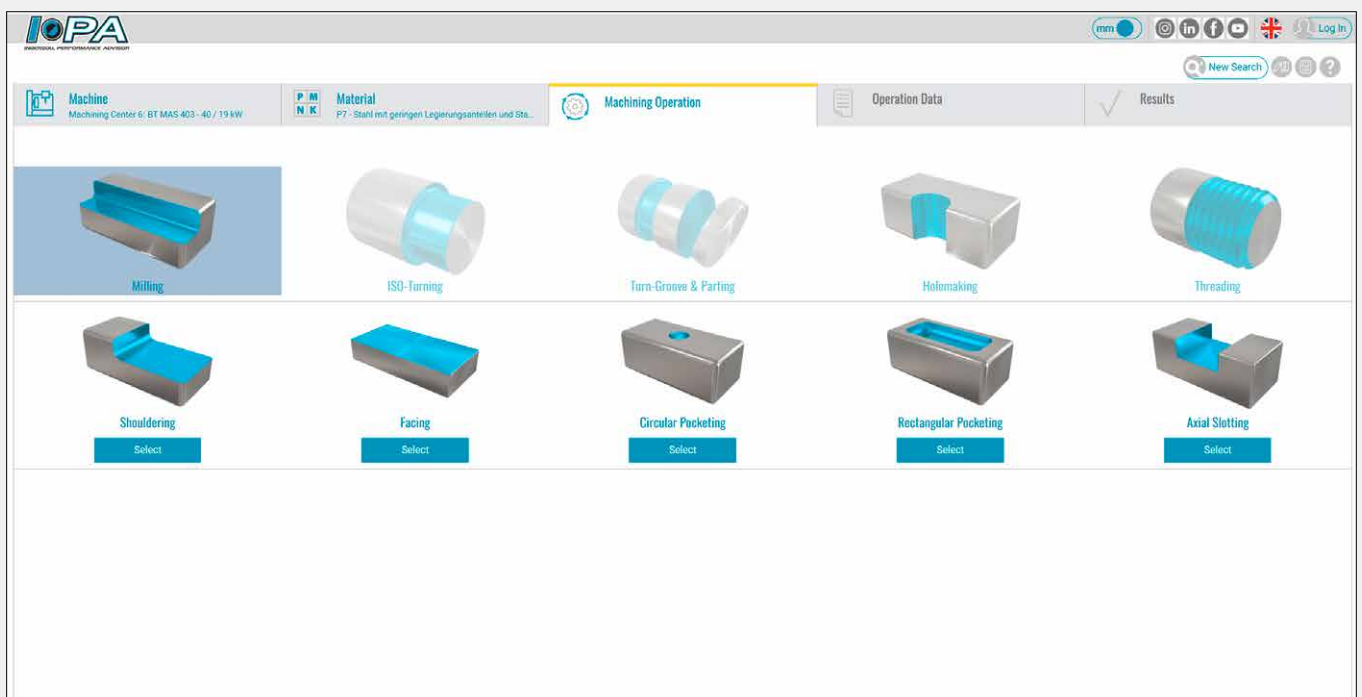
Cancel Send

3.3 "Machining Operation" Tab

Click the image to choose the main application:



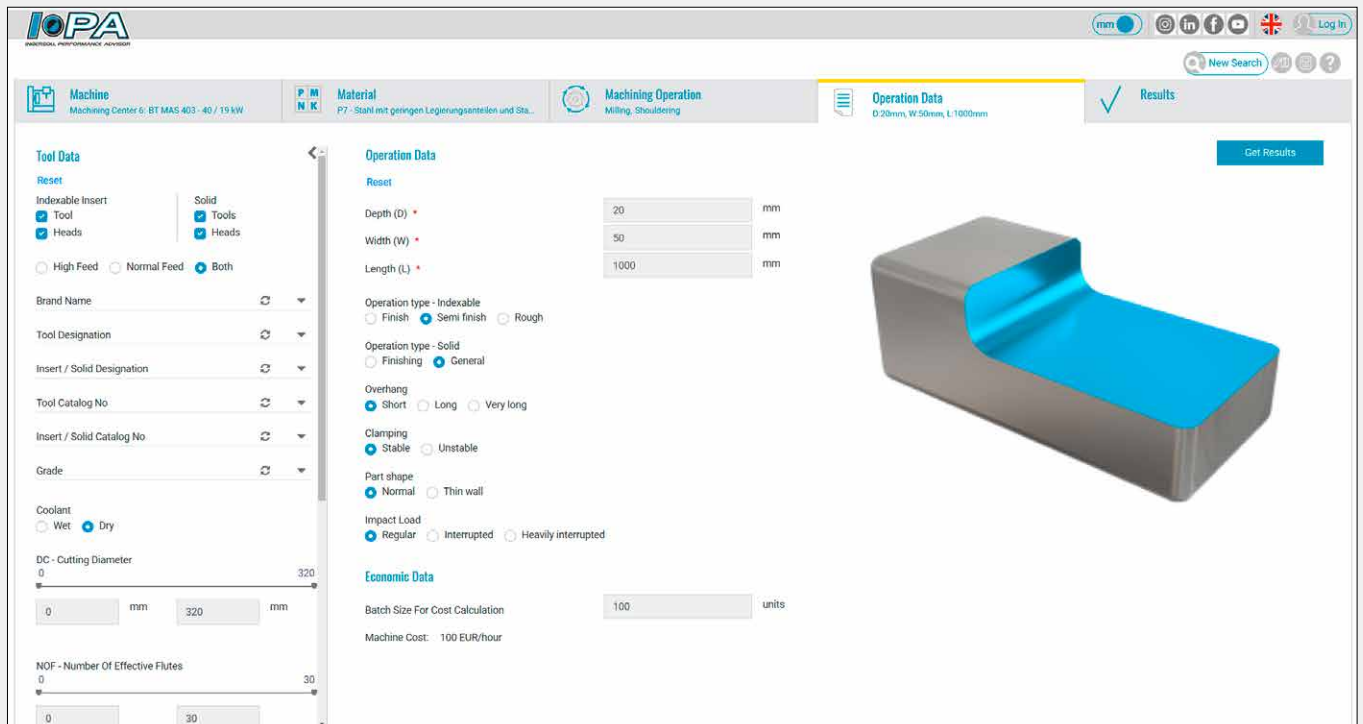
Then choose a sub application by clicking the image or the "Select" button and continue to "Operation Data" tab:



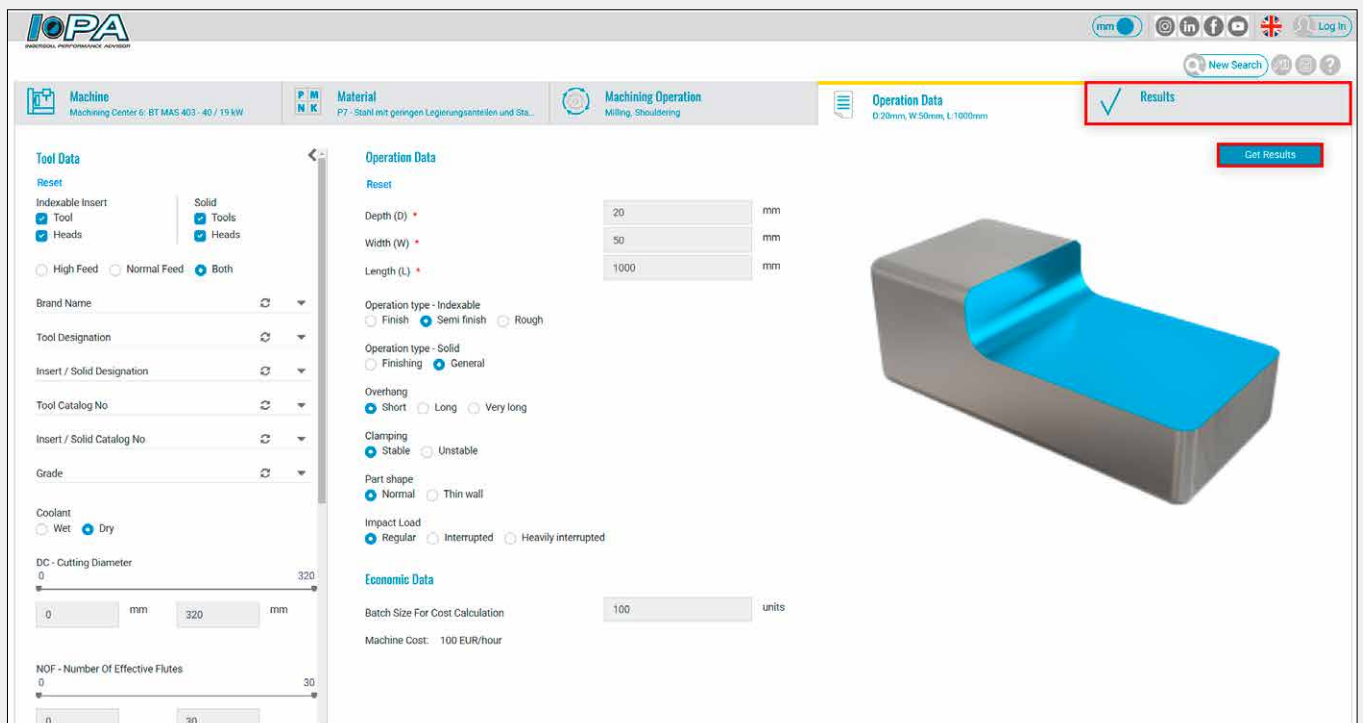
3.4 "Operation Data" Tab

Screen is divided to two sections: Tool Data and Operation Data.

Customize the operation data by selecting tool type, batch size for cost calculations and more filters for optimized search and recommendations.

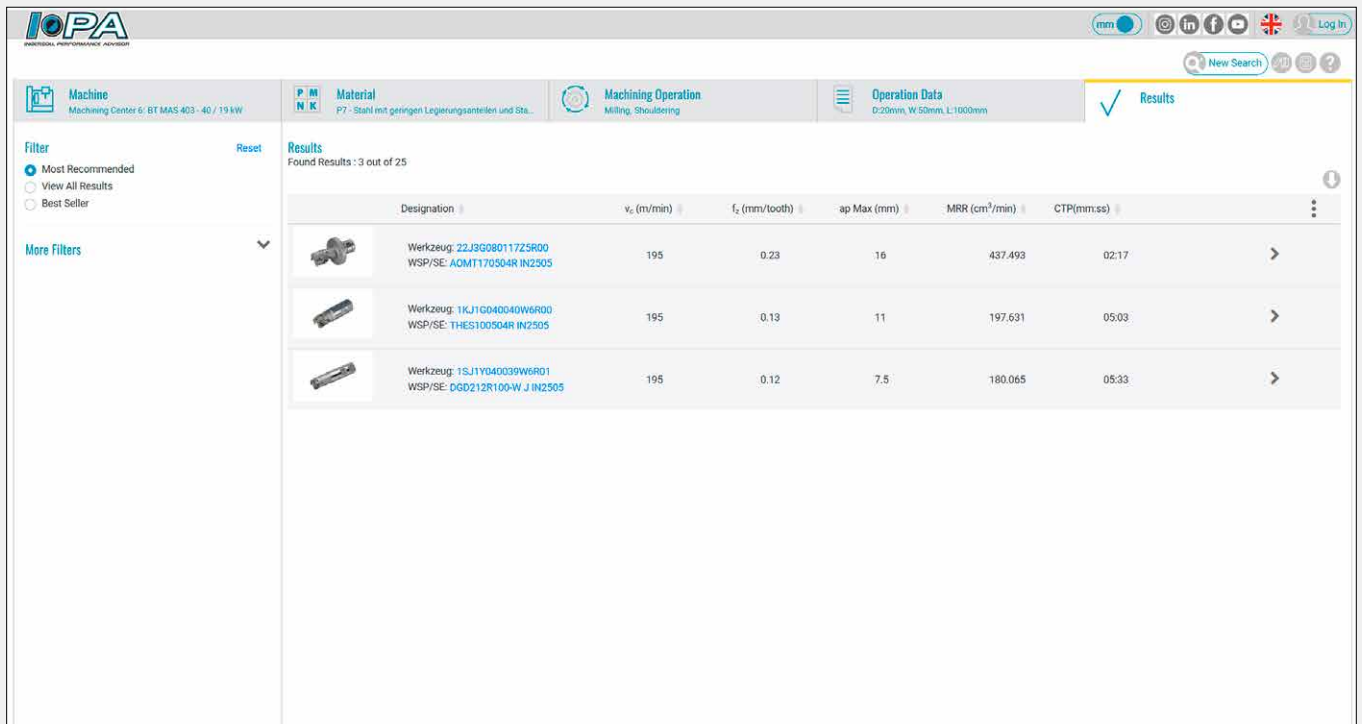


To get results, click the "Results" tab or "Get Results" button or the "enter" key:



3.5 "Results" Tab

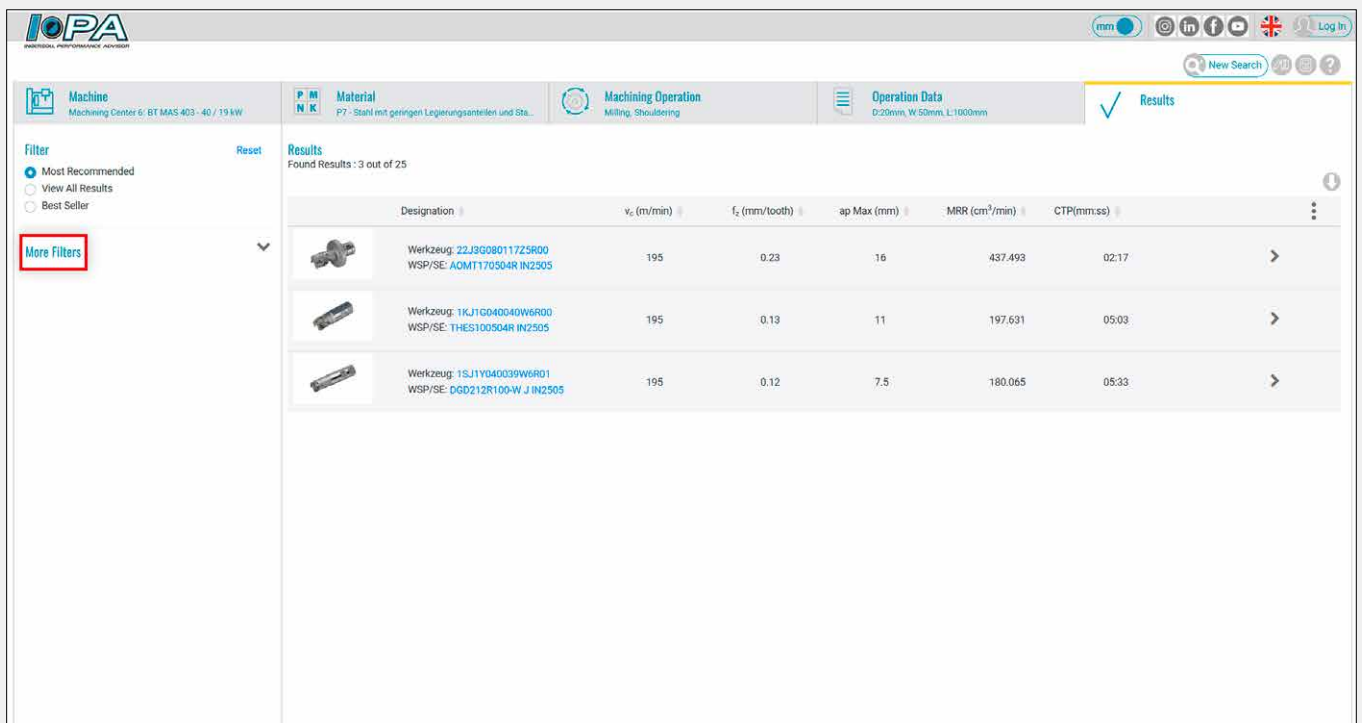
The system will show a default view of the three most recommended tooling solutions per application input:



The screenshot shows the IOPA Results Tab with the following data:

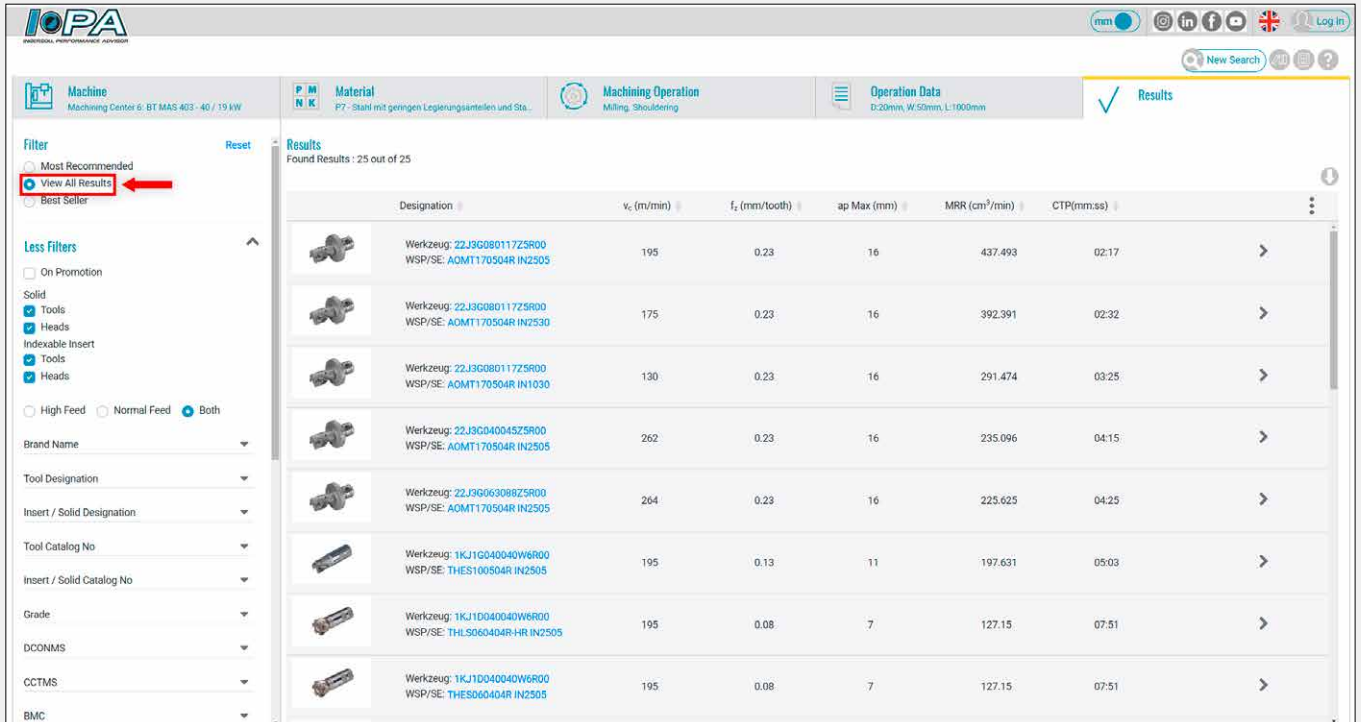
Designation	v_c (m/min)	f_z (mm/tooth)	ap Max (mm)	MRR (cm ³ /min)	CTP(mm:ss)
Werkzeug: 22J9G080117ZSR00 WSP/SE: AOMT170504R IN2505	195	0.23	16	437.493	02:17
Werkzeug: 1KJ1G040040W6R00 WSP/SE: THES100504R IN2505	195	0.13	11	197.631	05:03
Werkzeug: 1SJ1Y040039W6R01 WSP/SE: DGD212R100-W J IN2505	195	0.12	7.5	180.065	05:33

To see all filter options, click the title "More Filters":



The screenshot shows the IOPA Results Tab with the "More Filters" button highlighted in the left sidebar. The data table remains the same as in the previous screenshot.

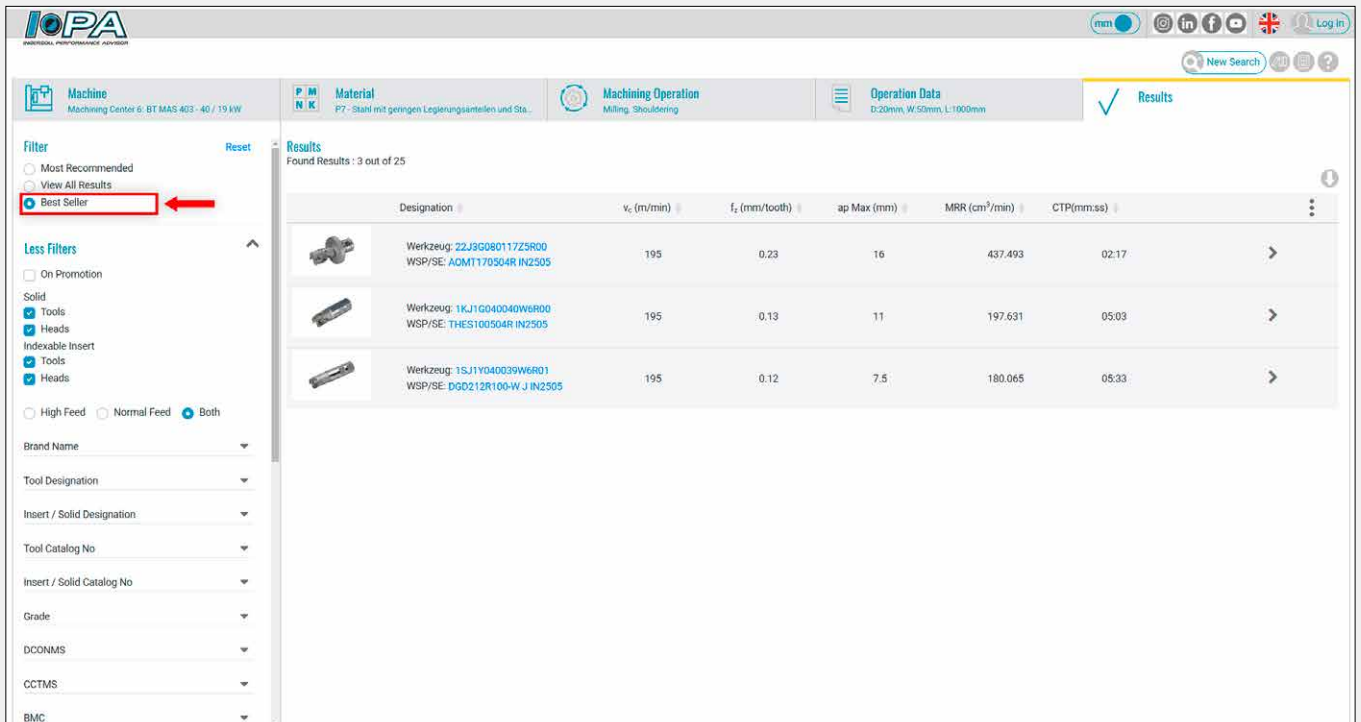
To view all results, select **"View All Results"** in the filters section on the left:



The screenshot shows the IOPA Performance Advisor interface. On the left, the 'Filter' section has 'View All Results' selected, indicated by a red arrow. The 'Results' section on the right shows 25 out of 25 results. The table below lists the results:

Designation	v_c (m/min)	f_z (mm/tooth)	ap Max (mm)	MRR (cm ³ /min)	CTP(mm:ss)
Werkzeug: 22J3G080117ZSR00 WSP/SE: AOMT170504R IN2505	195	0.23	16	437.493	02:17
Werkzeug: 22J3G080117ZSR00 WSP/SE: AOMT170504R IN2530	175	0.23	16	392.391	02:32
Werkzeug: 22J3G080117ZSR00 WSP/SE: AOMT170504R IN1030	130	0.23	16	291.474	03:25
Werkzeug: 22J3G040045ZSR00 WSP/SE: AOMT170504R IN2505	262	0.23	16	235.096	04:15
Werkzeug: 22J3G06308ZSR00 WSP/SE: AOMT170504R IN2505	264	0.23	16	225.625	04:25
Werkzeug: 1KJ1G040040W6R00 WSP/SE: THES100504R IN2505	195	0.13	11	197.631	05:03
Werkzeug: 1KJ1D040040W6R00 WSP/SE: THES060404R HR IN2505	195	0.08	7	127.15	07:51
Werkzeug: 1KJ1D040040W6R00 WSP/SE: THES060404R IN2505	195	0.08	7	127.15	07:51

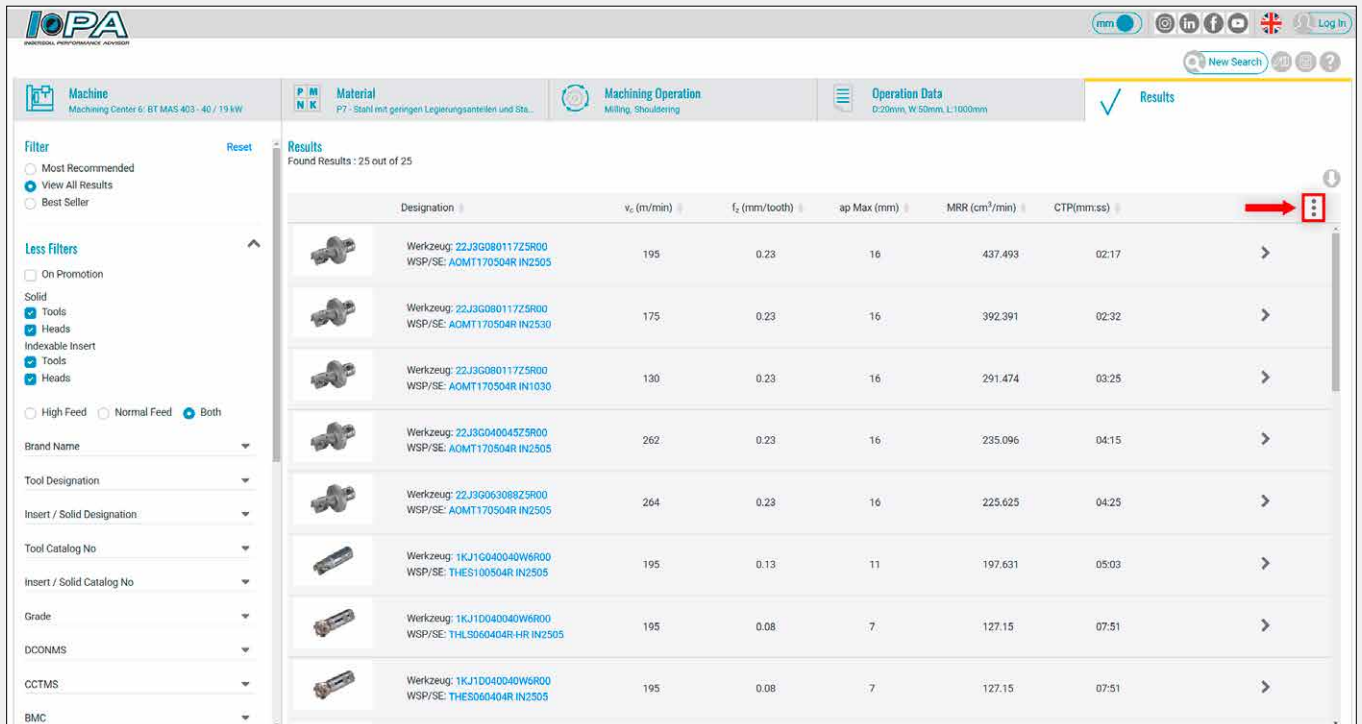
To view all results sorted by **"Best Seller"** recommendation, select the **"Best Seller"** filter option.



The screenshot shows the IOPA Performance Advisor interface. On the left, the 'Filter' section has 'Best Seller' selected, indicated by a red arrow. The 'Results' section on the right shows 3 out of 25 results. The table below lists the results:

Designation	v_c (m/min)	f_z (mm/tooth)	ap Max (mm)	MRR (cm ³ /min)	CTP(mm:ss)
Werkzeug: 22J3G080117ZSR00 WSP/SE: AOMT170504R IN2505	195	0.23	16	437.493	02:17
Werkzeug: 1KJ1G040040W6R00 WSP/SE: THES100504R IN2505	195	0.13	11	197.631	05:03
Werkzeug: 1SJ1Y040039W6R01 WSP/SE: DGD212R100-W J IN2505	195	0.12	7.5	180.065	05:33

There is a performance bar to sort by filtering each category output:



Machine
Machining Center 6: BT MAS 403 - 40 / 19 kW

Material
P7 - Stahl mit geringen Legierungsanteilen und Sta.

Machining Operation
Milling, Shouldering

Operation Data
D:20mm, W:50mm, L:1000mm

Filter
Reset
Most Recommended
View All Results
Best Seller

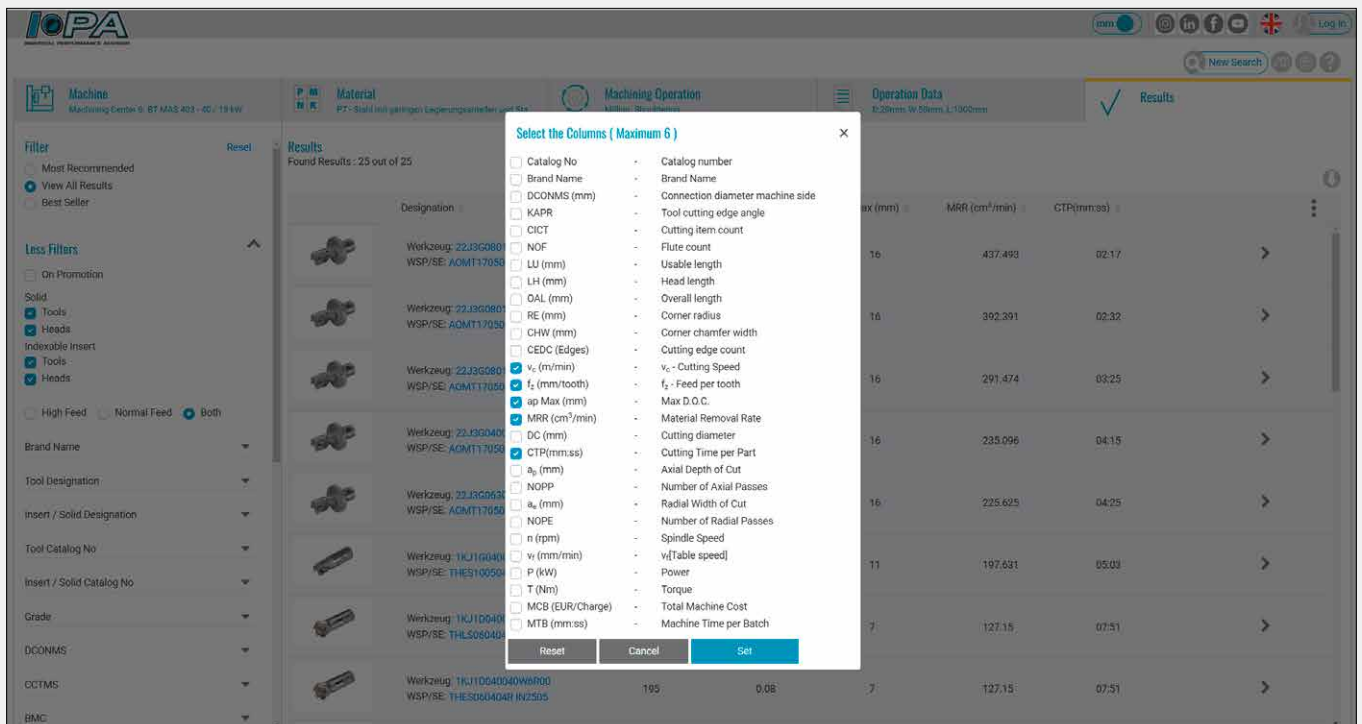
Less Filters
On Promotion
Solid
Tools
Heads
Indexable Insert
Tools
Heads
High Feed
Normal Feed
Both

Brand Name
Tool Designation
Insert / Solid Designation
Tool Catalog No
Insert / Solid Catalog No
Grade
DCONMS
CCTMS
BMC

Results
Found Results: 25 out of 25

Designation	v_c (m/min)	f_z (mm/tooth)	ap Max (mm)	MRR (cm ³ /min)	CTP(mm:ss)
Werkzeug: 22J3G080117ZSR00 WSP/SE: AOMT170504R IN2505	195	0.23	16	437.493	02:17
Werkzeug: 22J3G080117ZSR00 WSP/SE: AOMT170504R IN2530	175	0.23	16	392.391	02:32
Werkzeug: 22J3G080117ZSR00 WSP/SE: AOMT170504R IN1030	130	0.23	16	291.474	03:25
Werkzeug: 22J3G040045ZSR00 WSP/SE: AOMT170504R IN2505	262	0.23	16	235.096	04:15
Werkzeug: 22J3G063088ZSR00 WSP/SE: AOMT170504R IN2505	264	0.23	16	225.625	04:25
Werkzeug: 1KJ1G040040W6R00 WSP/SE: THES100504R IN2505	195	0.13	11	197.631	05:03
Werkzeug: 1KJ1D040040W6R00 WSP/SE: THLS060404R HR IN2505	195	0.08	7	127.15	07:51
Werkzeug: 1KJ1D040040W6R00 WSP/SE: THES060404R IN2505	195	0.08	7	127.15	07:51

Select and define your own performance bar categories:



Machine
Machining Center 6: BT MAS 403 - 40 / 19 kW

Material
P7 - Stahl mit geringen Legierungsanteilen und Sta.

Machining Operation
Milling, Shouldering

Operation Data
D:20mm, W:50mm, L:1000mm

Filter
Reset
Most Recommended
View All Results
Best Seller

Less Filters
On Promotion
Solid
Tools
Heads
Indexable Insert
Tools
Heads
High Feed
Normal Feed
Both

Brand Name
Tool Designation
Insert / Solid Designation
Tool Catalog No
Insert / Solid Catalog No
Grade
DCONMS
CCTMS
BMC

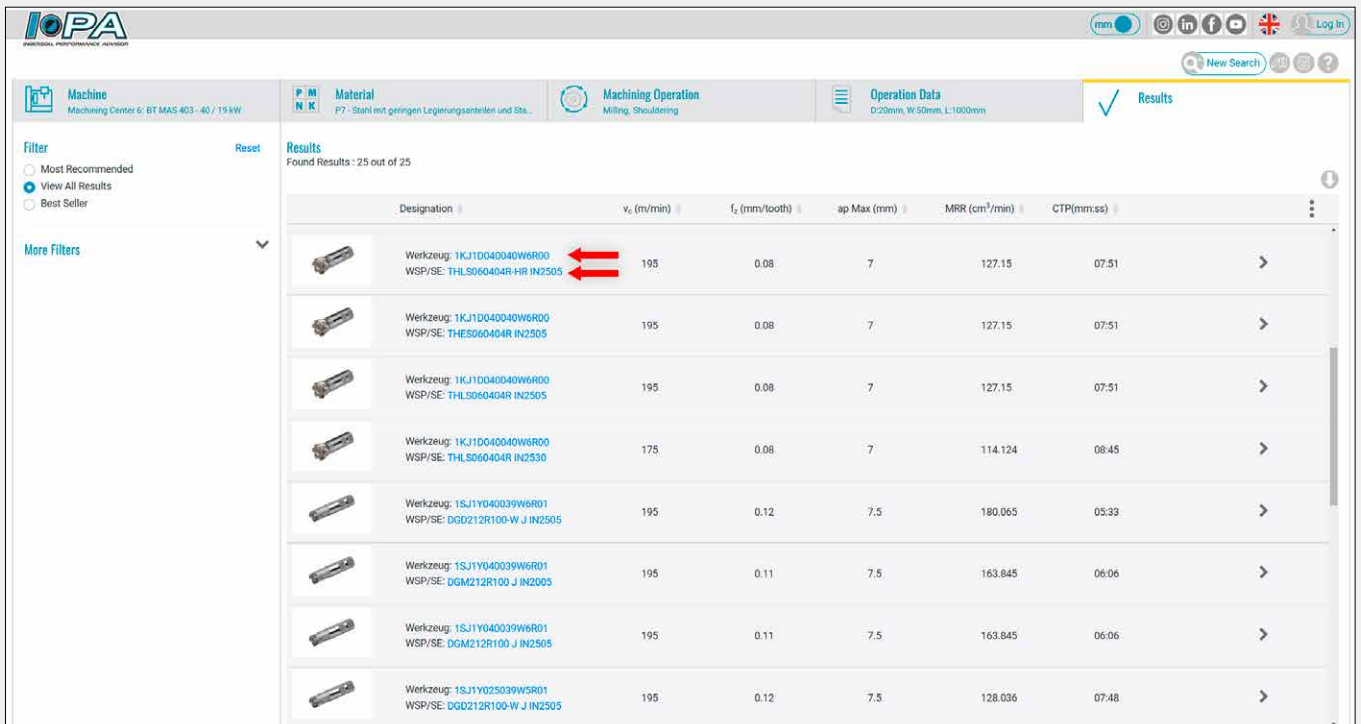
Results
Found Results: 25 out of 25

Select the Columns (Maximum 6)

- ☐ Catalog No
- ☐ Brand Name
- ☐ DCONMS (mm)
- ☐ KAPR
- ☐ CICT
- ☐ NOF
- ☐ LU (mm)
- ☐ LH (mm)
- ☐ OAL (mm)
- ☐ RE (mm)
- ☐ CHW (mm)
- ☐ CEDC (Edges)
- ☒ v_c (m/min)
- ☒ f_z (mm/tooth)
- ☒ ap Max (mm)
- ☒ MRR (cm³/min)
- ☐ DC (mm)
- ☒ CTP(mm:ss)
- ☐ a_p (mm)
- ☐ NOPP
- ☐ a_w (mm)
- ☐ NOPE
- ☐ n (rpm)
- ☐ v_t (mm/min)
- ☐ P (kW)
- ☐ T (Nm)
- ☐ MCB (EUR/Charge)
- ☐ MTB (mm:ss)
- ☐ Catalog number
- ☐ Brand Name
- ☐ Connection diameter machine side
- ☐ Tool cutting edge angle
- ☐ Cutting item count
- ☐ Flute count
- ☐ Usable length
- ☐ Head length
- ☐ Overall length
- ☐ Corner radius
- ☐ Corner chamfer width
- ☐ Cutting edge count
- ☐ v_c - Cutting Speed
- ☐ f_z - Feed per tooth
- ☐ Max D.O.C.
- ☐ Material Removal Rate
- ☐ Cutting diameter
- ☐ Cutting Time per Part
- ☐ Axial Depth of Cut
- ☐ Number of Axial Passes
- ☐ Radial Width of Cut
- ☐ Number of Radial Passes
- ☐ Spindle Speed
- ☐ v_t [Table speed]
- ☐ Power
- ☐ Torque
- ☐ Total Machine Cost
- ☐ Machine Time per Batch

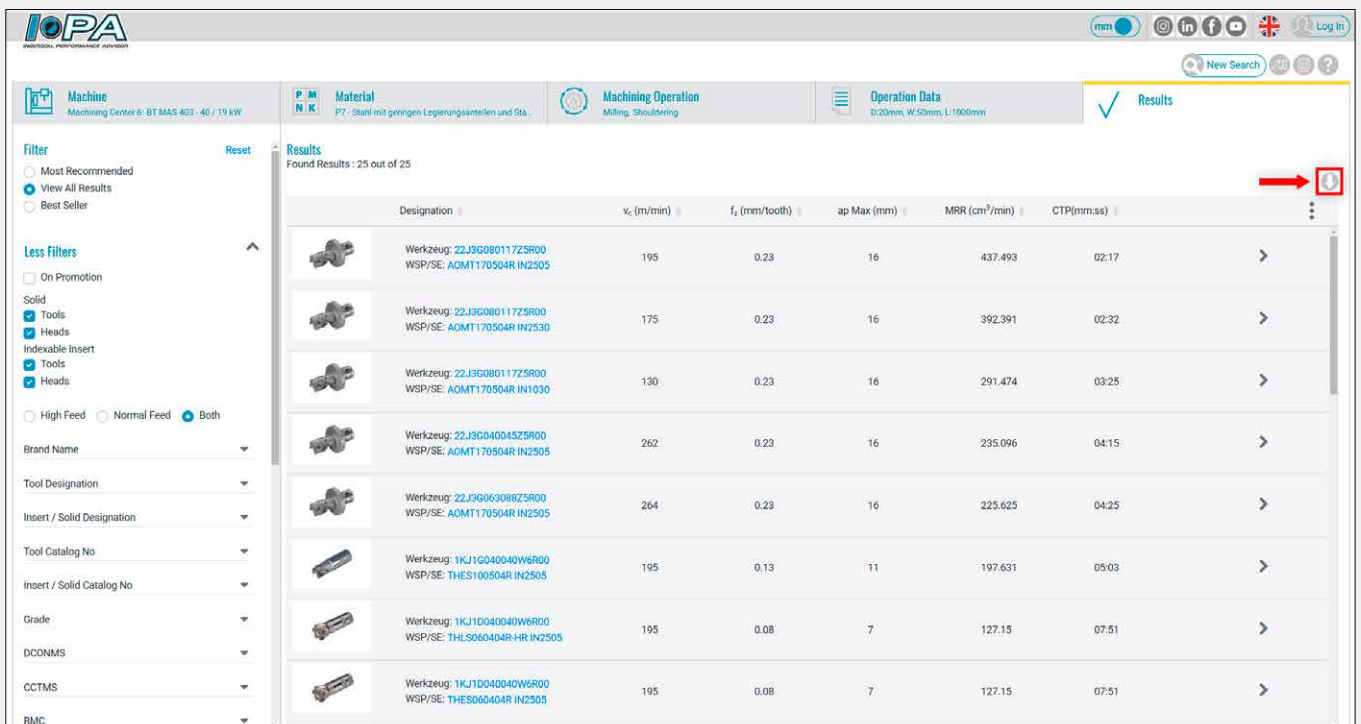
Reset Cancel Set

Option to view the item details in the Ingersoll's e-Catalog and create an assembly
A full assembly, including holders, will be presented in the Ingersoll e-Catalog.



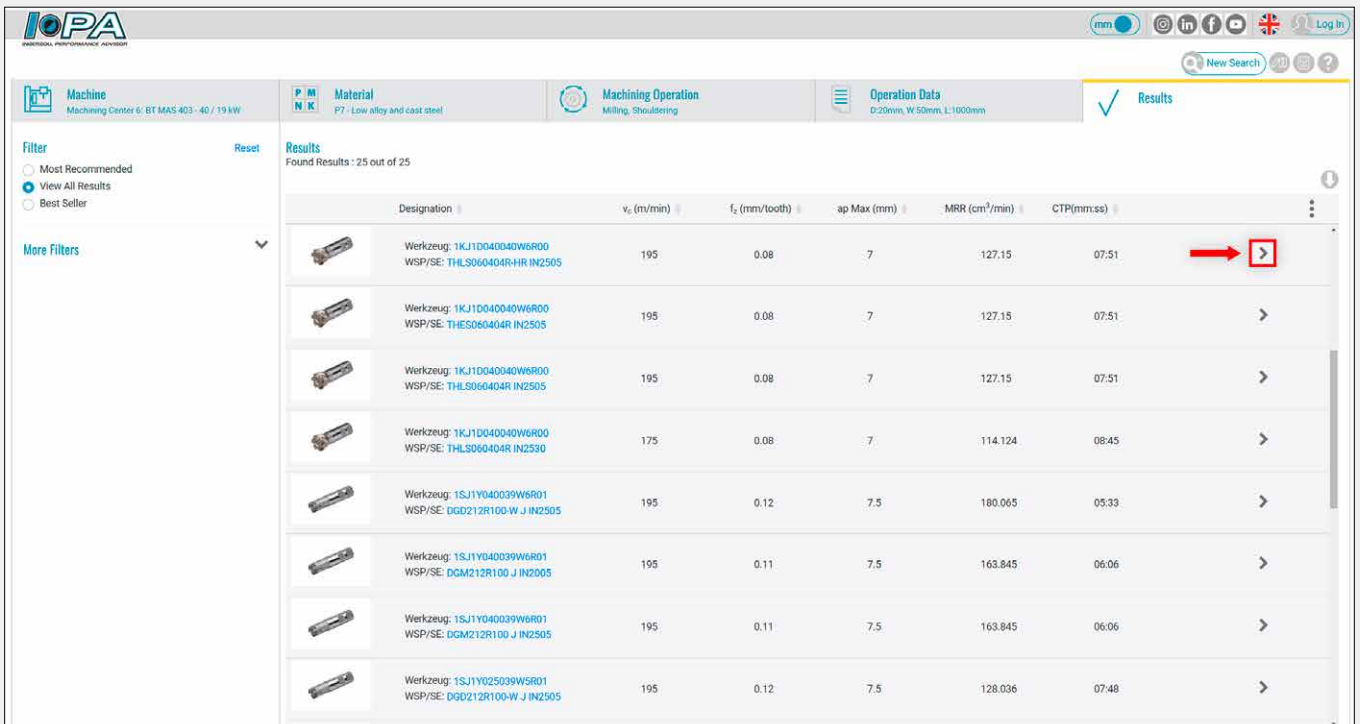
Designation	v_c (m/min)	f_z (mm/tooth)	ap Max (mm)	MRR (cm³/min)	CTP (mm:ss)
Werkzeug: 1KJ1D040040W6R00 WSP/SE: THLS060404R HR IN2505	195	0.08	7	127.15	07:51
Werkzeug: 1KJ1D040040W6R00 WSP/SE: THES060404R IN2505	195	0.08	7	127.15	07:51
Werkzeug: 1KJ1D040040W6R00 WSP/SE: THLS060404R IN2505	195	0.08	7	127.15	07:51
Werkzeug: 1KJ1D040040W6R00 WSP/SE: THLS060404R IN2530	175	0.08	7	114.124	08:45
Werkzeug: 1SJ1Y040039W6R01 WSP/SE: DGD212R100-W J IN2505	195	0.12	7.5	180.065	05:33
Werkzeug: 1SJ1Y040039W6R01 WSP/SE: DGM212R100 J IN2005	195	0.11	7.5	163.845	06:06
Werkzeug: 1SJ1Y040039W6R01 WSP/SE: DGM212R100 J IN2505	195	0.11	7.5	163.845	06:06
Werkzeug: 1SJ1Y025039W6R01 WSP/SE: DGD212R100-W J IN2505	195	0.12	7.5	128.036	07:48

Option to download recommended tooling solutions:



Designation	v_c (m/min)	f_z (mm/tooth)	ap Max (mm)	MRR (cm³/min)	CTP (mm:ss)
Werkzeug: 22JG080117ZSR00 WSP/SE: AOMT170504R IN2505	195	0.23	16	437.493	02:17
Werkzeug: 22JG080117ZSR00 WSP/SE: AOMT170504R IN2530	175	0.23	16	392.391	02:32
Werkzeug: 22JG080117ZSR00 WSP/SE: AOMT170504R IN1030	130	0.23	16	291.474	03:25
Werkzeug: 22JG040045ZSR00 WSP/SE: AOMT170504R IN2505	262	0.23	16	235.096	04:15
Werkzeug: 22JG063088ZSR00 WSP/SE: AOMT170504R IN2505	264	0.23	16	225.625	04:25
Werkzeug: 1KJ1G040040W6R00 WSP/SE: THES100504R IN2505	195	0.13	11	197.631	05:03
Werkzeug: 1KJ1D040040W6R00 WSP/SE: THLS060404R HR IN2505	195	0.08	7	127.15	07:51
Werkzeug: 1KJ1D040040W6R00 WSP/SE: THES060404R IN2505	195	0.08	7	127.15	07:51

To view more result Information, click on a specific row:



Machine
Machining Center 6: BT MAS 403 - 40 / 19 kW

Material
P7: Low alloy and cast steel

Machining Operation
Milling, Shouldering

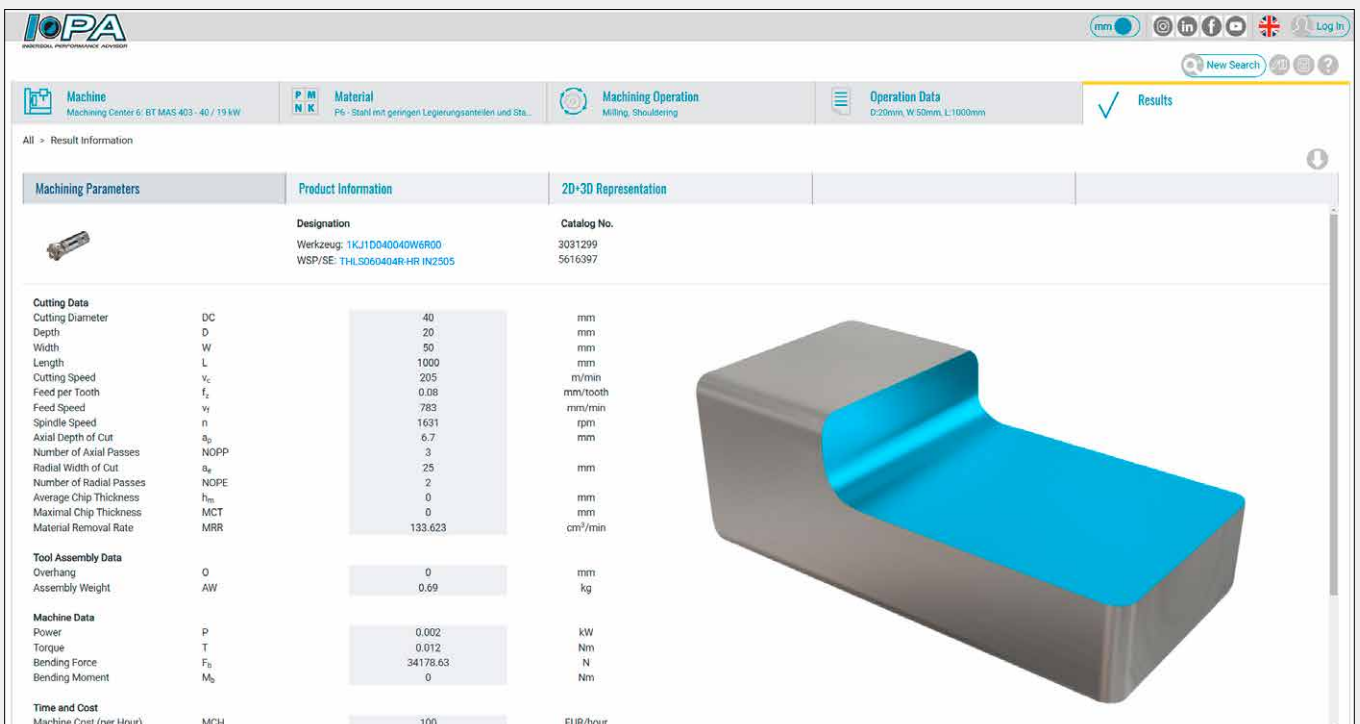
Operation Data
D:20mm, W:50mm, L:1000mm

Results
Found Results: 25 out of 25

Designation	v_c (m/min)	f_z (mm/tooth)	ap Max (mm)	MRR (cm ³ /min)	CTP(mm:ss)
Werkzeug: 1KJ1D040040W6R00 WSP/SE: THLS060404R-HR IN2505	195	0.08	7	127.15	07:51
Werkzeug: 1KJ1D040040W6R00 WSP/SE: THLS060404R IN2505	195	0.08	7	127.15	07:51
Werkzeug: 1KJ1D040040W6R00 WSP/SE: THLS060404R IN2505	195	0.08	7	127.15	07:51
Werkzeug: 1KJ1D040040W6R00 WSP/SE: THLS060404R IN2530	175	0.08	7	114.124	08:45
Werkzeug: 1SJ1Y040039W6R01 WSP/SE: DGD212R100-W J IN2505	195	0.12	7.5	180.065	05:33
Werkzeug: 1SJ1Y040039W6R01 WSP/SE: DGM212R100 J IN2005	195	0.11	7.5	163.845	06:06
Werkzeug: 1SJ1Y040039W6R01 WSP/SE: DGM212R100 J IN2505	195	0.11	7.5	163.845	06:06
Werkzeug: 1SJ1Y025039W6R01 WSP/SE: DGD212R100-W J IN2505	195	0.12	7.5	128.036	07:48

Clicking the link "All" or on the "Results" tab, will lead back to the previous page ("All results").

The result information screen is containing three clickable tabs: Machining parameters, Product information and 2D+3D Representation.



Machine
Machining Center 6: BT MAS 403 - 40 / 19 kW

Material
P6: Stahl mit geringen Legierungsanteilen und Sta...

Machining Operation
Milling, Shouldering

Operation Data
D:20mm, W:50mm, L:1000mm

Results

All > Result Information

Machining Parameters | **Product Information** | **2D+3D Representation**

Designation
Werkzeug: 1KJ1D040040W6R00
WSP/SE: THLS060404R-HR IN2505

Catalog No.
3031299
5616397



Parameter	Value	Unit
Cutting Data		
Cutting Diameter	40	mm
Depth	20	mm
Width	50	mm
Length	1000	mm
Cutting Speed	205	m/min
Feed per Tooth	0.08	mm/tooth
Feed Speed	783	mm/min
Spindle Speed	1631	rpm
Axial Depth of Cut	6.7	mm
Number of Axial Passes	3	
Radial Width of Cut	25	mm
Number of Radial Passes	2	
Average Chip Thickness	0	mm
Maximal Chip Thickness	0	mm
Material Removal Rate	133.623	cm ³ /min
Tool Assembly Data		
Overhang	0	mm
Assembly Weight	0.69	kg
Machine Data		
Power	0.002	kW
Torque	0.012	Nm
Bending Force	34178.63	N
Bending Moment	0	Nm
Time and Cost		
Machine Cost (per Hour)	100	EUR/hour

Catalog information for the entire assembly of items:

IOPA INGRESSOLL PERFORMANCE ADVISOR

Machine: Machining Center 6: BT MAS 403 - 40 / 19 kW | Material: P6 - Stahl mit geringen Legierungselementen und Sta... | Machining Operation: Milling, Shouldering | Operation Data: D:20mm, W:50mm, L:1000mm | Results

All > Result Information



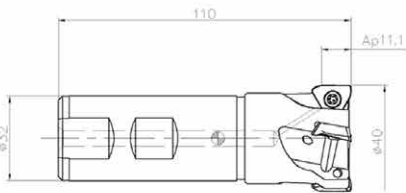
Machining Parameters	Product Information	2D+3D Representation																				
	Designation Werkzeug: 1KJ1D040040W6R00 WSP/SE: THLS060404R-HR IN2505	Catalog No. 3031299 5616397																				
Werkzeug: Family Description: Schaftfräser 1KJ1D...W GoldTrio Aufnahme nach DIN 1835 B Item Designation: 1KJ1D040040W6R00																						
<table border="1"> <thead> <tr> <th>DC</th> <th>CIC</th> <th>APMX</th> <th>OAL</th> <th>LUX</th> <th>LF</th> <th>RMPX*</th> <th>DCONMS</th> <th>CSP</th> <th>Schaft</th> </tr> </thead> <tbody> <tr> <td>40.00</td> <td>6</td> <td>7.00</td> <td>115.00</td> <td>40.0</td> <td>75.0</td> <td>1.3</td> <td>32.00</td> <td>Y</td> <td>Weldon 1835 B</td> </tr> </tbody> </table>			DC	CIC	APMX	OAL	LUX	LF	RMPX*	DCONMS	CSP	Schaft	40.00	6	7.00	115.00	40.0	75.0	1.3	32.00	Y	Weldon 1835 B
DC	CIC	APMX	OAL	LUX	LF	RMPX*	DCONMS	CSP	Schaft													
40.00	6	7.00	115.00	40.0	75.0	1.3	32.00	Y	Weldon 1835 B													
WSP/SE: Family Description: THLS060404R-HR hoch-positive Geometrie R0,4 																						

2D & dynamic 3D models for the entire assembly of items:

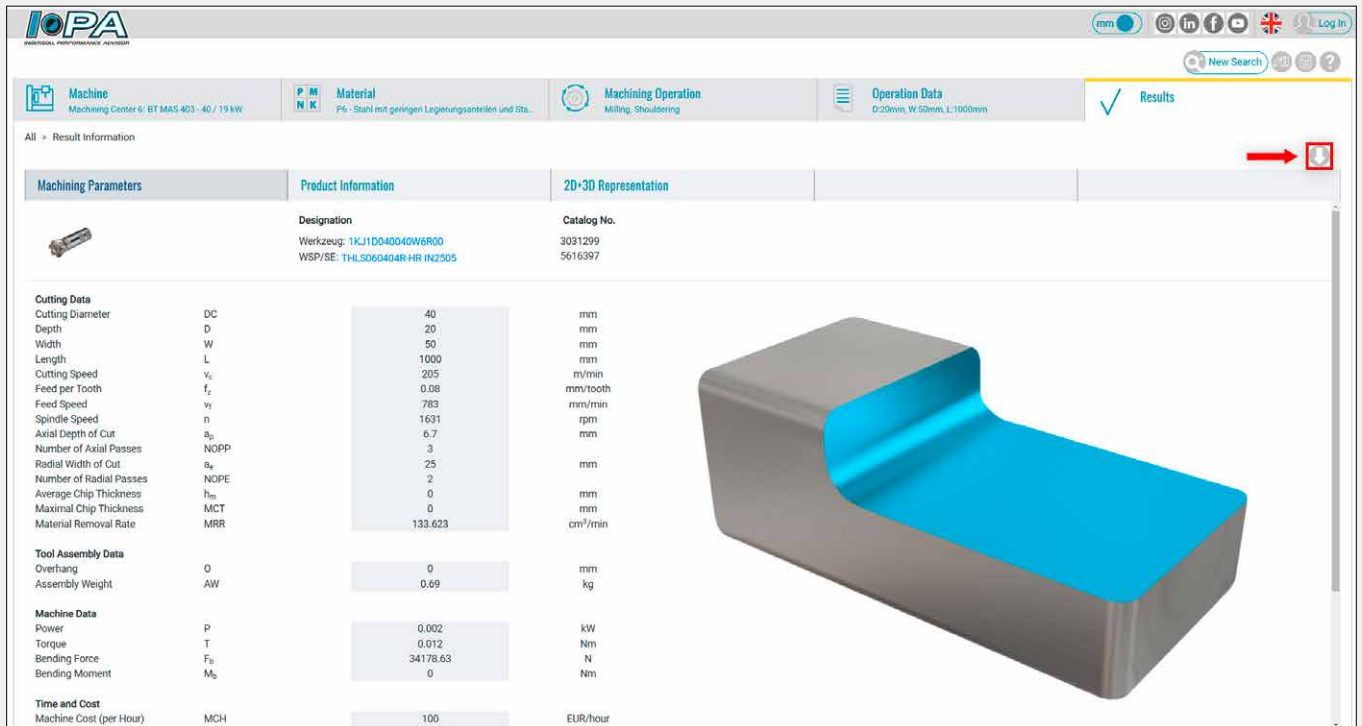
IOPA INGRESSOLL PERFORMANCE ADVISOR

Machine: Machining Center 6: BT MAS 403 - 40 / 19 kW | Material: P7 - Low alloy & cast steel | Machining Operation: Milling, Shouldering | Operation Data: D:20mm, W:50mm, L:1000mm | Results

All > Result Information

Machining Parameters	Product Information	2D+3D Representation
	Designation Tool: 1KJ1D040040W6R00 Insert: THLS060404R-HR IN2505	Catalog No. 3031299 5616397
Tool: Verpackungseinheit: 1 <input checked="" type="radio"/> Light <input type="radio"/> Detailed		
<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid orange; padding: 10px; width: 45%;"> <p>3D Representation</p>  </div> <div style="border: 1px solid orange; padding: 10px; width: 45%;"> <p>2D Representation</p>  <p>1KJ1D040040W6R00</p> </div> </div>		

A click on "Export file" icon will open a window to choose download format:



Machine
Machining Center 6: BT MAS 403 - 40 / 19 kW

Material
P6 - Stahl mit geringen Legierungsanteilen und Sta.

Machining Operation
Milling, Shouldering

Operation Data
D:20mm, W:50mm, L:1000mm

Results

All > Result Information

Machining Parameters | **Product Information** | **2D+3D Representation**

Designation
Werkzeug: 1KJ1D040040W6R00
WSP/SE: THL5060404R HR IN2505

Catalog No.
3031299
5616397

Cutting Data

Parameter	Value	Unit
Cutting Diameter	40	mm
Depth	20	mm
Width	50	mm
Length	1000	mm
Cutting Speed	205	m/min
Feed per Tooth	0.08	mm/tooth
Feed Speed	783	mm/min
Spindle Speed	1631	rpm
Axial Depth of Cut	6.7	mm
Number of Axial Passes	3	
Radial Width of Cut	25	mm
Number of Radial Passes	2	
Average Chip Thickness	0	mm
Maximal Chip Thickness	0	mm
Material Removal Rate	133.623	cm³/min

Tool Assembly Data

Parameter	Value	Unit
Overhang	0	mm
Assembly Weight	0.69	kg

Machine Data

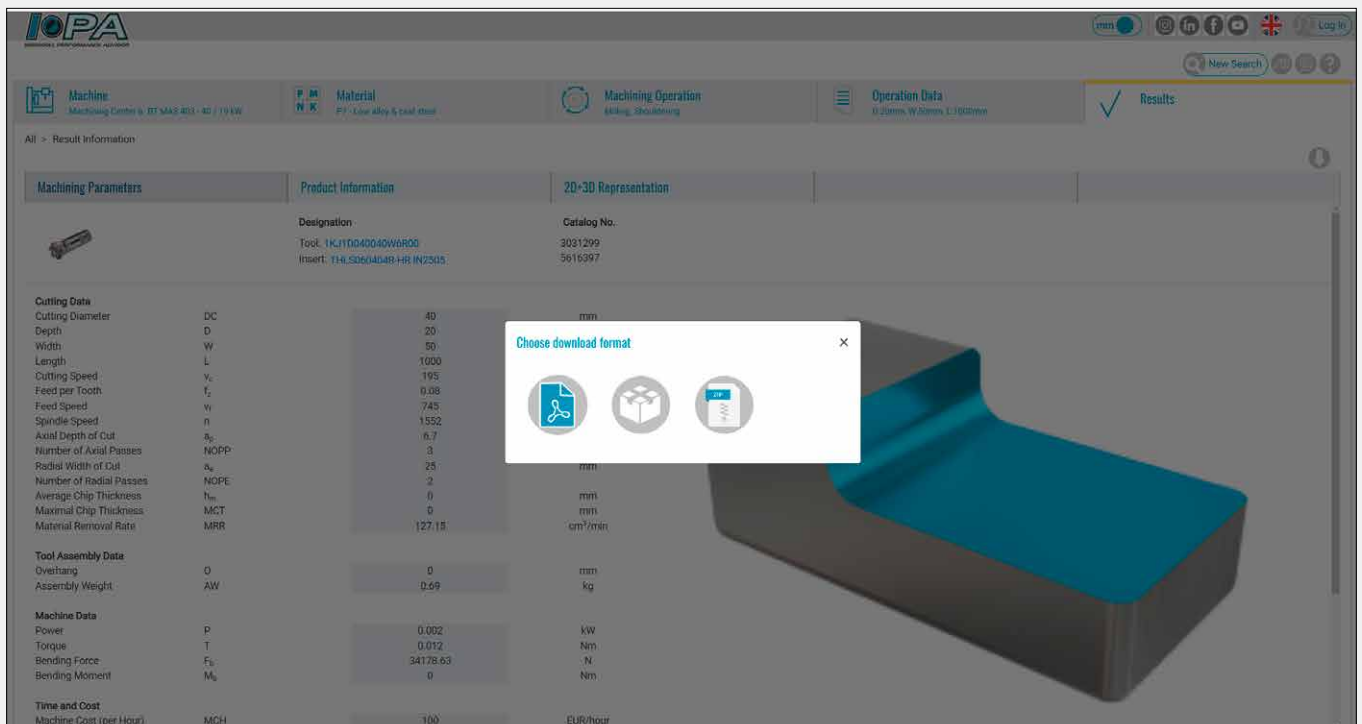
Parameter	Value	Unit
Power	0.002	kW
Torque	0.012	Nm
Bending Force	34178.63	N
Bending Moment	0	Nm

Time and Cost

Parameter	Value	Unit
Machine Cost (per Hour)	100	EUR/hour

3D Model

2D & dynamic 3D models for the entire assembly of items:



Machine
Machining Center 6: BT MAS 403 - 40 / 19 kW

Material
P6 - Steel alloy & tool steel

Machining Operation
Milling, Shouldering

Operation Data
D:20mm, W:50mm, L:1000mm

Results

All > Result Information

Machining Parameters | **Product Information** | **2D+3D Representation**

Designation
Tool: 1KJ1D040040W6R00
Insert: THL5060404R HR IN2505

Catalog No.
3031299
5616397

Cutting Data

Parameter	Value	Unit
Cutting Diameter	40	mm
Depth	20	mm
Width	50	mm
Length	1000	mm
Cutting Speed	195	m/min
Feed per Tooth	0.08	mm/tooth
Feed Speed	745	mm/min
Spindle Speed	1552	rpm
Axial Depth of Cut	6.7	mm
Number of Axial Passes	3	
Radial Width of Cut	25	mm
Number of Radial Passes	2	
Average Chip Thickness	0	mm
Maximal Chip Thickness	0	mm
Material Removal Rate	127.15	cm³/min

Tool Assembly Data

Parameter	Value	Unit
Overhang	0	mm
Assembly Weight	0.69	kg

Machine Data

Parameter	Value	Unit
Power	0.002	kW
Torque	0.012	Nm
Bending Force	34178.63	N
Bending Moment	0	Nm

Time and Cost

Parameter	Value	Unit
Machine Cost (per Hour)	100	EUR/hour

3D Model

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