

The screenshot displays the M-Bend software interface, which is used for simulating metal bending processes. The main window shows a 3D model of a metal part being bent by a die. The interface is divided into several panels:

- Top Panel:** Contains various toolbars for simulation setup, including options for Design, Export, Problem, Report, and Simulation.
- Left Panel:** A tree view showing the model structure, including 'Bend 2-3', 'Bend 2-4', and 'Bend 4-6'. It also lists parameters like 'A = 90', 'L = 479.98 mm', and 'Tools'.
- Main Window:** Displays a 3D model of the metal part being bent by a die. The part is shown in a green color, and the die is in a dark grey color.
- Right Panel:** A 'Sequenced Hits' table showing the results of the simulation. The table has columns for Hit, Type, Station, and Hitback. The data is as follows:
 

| Hit | Type   | Station   | Hitback |
|-----|--------|-----------|---------|
| 2-6 | Normal | Station 1 | 0.0     |
| 4-6 | Normal | Station 1 | 0.0     |
| 9   | Normal | Station 1 | 0.0     |
| 10  | Normal | Station 1 | 0.0     |
| 12  | Normal | Station 1 | 73.0    |
| 14  | Normal | Station 1 | 73.0    |
| 1-5 | Normal | Station 1 | 13.0    |
| 5-7 | Normal | Station 1 | 13.0    |
- Bottom Panel:** A 'Play Bends Simulation' section with buttons for 'Play', 'Pause', 'Stop', and 'Single Play'. It also shows the current bend number (6/8) and a 'Go To Output' button.

The bottom status bar indicates the part size as 479.88 x 599.98 / 1.00.

# BendSim Pro Installation

This document explains the basic process of setting up your new **BendSim Pro** workstation.

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# 1 Before Installing

## 1.1 Prerequisites

- BendSim Pro requires Windows 64bit
- BendSim Pro requires Windows Pro, Education, or Enterprise Edition.
- BendSim Pro requires full read, write, and execute rights on the PC.  
Ask your System Administrator to grant you these rights.
- You must be logged in as an **Administrator** on your local machine.
- Disable your antivirus program for the duration of the installation.
- For Windows 7, it is strongly recommended that you [disable the UAC](#) prior to installation.
- Before starting the installation remove the HASP Key from the computer.

 **Installing other applications also using HASP keys may cause problems.**

- ! If you have any questions, contact your local BendSim Pro reseller.

# 1.2 System requirements

Operating system requirements:

| Requirement                                                             | Minimum               | Recommended            |
|-------------------------------------------------------------------------|-----------------------|------------------------|
| Microsoft® Windows® edition<br>"Home" editions are <b>not</b> supported | Windows® 7 Pro 64 bit | Windows® 11 Pro 64 bit |

Hardware requirements:

| Requirement                                                          | Minimum                                     | Recommended                        |
|----------------------------------------------------------------------|---------------------------------------------|------------------------------------|
| Processor (CPU) Type<br>Apple Mac® machines are <b>not</b> supported | Core™ i5, 2GHz                              | Core™ i7                           |
| Memory (RAM)                                                         | 8 GB                                        | 32 GB                              |
| Hard disk (available space)                                          | 10 GB                                       | 50 GB                              |
| Optical disk reader                                                  | DVD reader                                  | DVD reader                         |
| Mouse or other pointing device                                       | Two-button + roller mouse                   | Two-button + roller mouse          |
| Monitor resolution                                                   | 19"                                         | 20"                                |
| Graphics processing unit                                             | Standard                                    | NVIDIA Quadro series or equivalent |
| USB port for HASP key (dongle)                                       | Port on motherboard                         | Port on motherboard                |
| Install media                                                        | DVD Reader or Broadband Internet Connection |                                    |
| <b>Optional</b> – Floating license                                   | Microsoft Windows network                   |                                    |

## 2 Installing BendSim Pro

You can install **BendSim Pro** from a DVD or download an installation package from one of our servers.

### 2.1 Installing BendSim Pro from a DVD

To install from a DVD do the following:

1. Insert the DVD.
2. Run the **BendSim ProCD.exe** file by right clicking and selecting **Run as administrator**.

You should see this screen:



3. Click **Install BendSim Pro** button and select **Next** for all screens.
4. After the installation completes insert the HASP Key into a USB port at the rear of the PC.  
Do not insert the Key into a USB hub or a port on the front of the PC, monitor, or keyboard.
5. You can now launch **BendSim Pro**. Run it at least once as an Administrator.

#### 2.1.1 Custom Installation

There are two non-typical installation types you can select in the **Install type** screen:

- **Update** – Installs with minimum required options.

- **Custom** – allows you to choose individual installation components and paths.

The **Custom** installation allows you to run through additional screens and select installation components and paths.

### **Recommended for advanced users**

After clicking selecting **Custom** and clicking **Next** you will be presented with the following screens:

1. **Measurement Units** – select between **Metric** and **Imperial**.
2. **Program language** – select the user interface language (you can change this after **BendSim Pro** is installed).
3. **Destination Location** screens – paths for installing the application's files.

### **It is strongly recommended to leave the defaults in place to make support easier.**

4. **Select features** – help, examples and other resources.
5. **HASP Drivers** and **CAD Link**:
  - a. **HASP Drivers** – if you encountered a problem installing drivers before, you can choose to install these drivers manually later.  
Use the procedure outlined in [HASP Driver Errors](#) to do so.
  - b. **CAD Link** – select this only if you use a 3D CAD system, to design your parts.

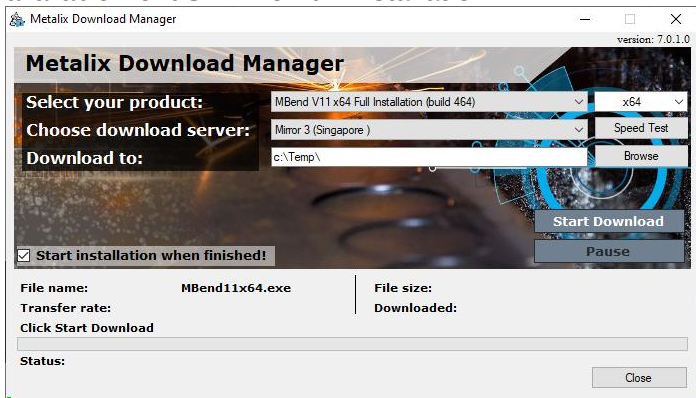
## **2.2 Downloading BendSim Pro**

If you don't have an installation CD, you can download **BendSim Pro** (Full Build and/or Service pack) from our Metalix website:

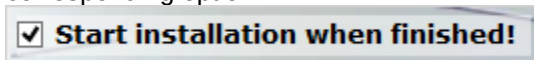
1. Contact your local reseller for the installation password.
2. Go to the [Metalix Download Manager](#) page.
3. Click the **Download Manager** link.
4. Download and run the application.



5. Open the **Select your product** dropdown and select the available **BendSim Pro Full Installation**:



6. Select a download server.
7. Click **Start Download** button.
8. **BendSim Pro** opens automatically provided you check the corresponding option:



9. Select a location to save the installation files, and click Install.
10. Paste the password you received.
11. Follow the procedure outlined in [Installing BendSim Pro from a CD](#).

## 2.3 Installing a Service Pack

After running the full installation, there might be a Service Pack containing the latest updates, and also worth installing.

To update:

1. Close **BendSim Pro**.
2. Go to the [Metalix Download Manager](#) page.
3. Download and run the application.
4. Select the latest Service pack available.
5. Download and run it.

## 3 Installing and Updating Software License

**BendSim Pro** can run using a physical **USB HASP key**, or a **Software License**.

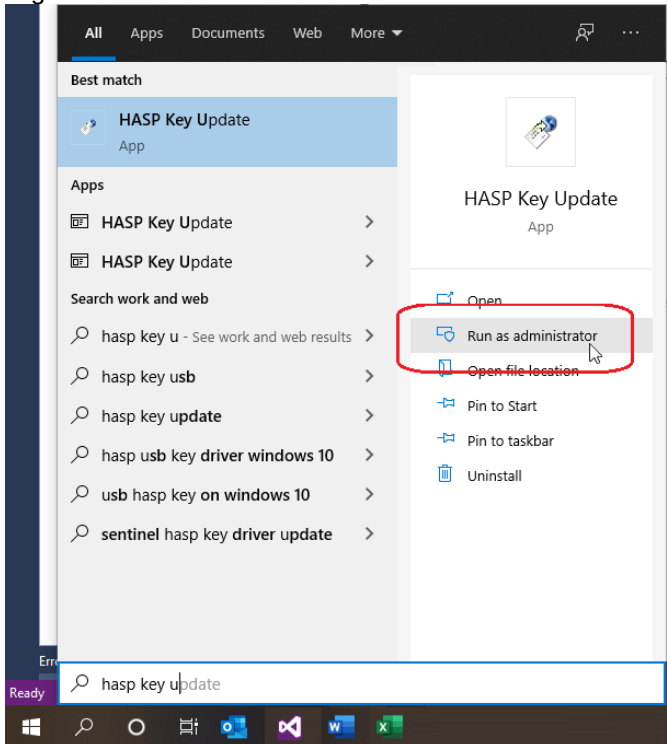
For a physical key you only need the HASP drivers installed during the application's installation process.

A Software License requires activation, which takes place in two stages:

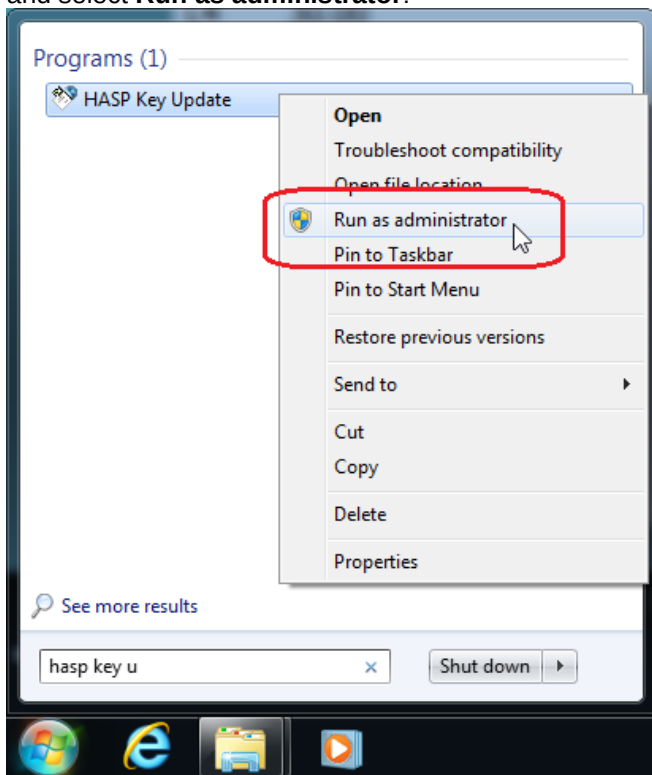
1. **Creating a license request** – a C2V file.
2. **Installing the license activation** – a V2C file

### 3.1 Creating a License Request

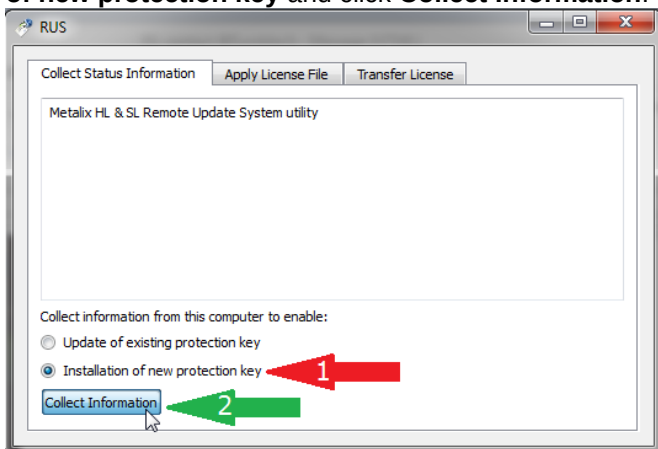
1. Click the Windows start icon and type “hasp key update”.
2. Right-click and select **Run as administrator**:



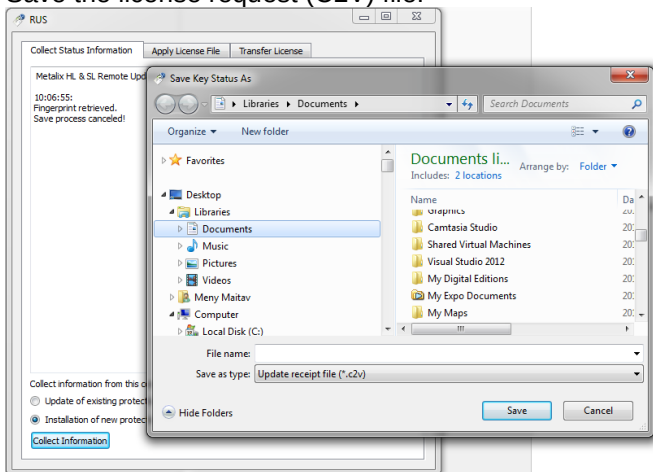
in Windows 7, type “hasp key update”, then right-click and select **Run as administrator**:



3. In the **HASP Key Update** application, select **Installation of new protection key** and click **Collect Information**:



4. Save the license request (C2V) file:



5. Send the C2V to your local reseller.

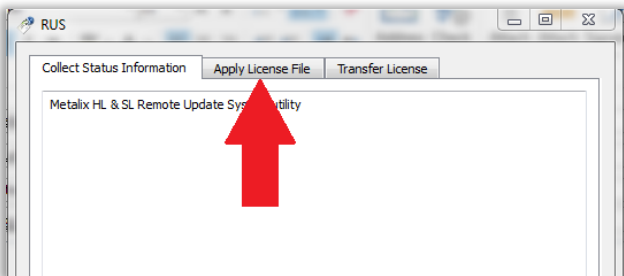
## 3.2 Installing the License Activation File

In reply to your license request file/C2V, you will receive a license activation file (V2C).

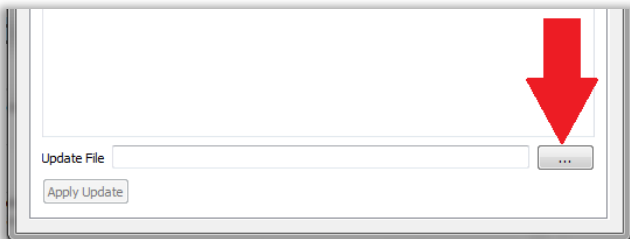
Proceed as follows:

1. Save the C2V file to your local disk.
2. Open the **HASP Key Update** application with **Run as administrator**.

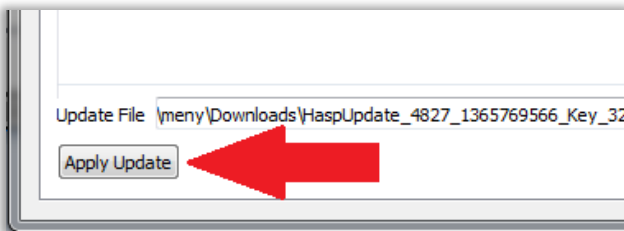
3. Select the **Apply License File** tab



4. Browse to where you saved the file and open it.



5. Confirm by pressing the **Apply Update** button:



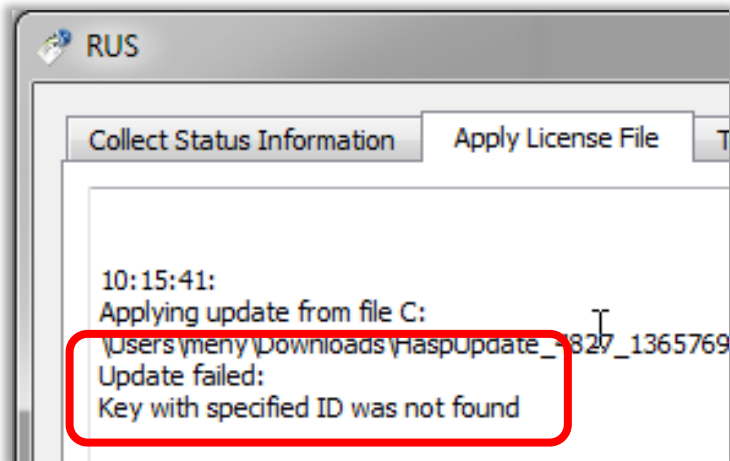
## 3.3 Troubleshooting

Trying to install/upgrade your license you might encounter some error messages.

Check below to better understand these errors.

### 3.3.1 License Upgrade is For a Different Key

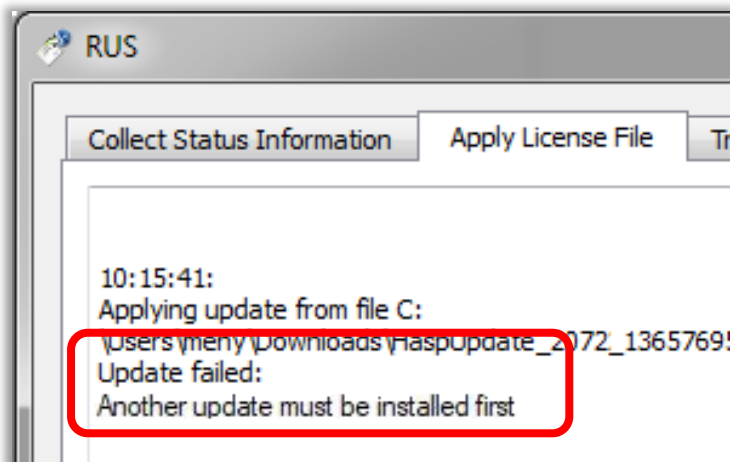
If you try to install the V2C file intended for a different key you will get this message:



### 3.3.2 Trying to Install V2C Out of Sequence

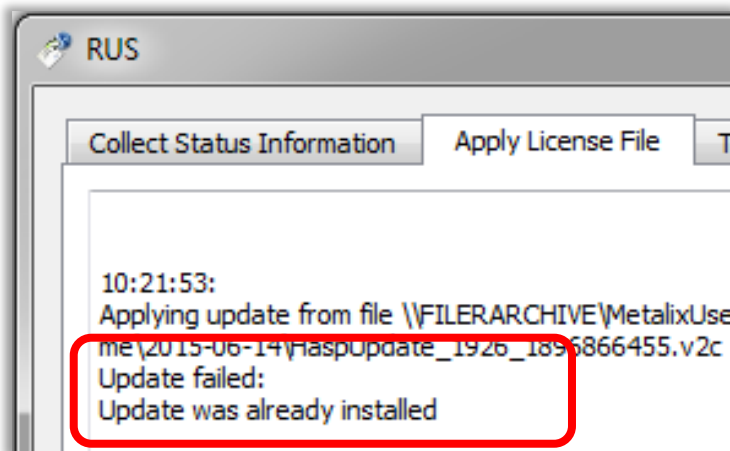
License upgrades must be installed in sequence – one after the other in the order they were created.

If you try to install a new upgrade file without installing the older one first you will get this message:



### 3.3.3 Trying To Install an Upgrade Already Installed

When you install a license that was already loaded previously you will get this message:



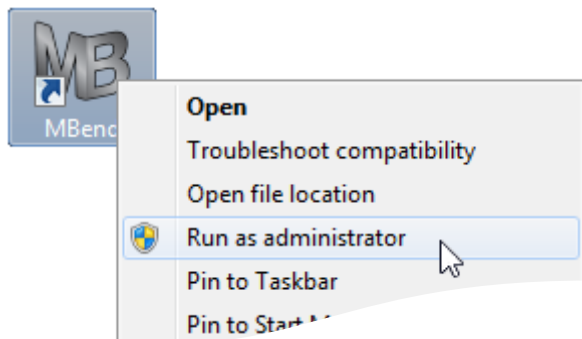
## 4 After Installing

### ⚠ After installing:

View the [Setting USB Power Options](#) section and follow the outlined procedure.

### 4.1 Running BendSim Pro

1. If you are using a physical HASP key, insert it as [described above](#).
2. Right-click on your desktop's **BendSim Pro** shortcut.
3. Select **Run as Administrator**:



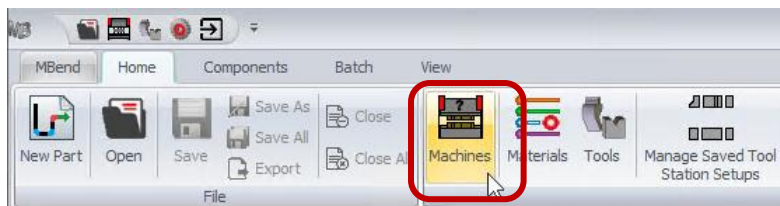
This is required on the first time you **BendSim Pro**.

### 4.2 Initial Configuration

After opening **BendSim Pro** you will want to customize your seat.

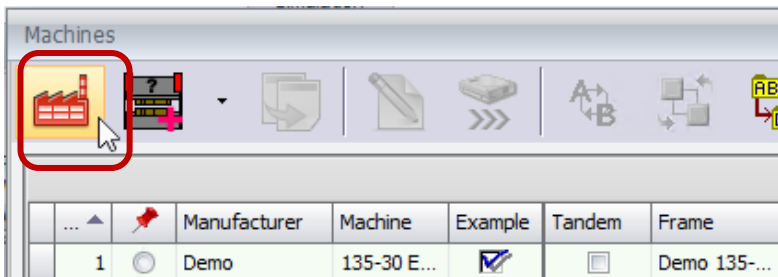
#### 4.2.1 Adding Your Machine

Goto the ribbon's **Home** tab and click the **Machines** button:

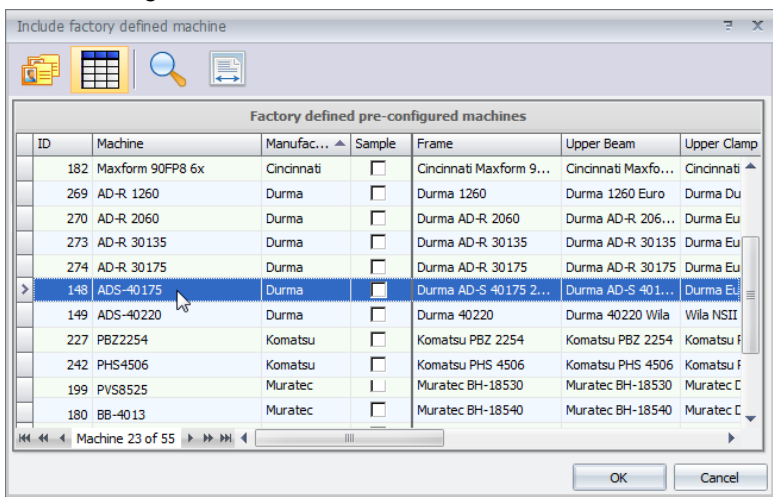


In the **Machines** dialog that opens, click the **Add New Machine** button:

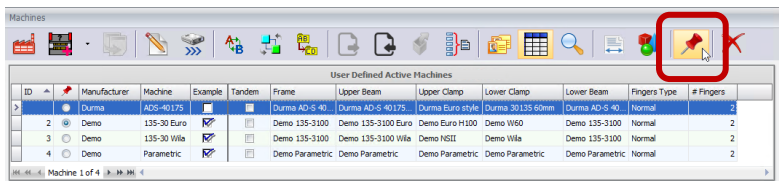




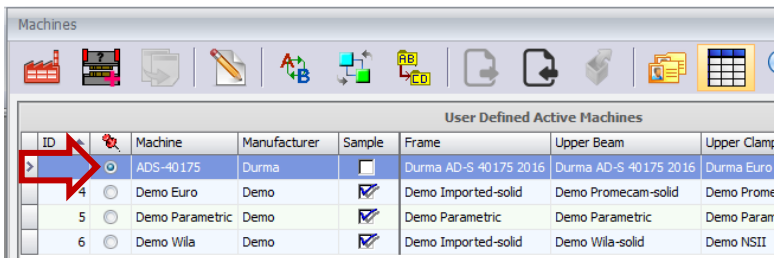
A list of available machines will be displayed; select your machine, e.g. ADS-40175 as below, and click **OK**:



Your machine has now been added to the list of active machines. Select the machine then click the **Set as Default** button:



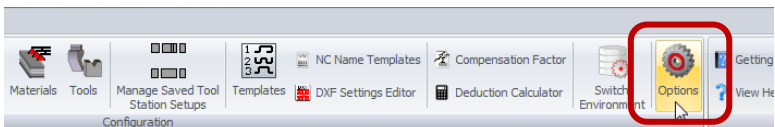
Your machine will now be the default machine for opening and creating new parts:



Click **OK** to confirm and close the dialog.

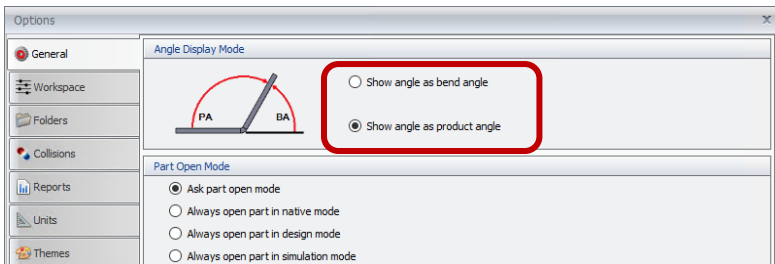
## 4.2.2 Setting General Options

You can now set general options from the **Options** dialog:



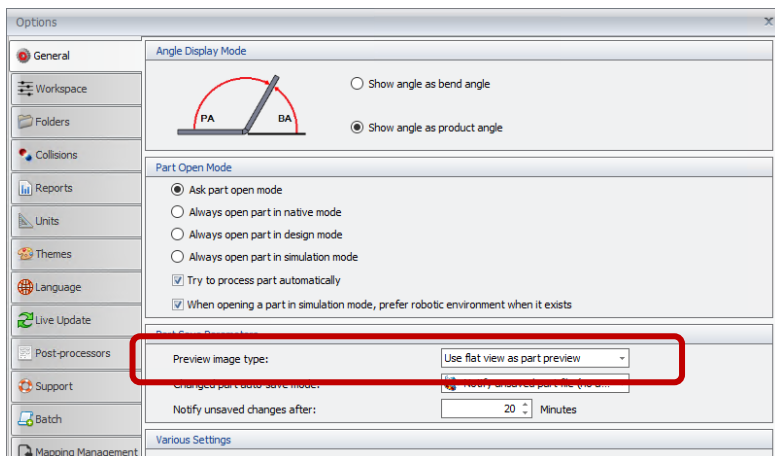
### 4.2.2.1 Setting Angle Display

You can set how to display the value of angles – as a **Bend Angle** or a **Product Angle**:



### 4.2.2.2 Setting the Saved Preview Option

This option determines how the BendSim Pro files preview will look once saved:

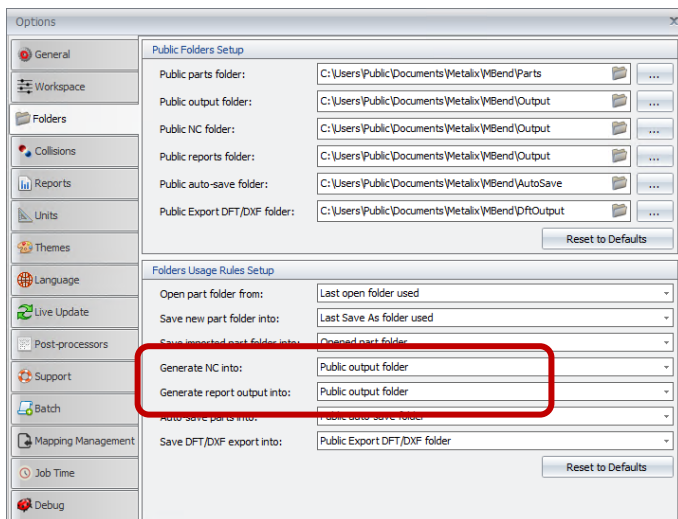


See more information regarding this option in the Help file under:  
**BendSim Pro Configuration > Options Dialog > General Options > Part Save Parameters > Preview Image Type**

### 4.2.2.3 Setting the Folder Options

In this tab you set the paths for various system directories.

It is recommended you set two the **Generate NC** and **Generate report** options:



### 4.2.2.3.1 Setting the NC Output Folder

It is recommended you set this option to the **Machine configuration NC folder** option:

Folders Usage Rules Setup

|                                 |                                                                                                                                 |
|---------------------------------|---------------------------------------------------------------------------------------------------------------------------------|
| Open part folder from:          | Last open folder used                                                                                                           |
| Save new part folder into:      | Last Save As folder used                                                                                                        |
| Save imported part folder into: | Opened part folder                                                                                                              |
| Generate NC into:               | Public output folder                                                                                                            |
| Generate report output into:    | Public output folder<br>Public NC Folder<br>Last NC folder used                                                                 |
| Auto-save parts into:           | Public output folder<br>Public NC Folder<br>Last NC folder used<br><b>Machine configuration NC folder</b><br>Opened part folder |
| Save DFT/DXF export into:       | Opened part folder                                                                                                              |

Reset to Defaults

### 4.2.2.3.2 Setting the Report Output Folder

It is recommended you set this option to the **Machine configuration report folder** option:

Folders Usage Rules Setup

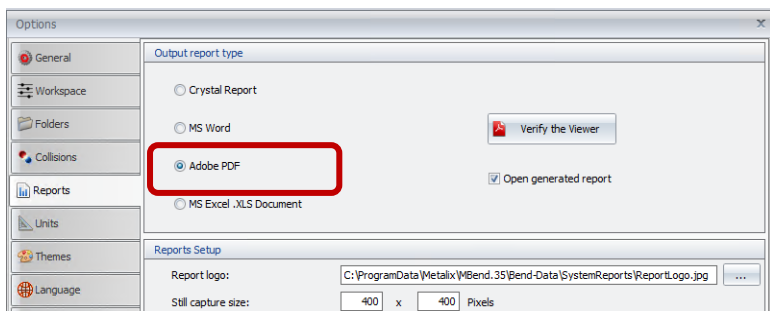
|                                 |                                                                                 |
|---------------------------------|---------------------------------------------------------------------------------|
| Open part folder from:          | Last open folder used                                                           |
| Save new part folder into:      | Last Save As folder used                                                        |
| Save imported part folder into: | Opened part folder                                                              |
| Generate NC into:               | Machine configuration NC folder                                                 |
| Generate report output into:    | Public output folder                                                            |
| Auto-save parts into:           | Public output folder<br>Public reports folder<br>Last report output folder used |
| Save DFT/DXF export into:       | Machine configuration report folder<br>Opened part folder                       |

## 4.2.2.4 Setting Report Options

Here you can set options relating to BendSim Pro's Setup Reports.

### 4.2.2.4.1 Setting the Default Output Format

It is recommended you set the report output to **PDF**:

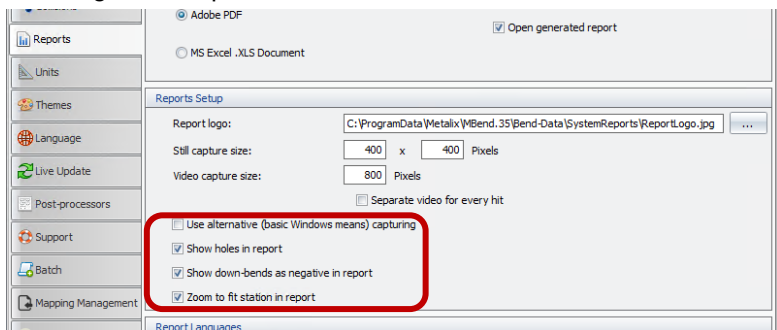


You can also change the **Report Logo** using the **Browse** button



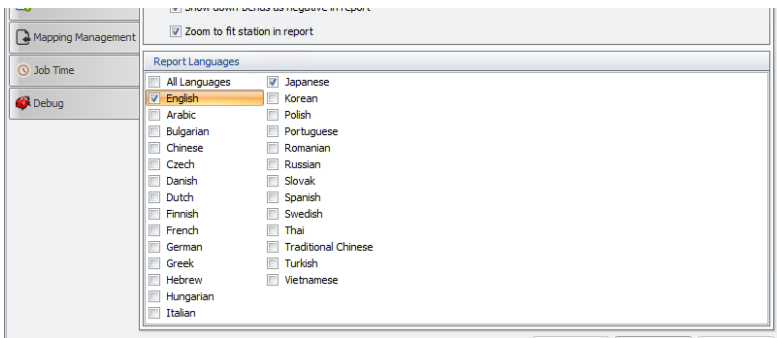
#### 4.2.2.4.2 Setting Holes in Reports

Use this option to display or hide holes, angle display and zooming in the reports:



#### 4.2.2.4.3 Setting Report Templates

You can set which report template languages to display for selection, either in the **Output** stage or in the machine configuration:

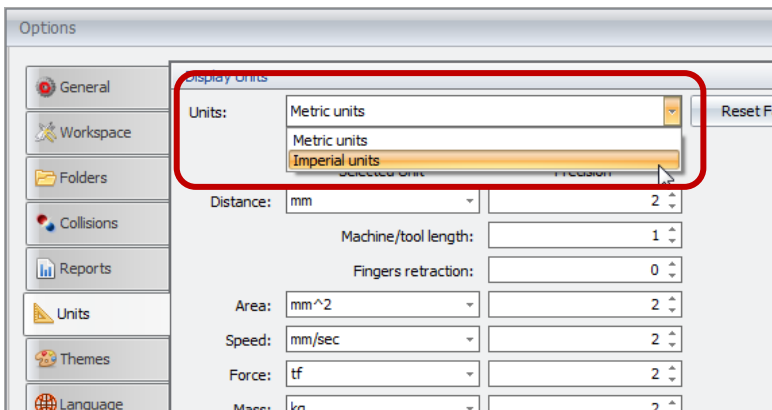


You can select more than one language.

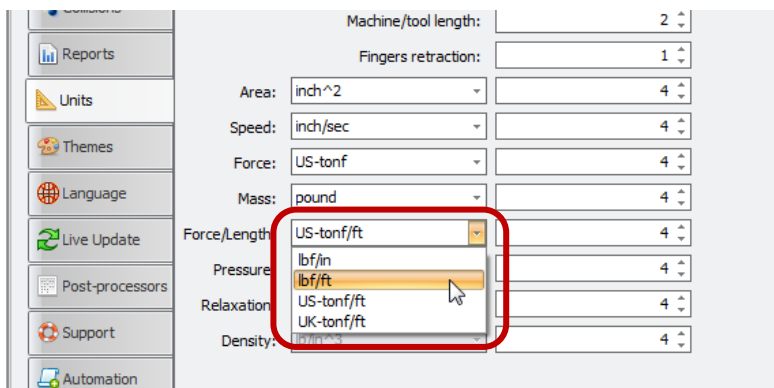
#### 4.2.2.5 Setting Display Units Options

Here you can set options relating to BendSim Pro's display of units – length, force, etc.

To begin with, select between the **Metric**/**Imperial** systems



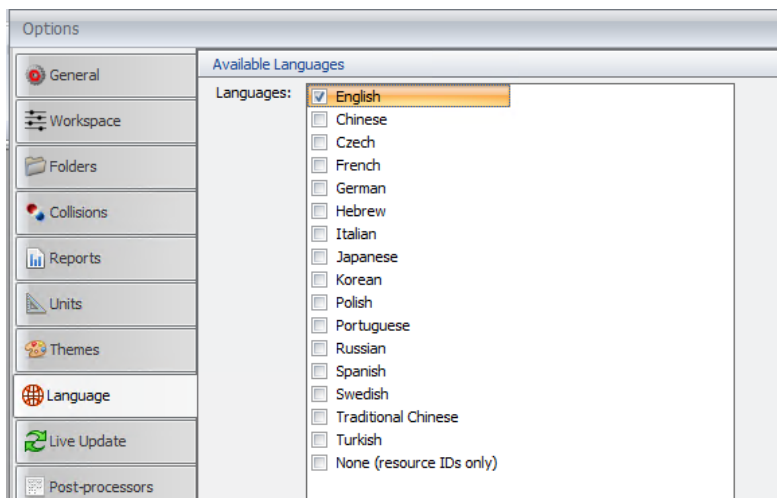
Next, you can the unit of measurement you want for each category, e.g. the **Force** units:



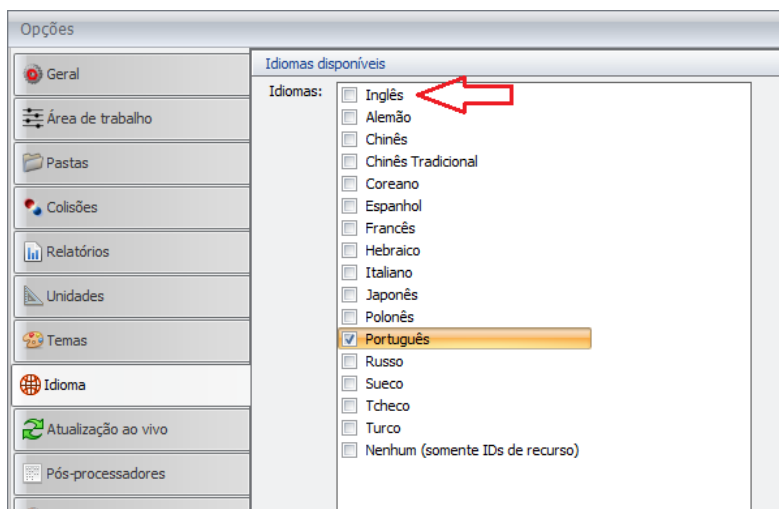
! You can set a different **Precision** for each category – this will be the number of digits displayed after the decimal point.

#### 4.2.2.6 Changing the Interface Language

You can change the language of the user interface:

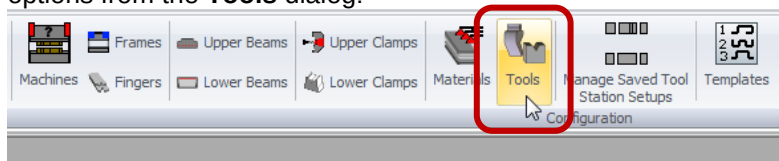


Note that after you change the language and wish to return to English, this will always be the top-most option:



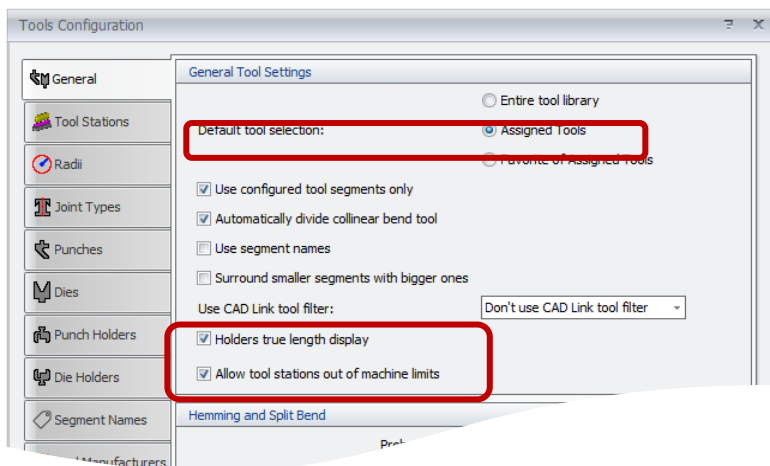
### 4.2.3 Setting Tool Options

After setting your machine, you can set various tool-related options from the **Tools** dialog:



Specifically, it is recommended you set the following options:





## 4.3 Troubleshooting

Depending on your system configuration, **BendSim Pro** may not install correctly or may not start after installation.

Try these actions before you contact the Metalix support team.

### 4.3.1 Disabling the UAC in Windows 7

The User Account Control (UAC) is a security component of the Microsoft® Windows 7® operating systems:

- To install **BendSim Pro**, you must disable the UAC as explained below.
- To run **BendSim Pro**, it is recommended that you leave the UAC disabled.

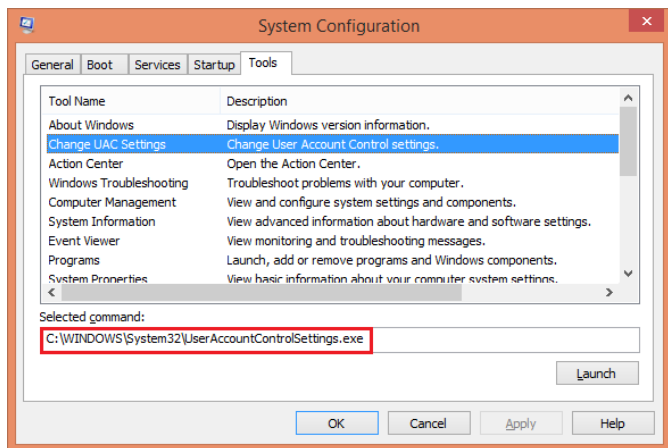
**⚠ Consult your IT manager before making any changes.**

You can open the UAC in several ways; this section describes one of them:

1. Go to **Start**, type **msconfig**, and press **Enter**.
2. In the **System Configuration** dialog box, click the **Tools** tab.
3. Select the **Change UAC Settings** item and click **Launch**.

💡 If you are unsure which item to select because of language differences, select the one that displays the

**C:\...\UserAccountControlSettings.exe** text in the **Selected command line**, as shown.



4. Set the bar to **Never Notify** and click **OK** twice.

### 4.3.2 Setting USB Power Options

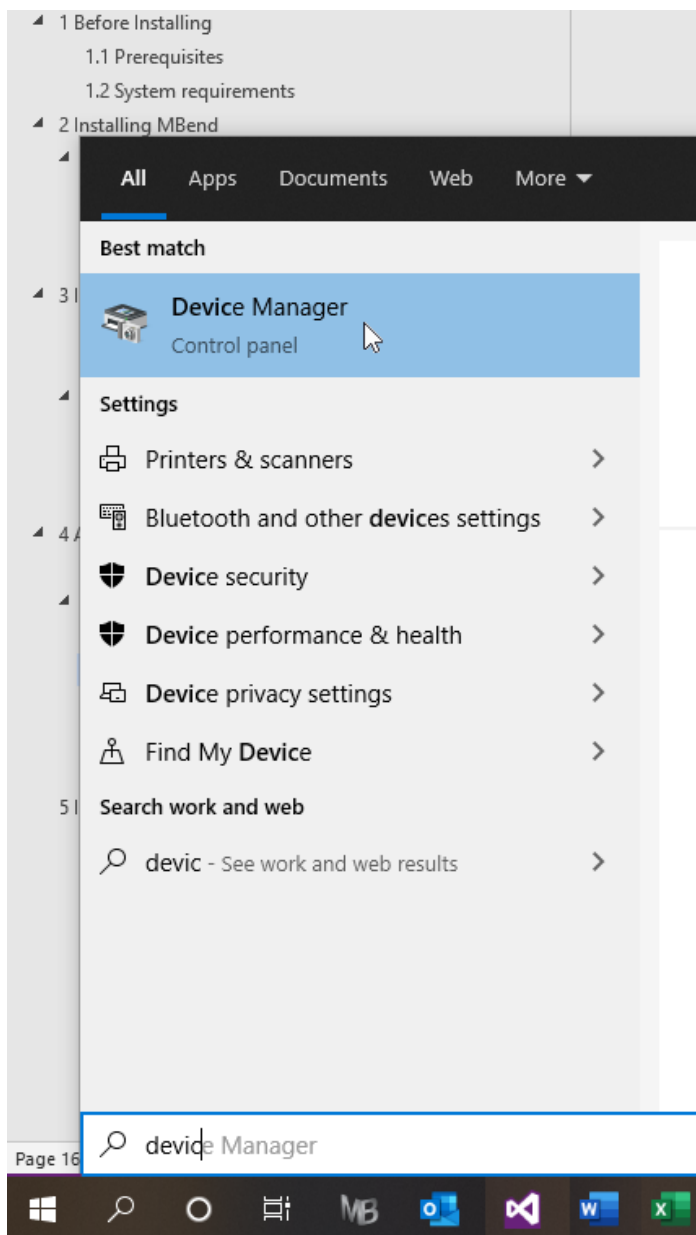
It is strongly recommended that you disable the Windows option for saving power on USB ports. When this option is active, your software can lose the connection with the HASP Key, possibly leading to interrupted work and loss of data.

Do as follows:

5. In Windows 7, right click **My Computer**, select the **Properties** item, and open the **Device Manager**:

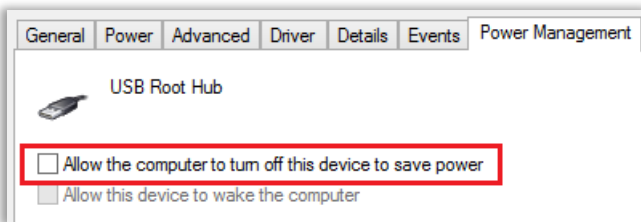


In Windows 10 press the Windows icon and type **device manager**:



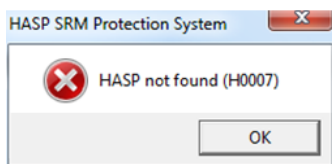
6. In the Device Manager, open the **Universal Serial Bus controller's** item.

7. For each of the **USB Root Hub** items:
  - a. Right click and select **Properties**.
  - b. In the **Power Management** tab, ensure that **allow the computer to turn off this device** is not checked:



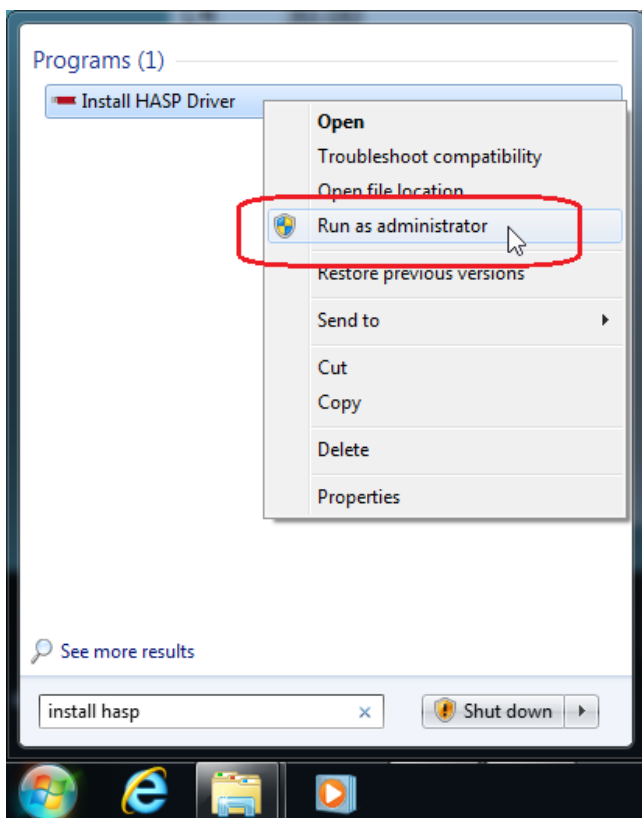
### 4.3.3 HASP Driver Errors

Some error messages may indicate a problem with the installation of the HASP drivers necessary for accessing the Key protecting **BendSim Pro**. For example:

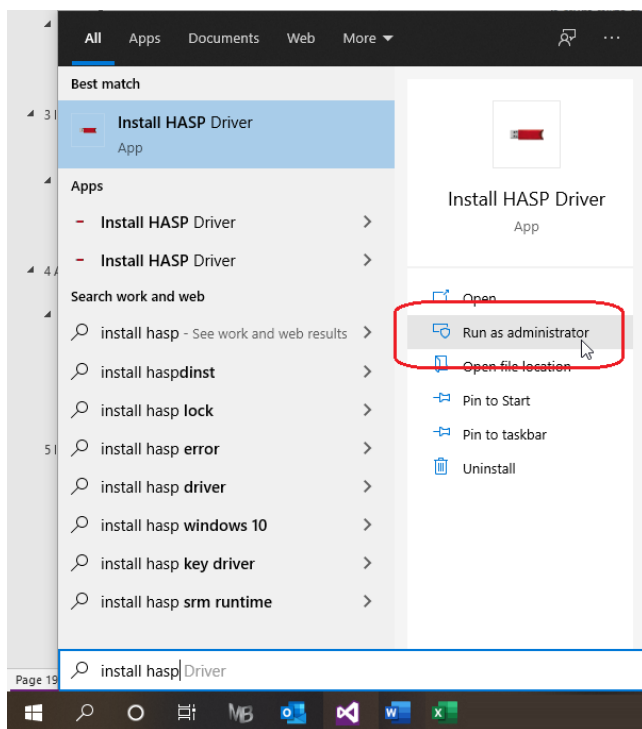


If you see a “**HASP not found/No License key**” message:

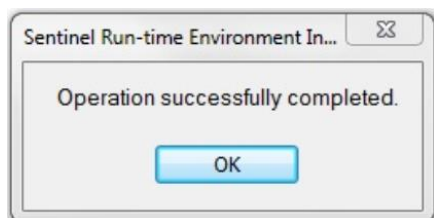
1. Remove the Key from your PC.
2. Re-insert the Key in a different port (at the rear of the PC), wait to see if there are any Windows messages, and rerun **cncKad**.
3. If you still get error messages:
  - a. In Windows 7, press the Windows icon and type “install hasp driver”, right-click and select **Run as administrator**:



- b. In Windows 10, press the Windows icon and type “install hasp driver”, then select **Run as administrator**:



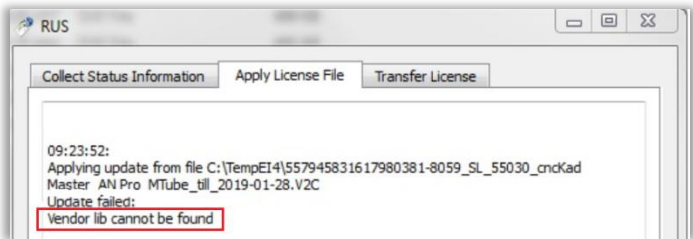
If successful, you should see this message:



4. Wait for the installation to complete, reinsert the key into a port at the rear of the PC, and rerun your **bending software**.
5. If this is not resolved contact your local reseller.

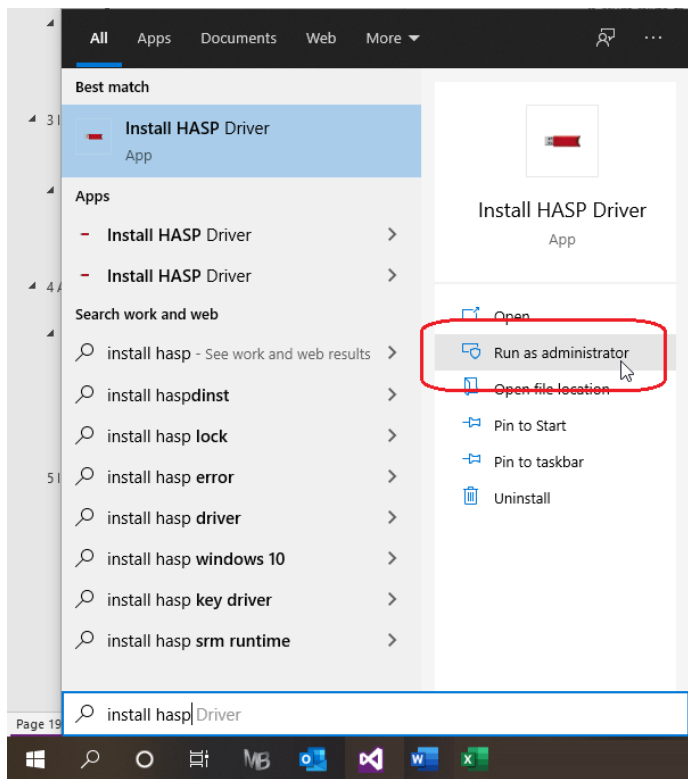
#### 4.3.4 Vendor Lib Cannot Be Found

When applying for a software license, you may see this message:

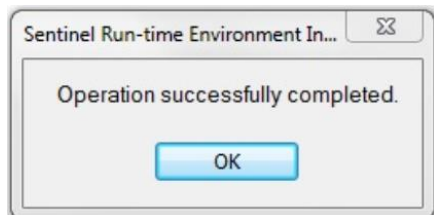


To resolve the error:

1. Close the **HASP Key Update** application.
2. Press the Windows icon and type "install hasp driver".
3. Select **Run as administrator**:



If successful, you should see this message:

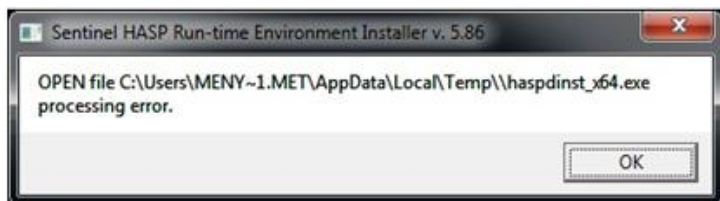


4. Open the **Hasp Key Update** application (as Administrator) and apply the license again.

### 4.3.5 HASP Driver Not Installed During Installation

Installation of the HASP driver file may not be successful, with the result that you cannot run **BendSim Pro**.

During installation, you may receive the following message:

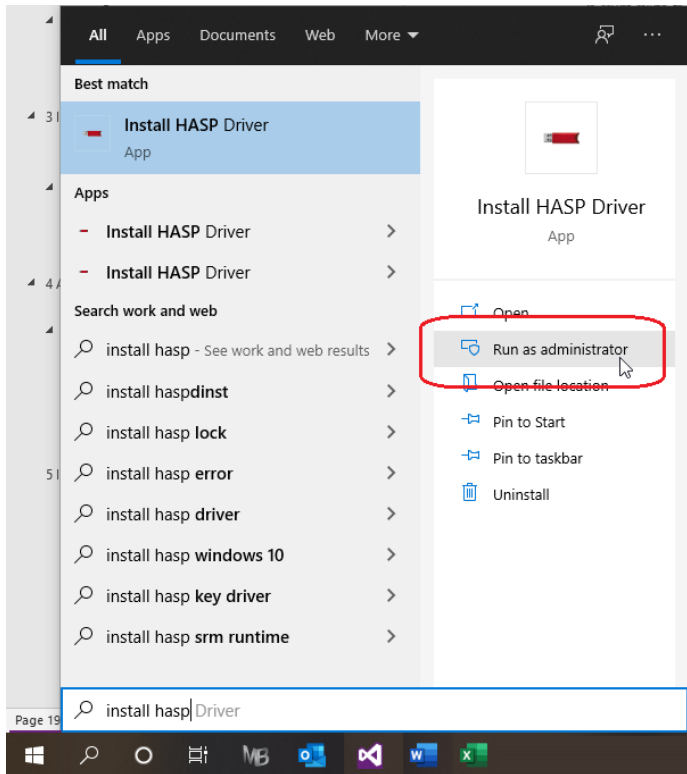


To resolve:

1. Click **OK** to complete the installation.
2. Press the Windows icon and type "install hasp driver".



### 3. Select **Run as administrator**:



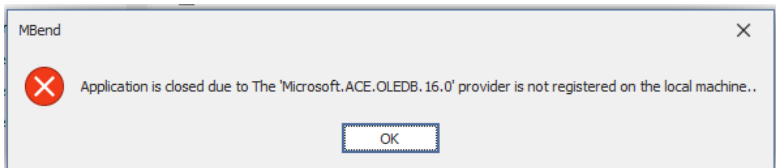
### 4. If prompted, enter the details of a user with Administrator rights (ask your system administrator).

When the action is successful you will see a confirmation message.

### 5. If this does not resolve the issue, proceed to 'HASP Driver Errors'.

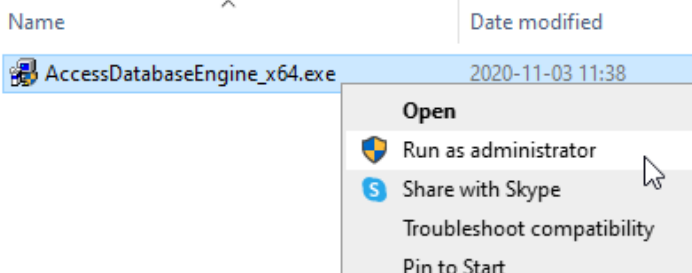
## 4.3.6 Access Database Engine Not Installed

When opening **BendSim Pro** for the first time, you may get this message:



If this happens, do the following:

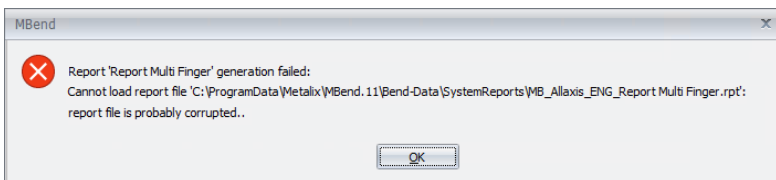
1. Locate the **BendSim Pro** installation package.
2. Browse to the **...\Prereq\_x64\AceV2016** folder.
3. Right-click the **AccessDatabaseEngine\_x64.exe** file and select **Run as administrator**:



4. Follow the installation.

### 4.3.7 Setup Reports Not Generated

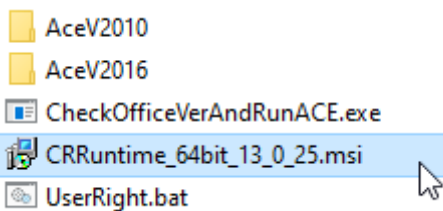
When attempting to generate a Setup Report, you may encounter this error message:



Or other messages detailing template or Crystal Reports related issues.

If this happens, do the following:

1. Locate the **BendSim Pro** installation package.
2. Browse to the **...\Prereq\_x64** folder.
3. Double-click the **CRRuntime\_64bit\_13\_0\_25.msi** file:



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