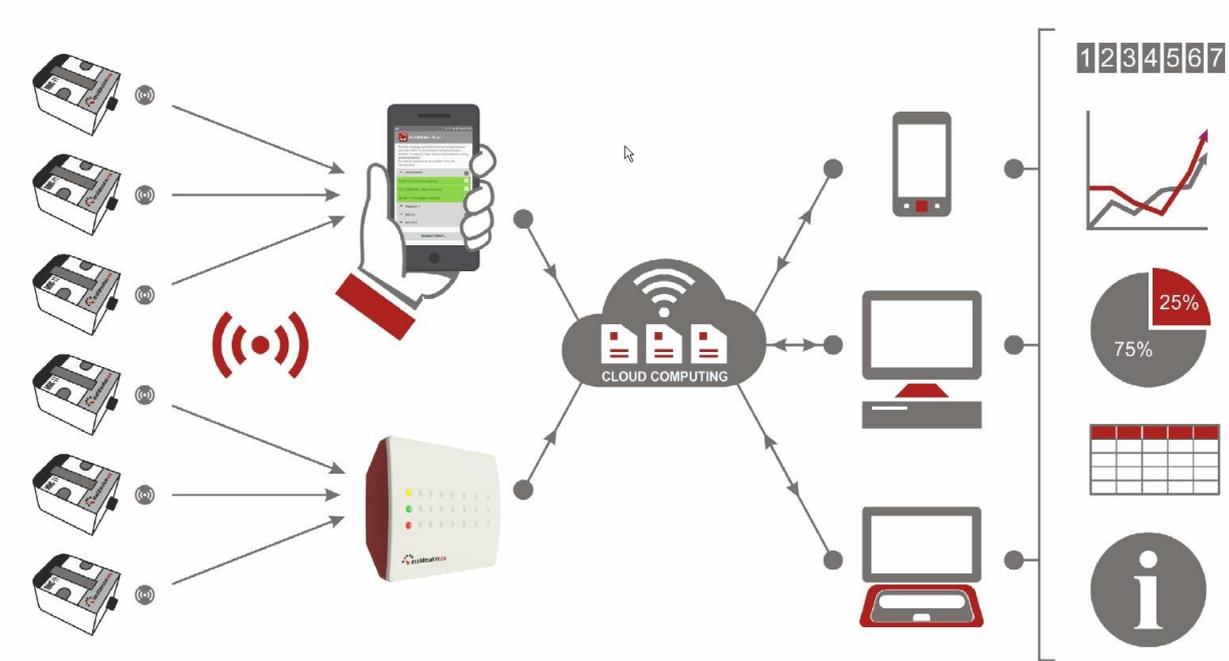


# Global internet service

## MoldMaker.eu



MANUAL

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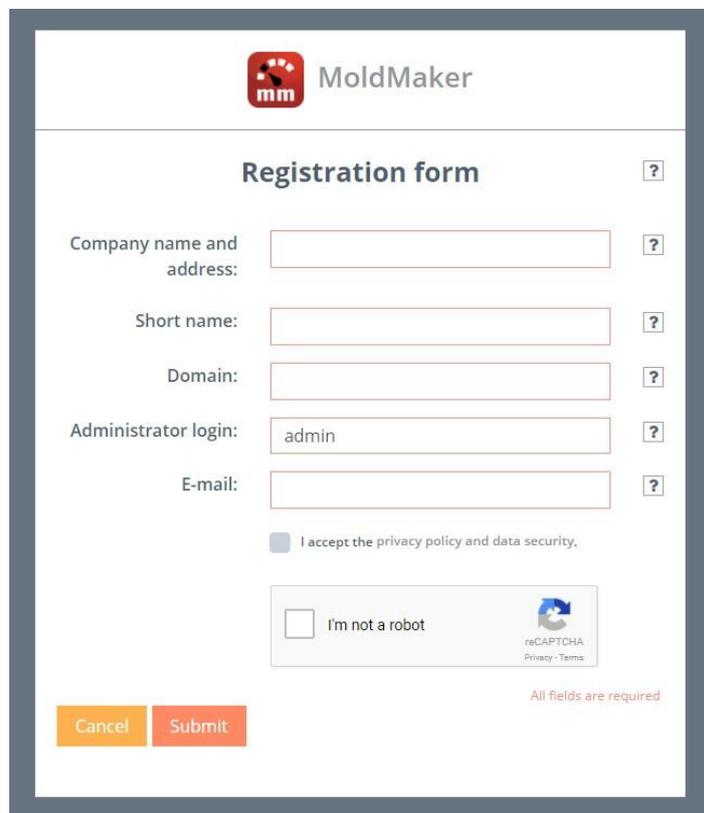
MoldMaker.eu is an online global internet service used to control the work of injection molds in various companies in both small and large global corporations. In order to use the website, first you need to register a company account. A company can register only one account, but may have many users.

In the case of large corporations, it is required that every company belonging to the corporation should register its own company account. The Corporation will supervise all of its companies.

## 1. CREATING A COMPANY ACCOUNT

In order to create a company account, a website registration process must be proceeded:

<https://moldmaker.eu/panel/register.php>



The screenshot shows the 'Registration form' on the MoldMaker website. The form includes the following fields and elements:

- Company name and address:** A text input field with a question mark icon to its right.
- Short name:** A text input field with a question mark icon to its right.
- Domain:** A text input field with a question mark icon to its right.
- Administrator login:** A text input field containing the text 'admin' and a question mark icon to its right.
- E-mail:** A text input field with a question mark icon to its right.
- Privacy Policy:** A checkbox labeled 'I accept the privacy policy and data security.' which is currently unchecked.
- reCAPTCHA:** A box containing the text 'I'm not a robot' and a checkbox, along with the reCAPTCHA logo and links for 'Privacy - Terms'.
- Buttons:** Two buttons at the bottom: 'Cancel' (orange) and 'Submit' (orange).
- Footer:** A red text note at the bottom right stating 'All fields are required'.

The required fields must be completed:

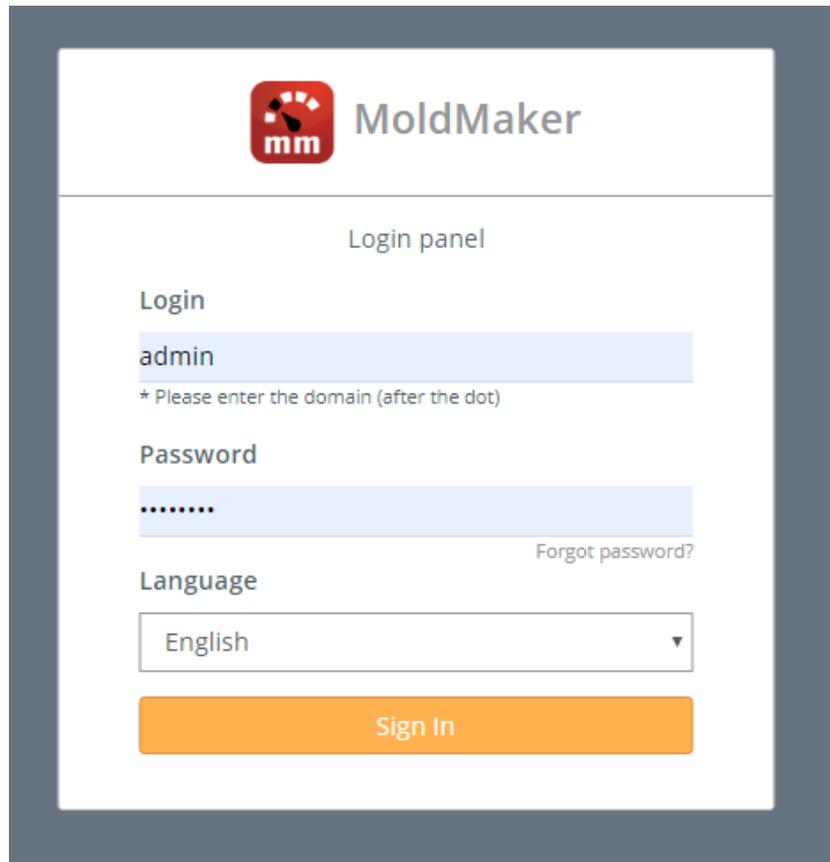
- "Company name and address"
- "Short name", a short name identifying your company that will be used in the system
- "Domain", the domain that identifies the company when logging in
- "Administrator login", name of user used by the company account administrator
- "e-mail", for verification

Then submit the form. An activation link will be sent to the e-mail address provided. After clicking the activation link you will be asked to set a password for the system.

After completing the registration process, you will receive an email with confirmation of a company account creation and the first user with administrator privileges.

## 2. LOGGING TO THE MOLDMAKER SYSTEM.

To log in to the MoldMaker service, visit the website <https://www.moldmaker.eu/panel/>



The screenshot shows the MoldMaker login interface. At the top left is the MoldMaker logo (a red square with a white 'mm' and a stylized 'm' above it). To the right of the logo is the text 'MoldMaker'. Below the logo and text is a horizontal line. Underneath the line is the text 'Login panel'. The main content area contains three sections: 'Login' with a text input field containing 'admin' and a note '\* Please enter the domain (after the dot)'; 'Password' with a password input field containing seven dots and a 'Forgot password?' link; and 'Language' with a dropdown menu showing 'English'. At the bottom of the form is a large orange button labeled 'Sign In'.

As a login, enter the username and domain. Keep the correct syntax: "Administrator login.domain" set up at the registration process. Additionally you have received information how to login at the email address provided during the registration process. Select the appropriate language for use.

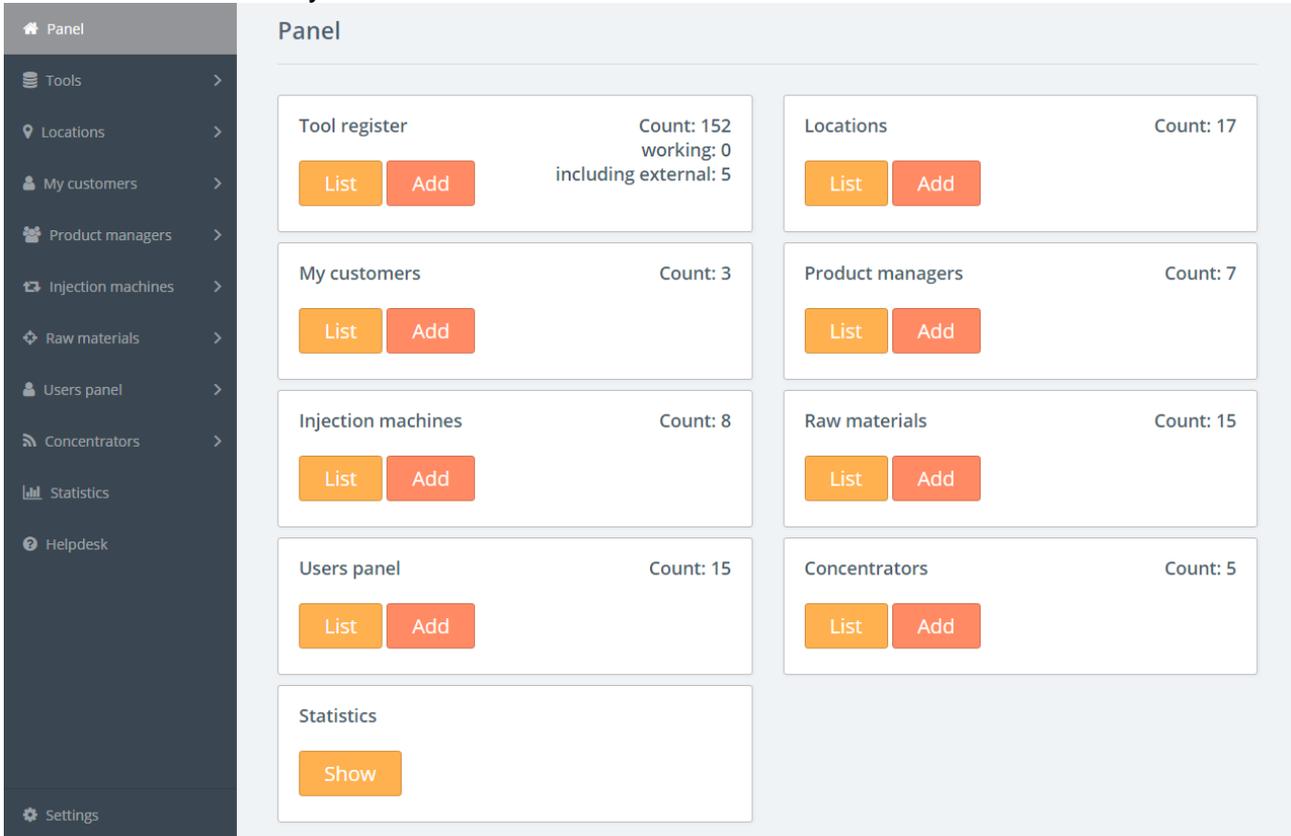
## 3. SYSTEM USERS

The first person registered in the service has administrator rights. At the beginning, it should create accounts for other users. Depending on the needs, you can assign 3 types of rights to them:

- Administrator - has access to all resources (including adding new users and editing them)
- Manager - has the same rights as the administrator except adding new users
- User - has access to read-only tool register, maintenance cards, charts, counter readings

## 4. OPERATION OF THE SYSTEM - FIRST STEPS

After logging in to the MoldMaker system, the start panel is displayed allowing quick access to individual system resources.



In order to start working with the system, you should enter some tools data, their locations and customers (optional). Please follow the next steps for quick start.

### 4.1. Adding locations

*Available for users: Manager, Administrator*

If the tools are located in several different places in the plant, you should name them and use as a locations. Add locations by selecting "Locations" menu and command "Add new location".

### 4.3. Adding customers

*Available for users: Manager, Administrator*

Optionally, you can enter customer data for which the production is carried out. Add customers by selecting "My Customers" menu and "Add new customer" command .

### 4.2. Adding tools

*Available for users: Manager, Administrator*

The next step is to enter basic tools data into the system. Please select "Add new tool" from the "Tools" menu, fill in the required fields and confirm with "Add".

At this step, you do not have to fill in the "Counter MAC address" field. It will be completed automatically during assigning the counter to the tool via the MoldMaker Scan mobile application.

You can also use the "copy" icon  for quick copying existing tool.

## 5. TOOL SPECIFICATION CARDS (TSC)

The Tool Specification Cards are documents describing the structure and technical parameters of the tools held. They can be used for various purposes related to the operation, construction and design of new tools.

The Tool Specification Card is related to the tool, lead persons, injection machines and raw materials. Therefore, you must first add this data to the system. The parameters stored in the Tool Specification Cards can be used as specific attributes during search process

### 5.1. Product managers

*Available for users: Manager, Administrator*

List of people managing injection molds in the company. The person is assigned to the tool when creating the Tool Specification Card. To add a person, select the menu "Product managers" and the command "Add new manager".

### 5.2. Injection machines

*Available for users: Manager, Administrator*

List of injection machines used in the company. The injection machine can be assigned to the tool when creating a Tool Specification Card. To add an injection machine, select the "Injection machines" menu and the "Add new injection machine" command.

### 5.3. Raw materials

*Available for users: Manager, Administrator*

A list of raw materials used in the company. The raw material can be assigned to the tool when creating a Tool Specification Card. To add a raw material, select the "Raw materials" menu and the "Add new raw material" command.

### 5.4. Creating Tool Specification Card

*Available for users: Manager, Administrator*

The Tool Specification Card is a document describing the injection tool in detail. It consists of several thematic groups:

- General information
- Part
- Injection machine



- Get from another tool - it allows you to copy data from another TCS
- Create PDF - allows you to save TSC in a PDF file in 2 versions - full (contains all fields) and shortened (contains only filled fields)
- Delete Card - delete Tool Specification Card
- Share Card - provides a Tool Specification Card as link or email.

## 6. TOOL REGISTER

Available for users: User, Manager, Administrator

The basic work with the MoldMaker system is to control the main register of tools available at **Tools -> Tool register** menu.

The tools in the register are presented in a table containing the following columns:

- Tool name
- Part name
- Location
- Customer
- Tool Spec.Card
- Counter MAC
- Status
- Count
- Schedules
- maintenance cards
- Options:    (Available for users: Manager, Administrator)

### Tool register

Add new tool

Location: Hall 2

All
My tools
With counters

Search:

External
Sent
Working

Lp.	Tool name	Part name	Location	Customer	Tool Spec.Card	Counter MAC	Status	Count	Schedules	Maintenance cards	Options
2	VECTOR	NCF size PF1	Hall 2	XTTS Ltd.	+	FC:23:A1...	—	11 196		2	
1	D220-Lift-3040	External lift A	Hall 2	XTTS Ltd.	<a href="#">TSC 31</a>	—		7 204		20	
3	KW346	Upper Cover	Hall 2	MORON Ltd.	<a href="#">TSC 32</a>	12:AF:13...	—	4 553	—	+	
4	Housing K124	Housing	Hall 2	—	+	F0:26:04...	—	4 685	—	+	
5	D356-112	FW-112	Hall 2	MORON Ltd.	+	FB:D1:D2...	—	0	—	+	

Show 100 entries
 
 - external tools
  - sent tools

5 items

Previous 1 Next

MOLDMAKER, Jasionka 252E, 36-002 Jasionka, POLAND

8

The tool register has a convenient possibility of sorting columns, sorting by location and other attributes of quick selection.

The search engine also works on a given phrases. More information in chapter 8.2.



The "external tools" and "sent tools" to subcontractors are marked respectively in colors according to the legend



### 6.1. The column "Tool Spec.Card"

*For user type: user*

The user can preview the tool card in PDF format by clicking the shortcut eg "TSC\_24".

*For user type: user, manager, administrator*

The Manager and Administrator, after clicking the shortcut, have the option of previewing and editing the Tool Specification Card.

### 6.2. The column "Status"

It presents the status of the tool's operation by means of appropriate icons:

Icon	Description	Explanations
	do not worry, everything is ok	no alarms
	low battery voltage	It will soon be necessary to replace the battery at an authorized service center. The battery can not be replaced by the user himself.
	tool service required	Appears when the programmed counter value is reached in the maintenance schedule. It disappears after confirming service activities or setting a new value in the maintenance schedule and programming to the counter via NFC.
	counter mounted to the mold, active monitoring	Appears when monitoring is active.
	counter not mounted to the mold, active monitoring	Appears when monitoring is active.
	disassembly alarm, and the counter is mounted now	Appears when you unscrew and re-attach the counter to the tool with the monitoring function active. You can read the exact date of disassembly by pressing the "History of disassembly" button
	disassembly alarm, and the counter is mounted now	Appears when you unscrewed the counter from the tool with the monitoring function active. You can read the exact date of disassembly by pressing the "History of disassembly" button
	alarm for exceeding the temperature of 70 ° C (158 ° F)	The counter is designed to work at max. temperature of 85 ° C (185 ° F) , however, work above 70 ° C (158 ° F) causes increased consumption of the meter's battery.
	tool without a counter	

### 6.3. The column "Count"

It presents the counter value of the counter in the following form:

Icon	Description	Explanations
	last read value of the counter	... using a mobile application or MMCD concentrator
	tool work	An illustrative visualization of the tool work if subsequent readings increase their value
	list of readings	After clicking, you can display an exact register of subsequent meter readings.
	tool performance graph	After clicking, you should choose the presentation option of the tool's performance graph

### 6.4. The column "Schedules"

Presents the situation of current maintenance schedules in the following form:

Icon	Description	Explanations
	Defined reminder by counter value	Appears when you set a reminder by the counter value.
	Reminder achieved by the counter value	Appears when the set counter value is reached. Requires confirmation of the scheduled service.
	Reminder by counter value - done and confirmed.	Indicates a reminder that is no longer active. It appears after confirming the execution of the planned service activity in the schedule.
	Schedule update required by NFC	It appears after creating a new reminder or after changing its value with the "SERVICE" notification on the counter display. It means the need to update the schedule by NFC using the MoldMaker Scan mobile application.
	Defined reminder by date	Appears when you set a reminder by date.
	Reminder achieved by date	Appears when the set reminder date is reached. Requires confirmation of the scheduled service.
	Reminder by date - done and confirmed.	Indicates a reminder that is no longer active. It appears after confirming the execution of the planned service activity in the schedule.

### 6.5. The column "Options"

Possible options to use: *For user type: manager, administrator*

Icon	Description	Explanations
	copying the tool	The ability to quickly create a new tool by copying data from an existing tool.
	editing the toolparameters	Opens a window showing all the parameters of the tool.
	deleting the tool	It deletes the tool from the register and all data related to it, such as: maintenance schedules, tool spec.cards, maintenance cards, disassembly history, counter status, activities, etc.

## 7. TOOL PARAMETERS

For user type: manager, administrator

A section that allows configuration and preview of basic tool parameters. To go to editing the tool parameters, click any table row or edit icon .

Tool parameters
Last edited: admin.megamold, 2019-01-07 22:05:49

Counter MAC address:

Tool:

Part name:

Location:

Customer:

Marked fields are required

---

Access sharing:

for toolmaker (editing allowed)  for subcontractor (reading only allowed)

Period:

Expires on:

Count: 1 949 664

Last reading: 2019-01-04 09:27

Average cycle time: 9.4 sec

(2018-07-23 00:02:02 - 2018-07-24 00:00:43)

Disassembly sensor:  mounted to the tool

Monitoring (active)

5 persons

---

[TSC\\_53.Forma 18.Detal 18](#)

items count: 3

---

STATUS:  not working  
maintenance required

---

Actions:

- 2019-01-07 22:05, access for toolmaker to 2019-02-06 [admin.megamold]
- 2019-01-07 22:05, changed periodic term remainder (2019-01-14/every 3 months) [admin.megamold]
- 2019-01-07 22:05, confirmed periodic maintenance remainder (1800000/20000) [admin.megamold]
- 2019-01-07 22:05, confirmed periodic maintenance remainder (1740000/10000) [admin.megamold]
- 2018-12-23, access for toolmaker has expired 2018-12-22 [system]
- 2018-11-30 01:23, SERVICE | periodic (1800000/20000) [system]
- 2018-11-23 10:46, SERVICE | periodic (1740000/10000) [system]
- 2018-11-22 14:33, access for toolmaker to 2018-12-22 [admin.megamold]
- 2018-11-22 14:30, added periodic maintenance remainder (1800000/20000)

Maintenance schedules

Show "SERVICE" notification on display 

The counter is programmed: -

Harmonogram 1

 Next: 1992000

 every 10000



Schedule 2

 Next: 14.01.2019 (in 7 days)

 every 3 month

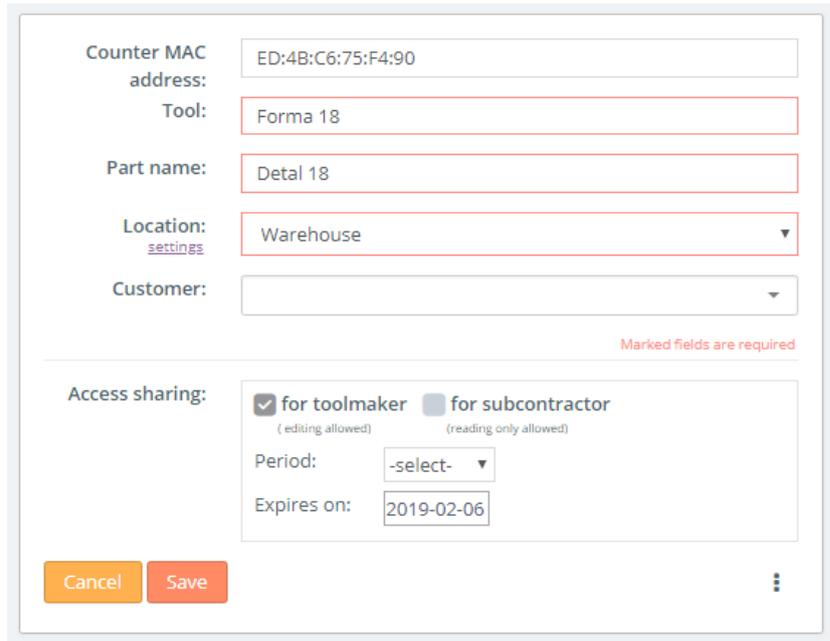


The section is grouped into several thematic blocks, which are discussed below:

### 7.1. Basic data block

- counter MAC address,
- Tool name,
- Part name,
- Location,
- Customer name,
- information on sharing the tool,
- assignment of tool

**Tool Sharing** is an advanced functionality that can be used when transferring a tool to the Tool Shop or Subcontractor, i.e. to another company. In this way, the tool becomes visible at the same time on the list of tools of the Subcontractor or Tool Shop and the owner of the tool. After sharing the tool, the company obtains access to read or edit the tool parameters.



Permission options:

Tool sharing	Permissions
for toolmaker	View and edit of all tool parameters
for subcontractor	Only viewing the parameters of the tool

When sharing a tool, you must specify the period after which the access will automatically expire.

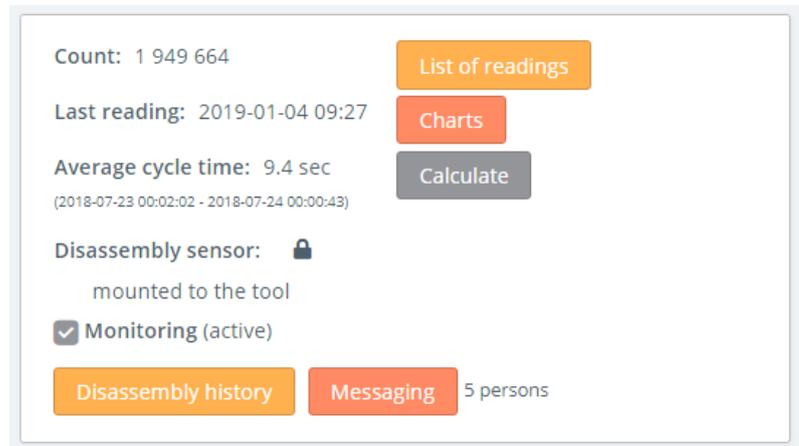
**Dynamic location** is a feature that allows you to dynamically display the location of the tool depending on where it is at the moment. To enable this option, check the "Active" checkbox and confirm.

**The assignment** command makes it possible to transfer the tool from the register of one company to the register of the other company. The first company gets rid of this tool, and the second company receives this tool. The assignment is used, for example, when selling a form.

To perform the assignment, one should provide the "tool transfer code" received from the receiving company (available in the Statistics menu).

## 7.2. Counter block

- current meter reading,
- last reading date,
- average cycle time,
- viewing the list of reading,
- view performance graphs,
- counter temperature
- disassembly sensor status,
- an option to enable disassembly monitoring,
- preview of the disassembly history



The screenshot shows a control panel for a counter block. It displays the following information and controls:

- Count:** 1 949 664
- Last reading:** 2019-01-04 09:27
- Average cycle time:** 9.4 sec (with a sub-range of 2018-07-23 00:02:02 - 2018-07-24 00:00:43)
- Disassembly sensor:** Status is locked (indicated by a padlock icon) and mounted to the tool.
- Monitoring:** A checked checkbox labeled "Monitoring (active)".
- Buttons:** "List of readings" (orange), "Charts" (orange), "Calculate" (grey), "Disassembly history" (orange), and "Messaging" (orange).
- Users:** "5 persons" are associated with the messaging function.

The displayed temperature is measured inside the counter and approximately corresponds to the temperature of the tool. It is possible to observe the tendency of temperature changes during tool operation.

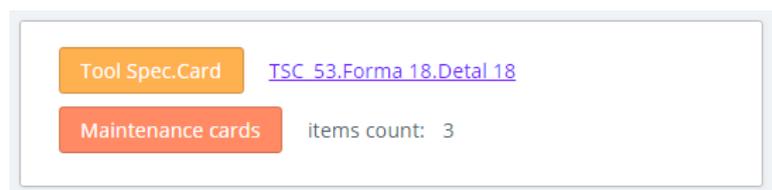
The disassembly sensor provides protection against unauthorized disassembly of the counter from the tool. Each change of the disassembly sensor status is recorded in the disassembly history.

If you need to strictly control the presence of the counter in the tool, you can enable the "Monitoring" option. Then, after disassembly detection, the system will notify the user about this fact by displaying the "red padlock" icon in the "Status" column in the main tool register and notes this event in a disassembly history.

The disassembly alarm can be cleared using the "Clear alarm" button, while the alarm occurrence is retained in the disassembly history.

## 7.3. Cards block:

- tool specification card
- maintenance card



The screenshot shows a control panel for the cards block. It displays the following information and controls:

- Tool Spec.Card:** A button with a link to [TSC\\_53.Forma 18.Detal 18](#).
- Maintenance cards:** A button showing "items count: 3".

Only one tool specification card (described in chapter 5.4) and multiple maintenance cards can be defined for one tool.

Service cards are documents of strict accountancy, having the character of a protocol confirming of various maintenance activities performed during tool life.

After creating the maintenance card, you can edit or delete it within next 24 hours. After this time, only the ability to view the card remains.

When adding a new maintenance card, you can choose two types of cards::

- type 1 - maintenance card (standard note)
- type 2 - checklist

For the "maintenance card" type, you can select several names from the ready to use list, and then complete the content.

For the type "checklist" type you can choose different forms that the user should previously define in the "Settings" menu. Checklist is a kind of list of questions and answers referring to the service activities performed.

**Adding new maintenance card**

Type:  maintenance card  checklist  
(checklist configuration is possible in Settings menu)

Name:

Description:

Marked fields are required

Information - maintenance card are strict documents. Once saved, there is no possibility to delete it. Editing is allowed only within 24 hours from its creation.

An example of checklist filled:

The checklist allows you to plan maintenance activities that are performed during technical reviews, inspections, repairs, etc.

An example of filling in the form "Tool receipt checklist".

Using a properly defined checklist is helpful in maintaining the company's Quality Management System procedures.

**Adding new maintenance card**

Type:  maintenance card  checklist  
(checklist configuration is possible in Settings menu)

Name:

Lp.	List of activities	Done	Comments
1.	Checking the tool integrity	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable	<input type="text" value="OK"/>
2.	Electrical socket check	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not applicable	<input type="text" value="OK"/>
3.	Tightness of cooling system	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Not applicable	<input type="text" value="not checked"/>

Marked fields are required

Information - maintenance card are strict documents. Once saved, there is no possibility to delete it. Editing is allowed only within 24 hours from its creation.

#### 7.4. Tool status block

Information block containing the current status of the tool. The icons are described in chapter 6.2.

STATUS:  not working  
 maintenance required

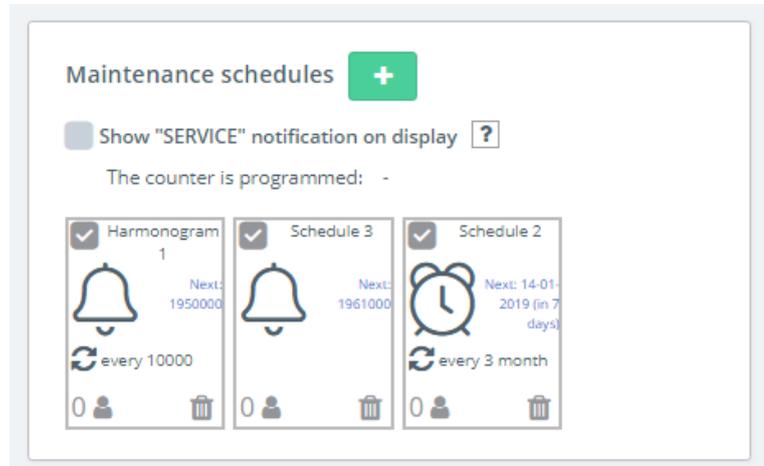
## 7.5. Schedules block

Maintenance schedules are a kind of reminders about scheduled service activities or other events. There are two types of counter reminders:

- by value ( icon  )
- by date ( icon  )

Reminders can be:

- one time only
- cyclical ( icon  )



A reminder after reaching the set value of the counter or date is highlighted in red color. The user should confirm the planned activity by means of the "Confirm" button. For ease of use, the user can automatically create a maintenance card as a confirmation of preformed activity.

Cyclical reminders automatically renew after execution.

Moreover, a reminder can be:

- activated/deactivated ( click icon  )
- deleted ( click icon  )
- edited ( click icon  or  )

### Description of the functionality "Show SERVICE notification on display"

Maintenance schedules allow you to enable advanced functionality of parallel notifying the user about a maintenance reminder on the counter's display. Click the option below:

Powiadomienie "SERVICE" na wyświetlaczu licznika 

The functionality of displaying the word "SERVICE" on the counter display is linked to the maintenance schedules. Thanks to this functionality, after displaying the value of the counter set in the maintenance schedule, the word "SERVICE" will be blinking on display.

Regardless of enabling/disabling this functionality, MoldMaker system will normally implement maintenance reminders displaying the appropriate icons in the main tool table.

Enabling this functionality will require the user to synchronize the schedule with the counter using the MoldMaker Scan mobile application.

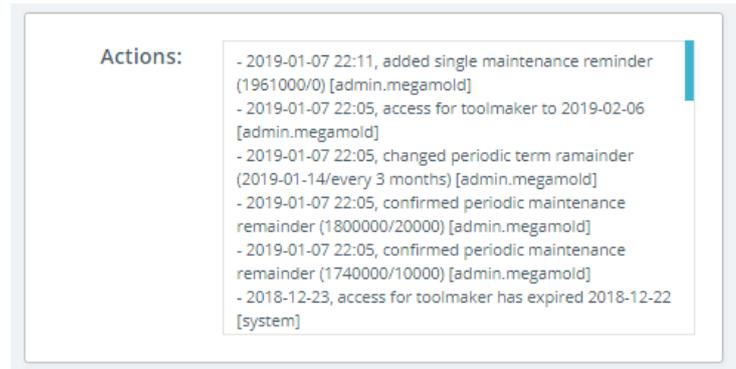
The necessity of synchronization for a given tool will be signaled in the schedule window by means of the red NFC icon  .

In order to synchronize, use the "Manage maintenance" button in the MoldMaker Scan mobile application. When pressed, the application will ask you to place the phone on the counter and it will automatically synchronize. Duration approx. 1 sec.

Lack of synchronization by the user will cause that the word "SERVICE" will be displayed on the counter at a different moment than set in the schedule.

## 7.6. Actions block

Contains the history of the activities performed on the given tool made in the MoldMaker service having exact date and the name of person performing.



## 8. SEARCH AND SORT

### 8.1 Search

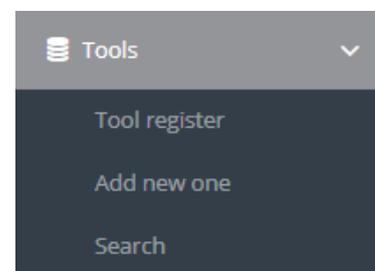
There are 2 types of search engines available in the MoldMaker system:

- search for a phrase or a number in the tool register table fields (upper right corner of the table)

*Available for users: User, Manager, Administrator*

- advanced search in fields of schedules, service cards, tool spec. cards (menu Tools ->Search)

*Available for users: Manager, Administrator*

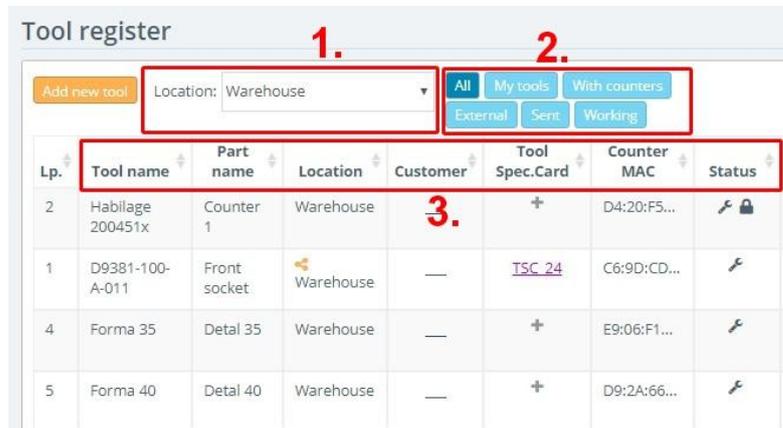


## 8.2 Sorting

Available for users: User, Manager, Administrator

There are several types of sorting in the MoldMaker system:

- Sort by location (1)
- Sorting by attributes (2)
  - "All" - all tools in the register.
  - "My tools" - only tools belonging to the company.
  - "With counters" - only tools having a counter.
  - "External" - only tools added to the sock.
  - "Sent" - only tools beeing at subcontractors stock.
  - "Working" - only working tools , i.e. those in which the counter's status has changed since the last hour.
- Alphabetical sorting (3)
  - by means of arrows placed next to the column name.



Lp.	Tool name	Part name	Location	Customer	Tool Spec.Card	Counter MAC	Status
2	Habilage 200451x	Counter 1	Warehouse		+	D4:20:F5...	🔒
1	D9381-100-A-011	Front socket	Warehouse	—	TSC 24	C6:9D:CD...	🔧
4	Forma 35	Detal 35	Warehouse	—	+	E9:06:F1...	🔧
5	Forma 40	Detal 40	Warehouse	—	+	D9:2A:66...	🔧

## 9. CONCENTARTORS

This optional receiving device requires no maintenance, operates automatically, regularly collects readings from counters that are in range and sends the data to the moldmaker.eu enterprise platform.

The concentrator is a convenient addition to the phone with the MoldMaker Scan application installed.

It should be remembered that both the Moldmaker Scan application and the Concentrator perform the same basic function - sending data from counters to the moldmaker.eu enterprise platform.

The difference is that the concentrator does it cyclically, maintenance-free and regularly, while the application does it "on demand" of the user.

It also serves as security in the event of a lack of internet connection with the platform. Stores readings in its internal memory, and after obtaining an internet connection, transmits the collected data to enterprise platform thus maintaining the continuity of work.

More information on the use and configuration of the concentrator can be found in the Concentrator User Manual.

## 10. STATISTICS

Quickly view your company's account resources statistics, such as:

- number of defined tools, including the number of external tools

- number of locations
- number of people managing
- number of injection molding machines
- amount of raw materials
- number of users
- number of concentrators
- the tool transfer code (more information in chapter 7.1)

## 11. SETTINGS

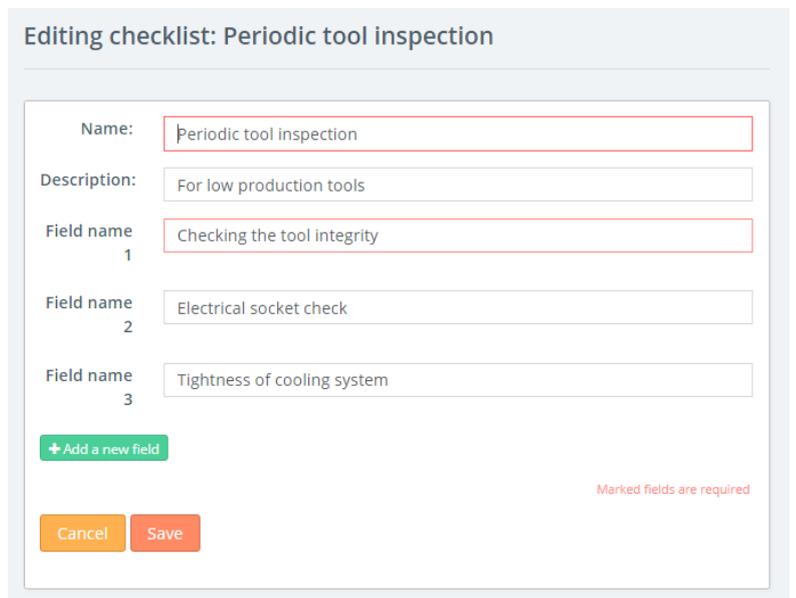
### 11.1 Checklist configuration for maintenance cards

Checklists are used to meet quality requirements when handling injection molds. They make it easier to meet the required procedures. A given company can create any number of checklists depending on the needs. They are used when creating maintenance cards for activities related to inspection and servicing of tools.

To add a new checklist, click "Add" in the "Checklist configuration for maintenance cards" section.

Then, fill in the Name field, optionally Description, Field name 1. The next fields can be added with the "Add new field" button. The maximum number of fields is 64.

The created checklist can be edited until it is used in the maintenance card. After use, the checklist appears on the checklist with the mark "in use". It can not be edited or deleted. However, you can easily create a new checklist using the "copy" icon.



Editing checklist: Periodic tool inspection

Name:

Description:

Field name 1:

Field name 2:

Field name 3:

Marked fields are required