

AHP.cad

How to install and use

Install

Open the installation file and appear as follows:



The upper right corner shows all languages supported by software (GB stands for English). Then click the "Install" button below and choose installation path to install. It will take about ten minutes to install.

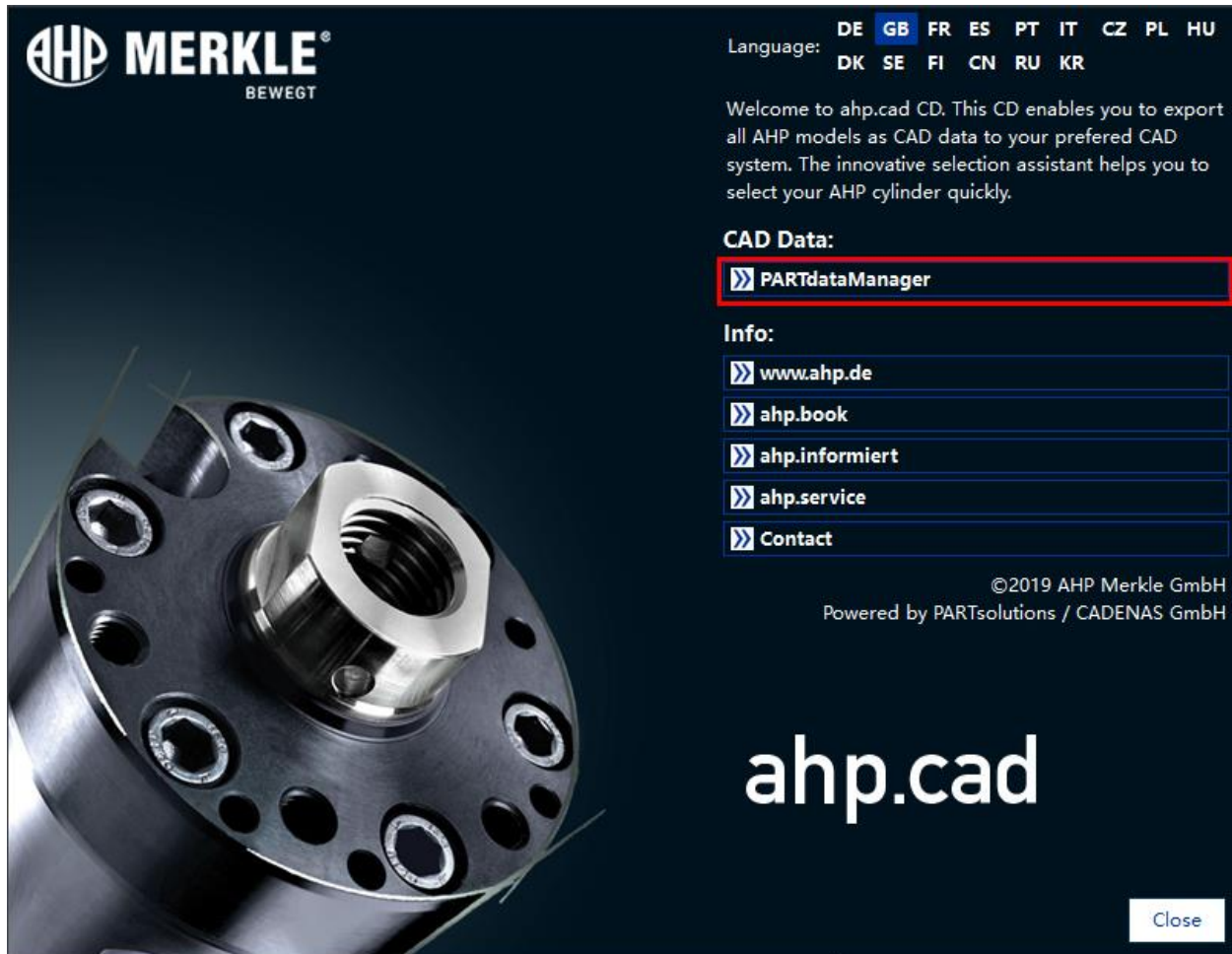
After installation, the following icon will appear on the desktop:



Later, you can enter AHP.cad through this icon.

Use

Step 1: Click on the icon to enter the software, the following picture appears:



Click "PARTdataManager" to enter.

Step2:



Assistant:

Guided cylinder search with additional information (*recommended start*)



Cylinder suggestion:

Here we ask you for your requirements and will suggest various cylinder choices. Once you found a matching cylinder that meets your requirements, you can switch to the assistant and finalize your needs.



Classic screen:

This view is for advanced user. Here, by clicking on "AHP Guide", it is possible to open the assistant with the aid of the index tree.

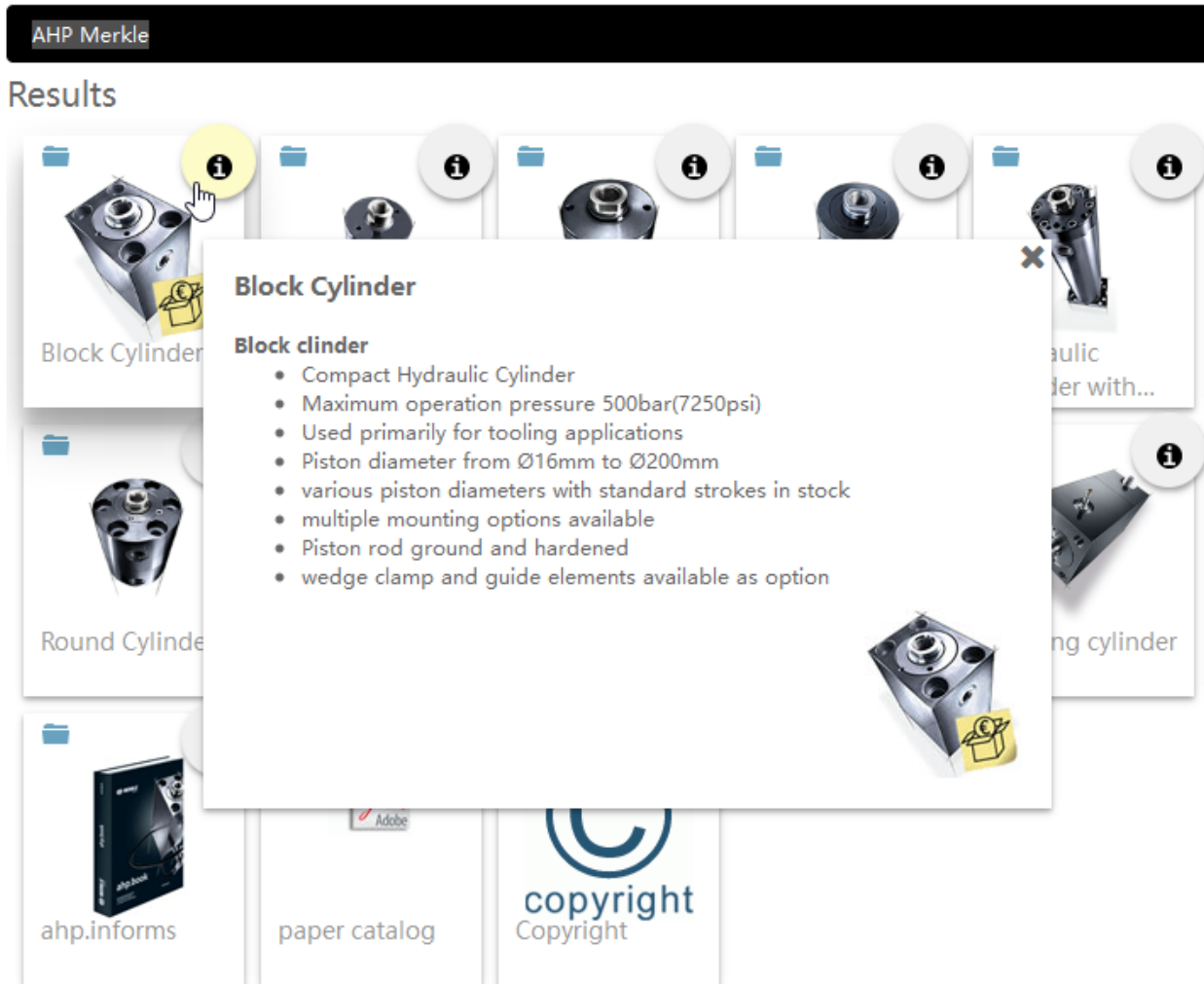
As shown above, there are three options for the welcome interface after entering the software. If we don't know much about our cylinders, we suggest using the "**Assistant**" option.

If you already know something about our cylinders, you can click on "**Classic screen**" and the software will jump to the detail page of our cylinders.

Next, we will explain the function of "**Assistant**" and "**Classic screen**" respectively.

Assistant

1. When you move the mouse over an icon, the software explains the cylinder to help you choose.



2. After selecting the type of cylinder, the software will enter the guide page. Firstly, the cylinder diameter is selected according to the required push-pull force (F_d represents push force, F_z represents pull force, KN).

AHP Merkle > Block Cylinder > BZ / BZN / MBZ / BZR / BZH / BZP / BRB - Block Cylinder

BZ / BZN / MBZ / BZR / BZH / BZP / BRB - Block Cylinder

Diameter Details

Chart for selection of piston diameter [bar / kN] [bar / kN] [psi / lbf]















Operating Pressure		50 bar		80 bar		100 bar		160 bar		250 bar		500 bar	
Force		F _d	F _z	F _d	F _z	F _d	F _z	F _d	F _z	F _d	F _z	F _d	F _z
D Piston diameter [mm]	D1 Rod diameter [mm]												
16 mm	10 mm	0.80	0.49	1.29	0.78	1.61	0.98	2.57	1.57	4.02	2.45	8.04	4.90
25 mm	16 mm	1.96	1.16	3.14	1.85	3.93	2.32	6.28	3.71	9.82	5.80	19.63	11.59
32 mm	20 mm	3.22	1.96	5.15	3.14	6.43	3.92	10.29	6.27	16.08	9.80	32.17	19.60
40 mm	25 mm	5.03	3.06	8.04	4.90	10.05	6.13	16.08	9.80	25.13	15.32	50.27	30.63
50 mm	32 mm	7.85	4.64	12.57	7.42	15.71	9.27	25.13	14.84	39.27	23.18	78.54	46.37
63 mm	40 mm	12.47	7.44	19.95	11.91	24.94	14.88	39.90	23.82	62.34	37.21	124.69	74.42
80 mm	50 mm	20.11	12.25	32.17	19.60	40.21	24.50	64.34	39.21	100.53	61.26	201.06	122.52
100 mm	60 mm	31.42	20.11	50.27	32.17	62.83	40.21	100.53	64.34	157.08	100.53	314.16	201.06
125 mm	80 mm	49.09	28.98	78.54	46.37	98.17	57.96	157.08	92.74	245.44	144.91	490.87	289.81
160 mm	100 mm	80.42	49.01	128.68	78.41	160.85	98.02	257.36	156.83	402.12	245.04	804.25	490.09
200 mm	125 mm	125.66	76.58	201.06	122.52	251.33	153.15	402.12	245.04	628.32	382.88	1256.64	765.76

3. Next, go to the detailed parameter list of the hydraulic cylinder, you can configure the parameters of the cylinder (mounting style, cushioning, etc.).

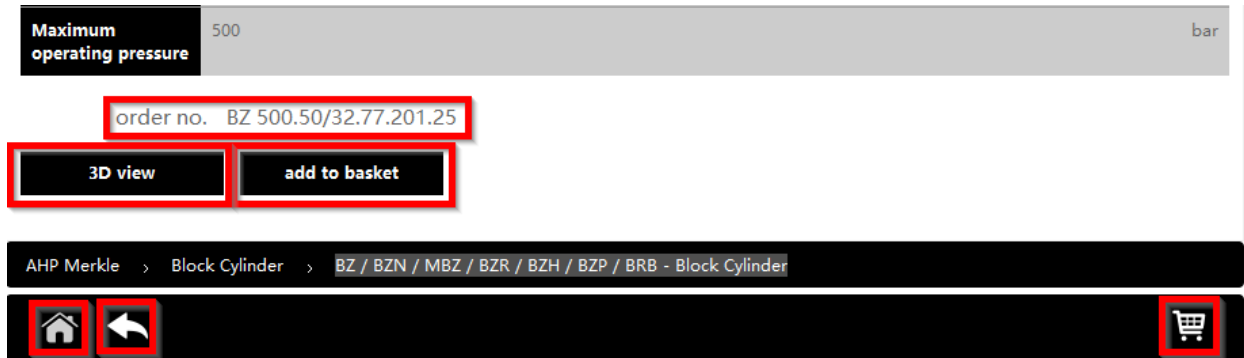
AHP Merkle > Block Cylinder > BZ / BZN / MBZ / BZR / BZH / BZP / BRB - Block Cylinder

BZ / BZN / MBZ / BZR / BZH / BZP / BRB - Block Cylinder

order no. BZ 500.50/32.77.201.25

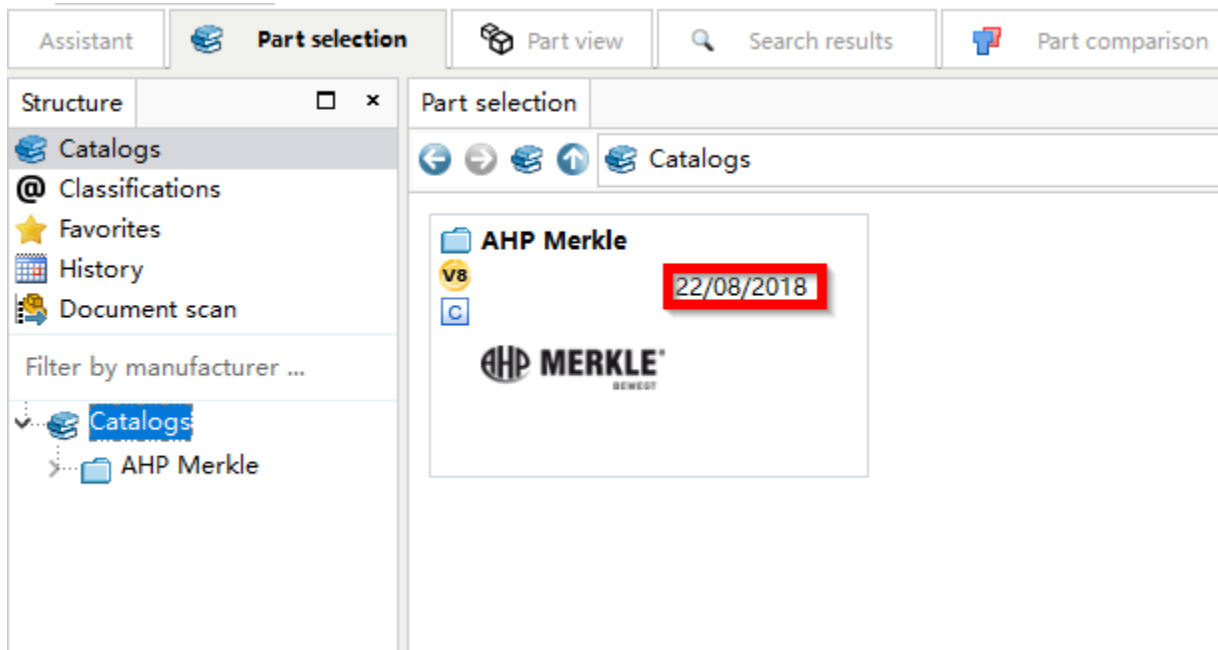
Diameter	Details
Piston diameter	50 mm
Rod diameter	32 mm
Model	<div> <div>  01 </div> <div> Style 01 - counterbore for DIN912/12.9 screws front - inch thread port con... </div> </div> <div> <div>  02 </div> <div> Style 02 - counterbore for DIN912/12.9 screws back - inch thread port con... </div> </div> <div> <div>  03 </div> <div> Style 03 - side through holes - inch thread port connections </div> </div> <div> <div>  04 </div> <div> Style 04 - attachment threads front - inch thread port connections </div> </div> <div> <div>  05 </div> <div> Style 05 - attachment threads back end - inch thread port connections </div> </div> <div> <div>  06 </div> <div> Style 06 - attachment threads rod end - inch thread port connections </div> </div> <div> <div>  12 </div> <div> Style 12 - counterbore back end - O-ring port connection rod end </div> </div> <div> <div>  14 </div> <div> Style 14 - attachment threads front, O-ring port connections rod... </div> </div> <div> <div>  21 </div> <div> Style 21 - counterbore for DIN912/12.9 rod end - O-ring port connection back... </div> </div> <div> <div>  25 </div> <div> Style 25 - attachment threads back end - O-ring port connection rear </div> </div> <div> <div>  31 </div> <div> Style 31 - side through holes - System Port </div> </div> <div> <div>  33 </div> <div> Style 33 - side through holes - O-ring side port connections </div> </div> <div> <div>  34 </div> <div> Style 34 - attachment </div> </div> <div> <div>  36 </div> <div> Style 36 - attachment threads side - O- </div> </div>

4. When all the parameters are selected, the **order no.** of the cylinder you selected will be displayed at the bottom of the page. This number will be used as the code for the cylinder you ordered. You can also click "**Add to basket**" to add the cylinder to your basket, and then click the **shopping cart** in the lower right corner to order online. After clicking the "**3D view**" button, you will see the cylinder 3D model displayed in the software. The two buttons at the bottom left of the page will take you back to the home page of the "Assistant" and the home page of the selected cylinder type.



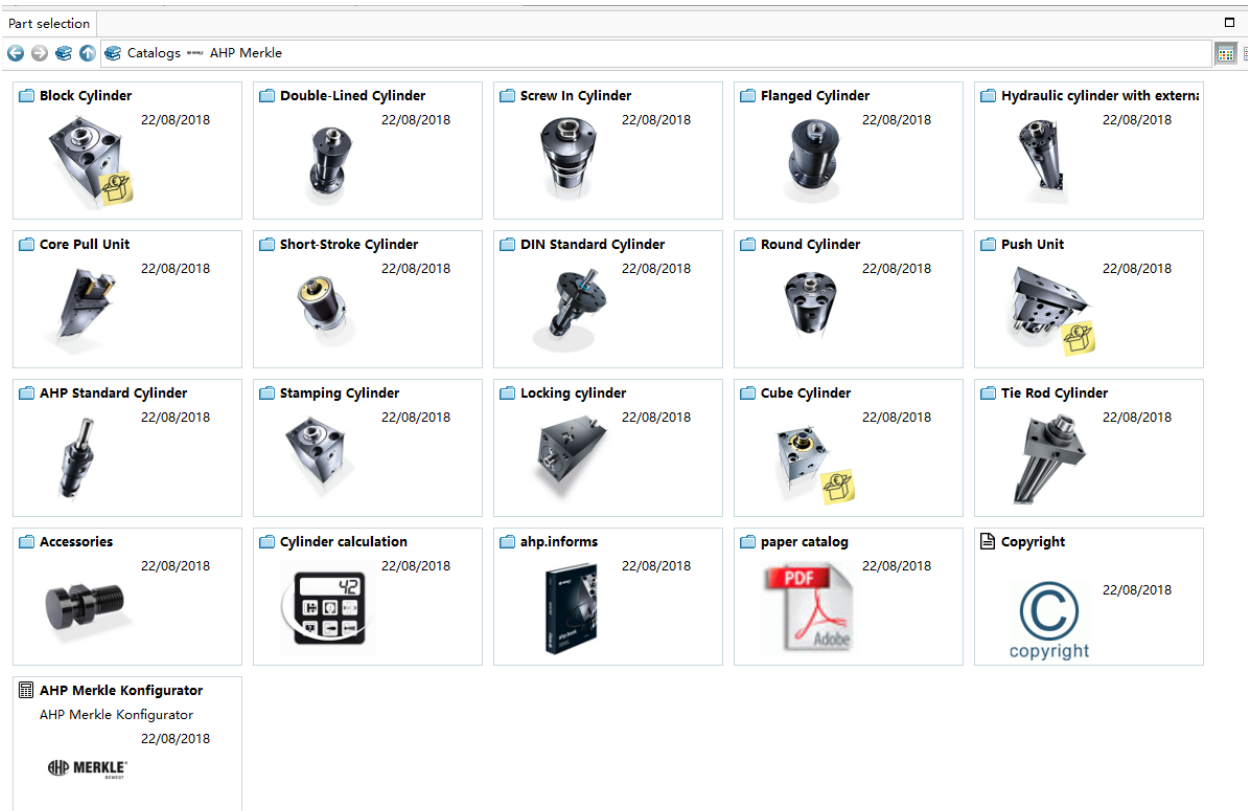
Part Selection

After entering the parts selection, you will see the following picture. The date on the picture represents the last update time of the software installed on your computer. You can keep the timeliness of software at any time by software's own online update function. (refer to the chapter "**update**").

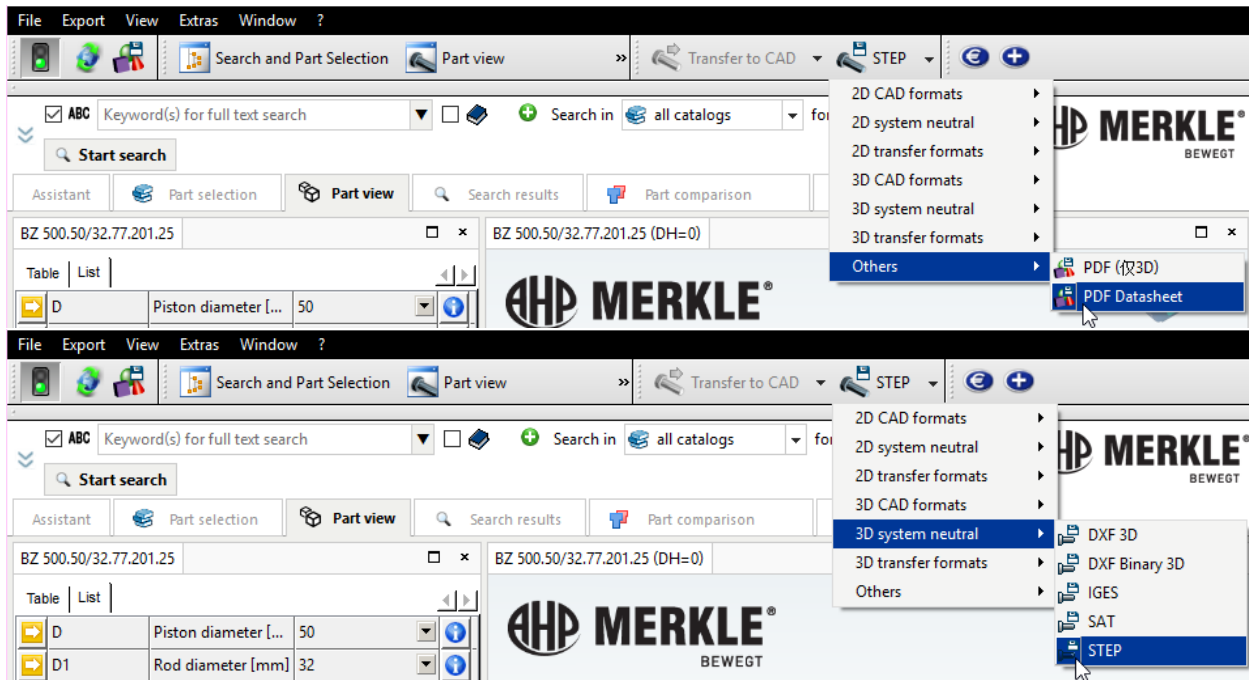


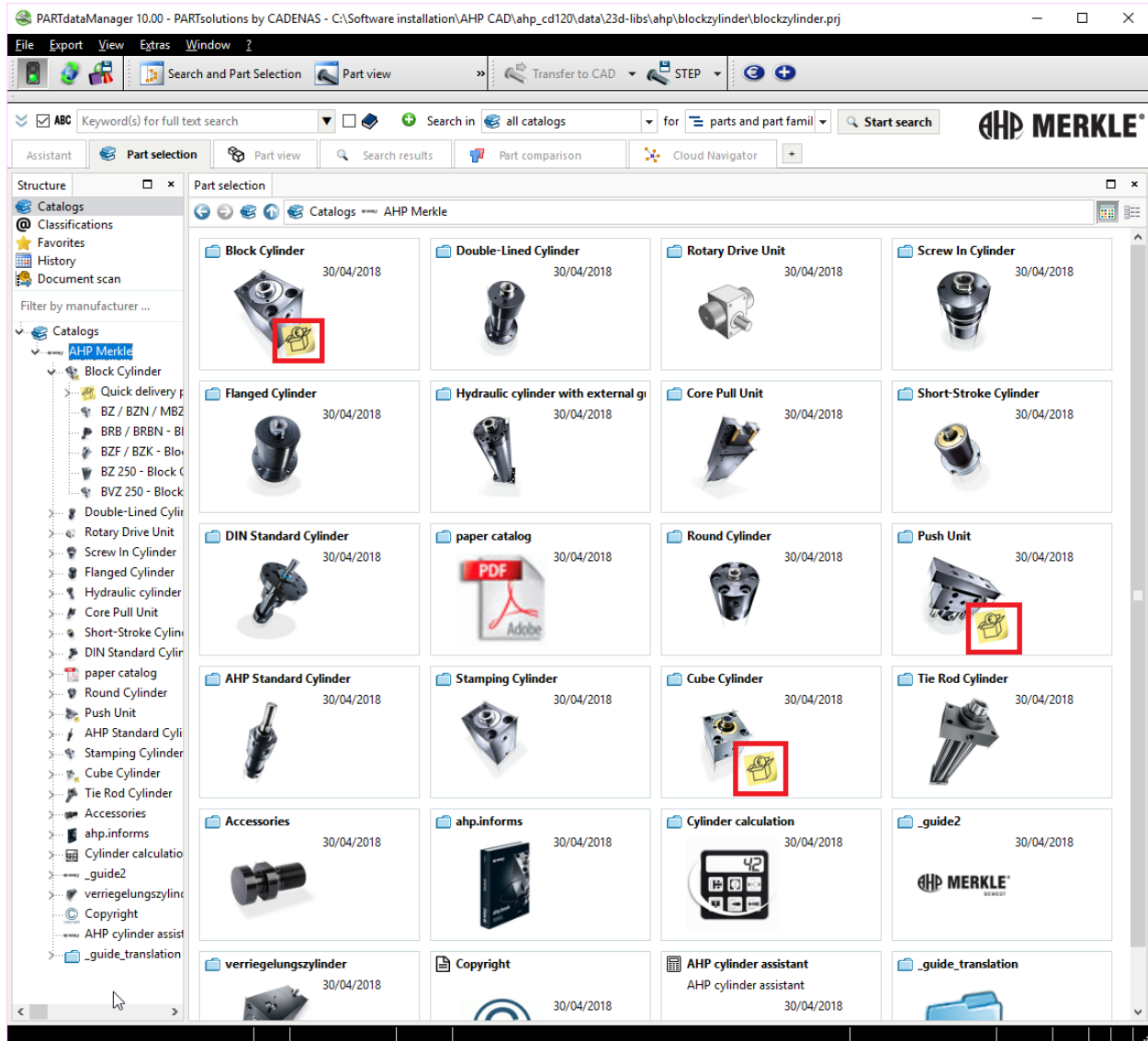
Click the icon to enter the next step.

In the next page, you'll see all of our cylinder types, which you can choose as needed.



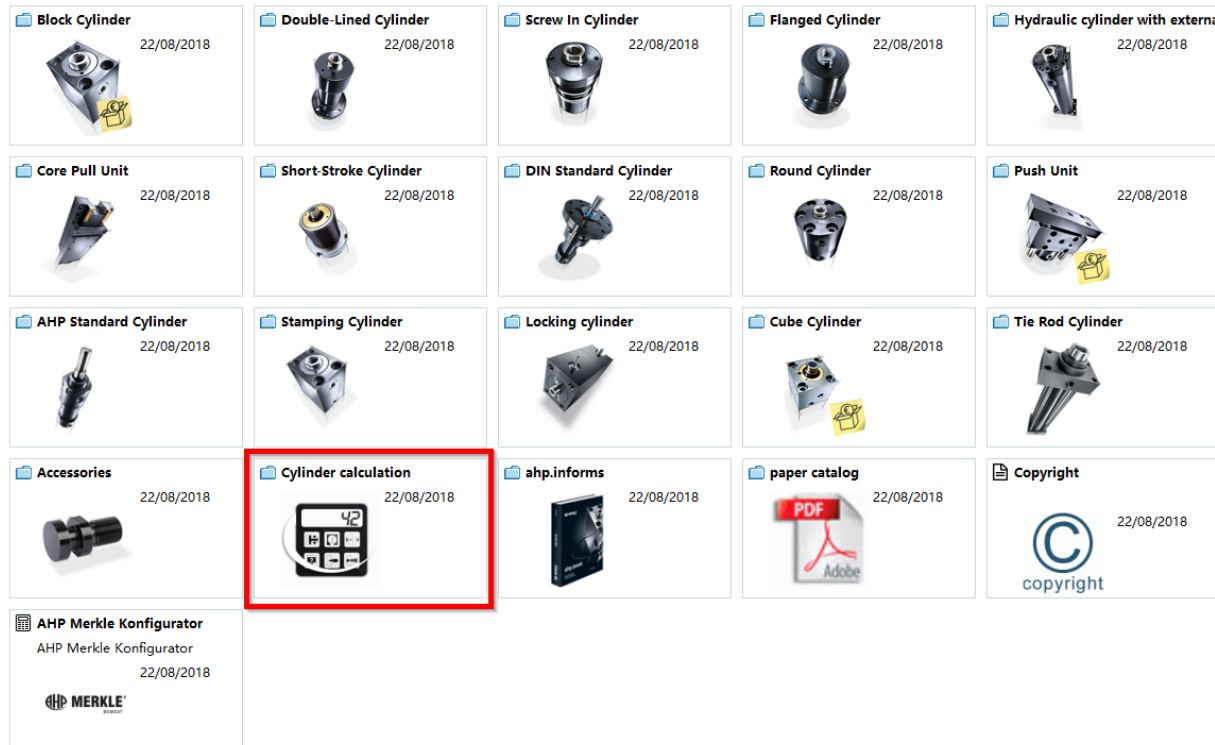
When the cylinder is selected, you can export the 2D and 3D files of the cylinder in the menu below.:



Attention:

When the yellow logo is on the icon, it is shown that this type of cylinder contains the cylinder of our **quick delivery program**. Choosing these cylinders you will get a quicker delivery date and a more favorable price.

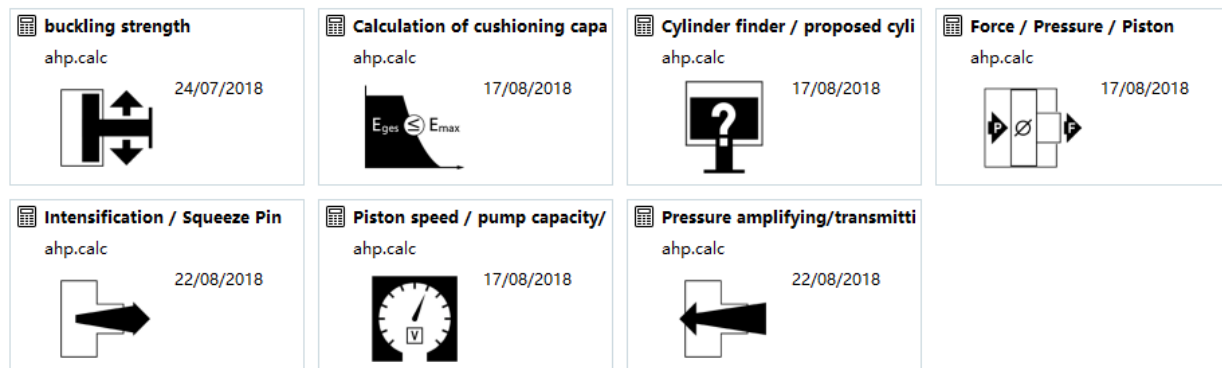
In addition, in our software, we also include a series of “**Cylinder calculation**” for hydraulic cylinders. You can open it in two ways:



Cylinder suggestion:

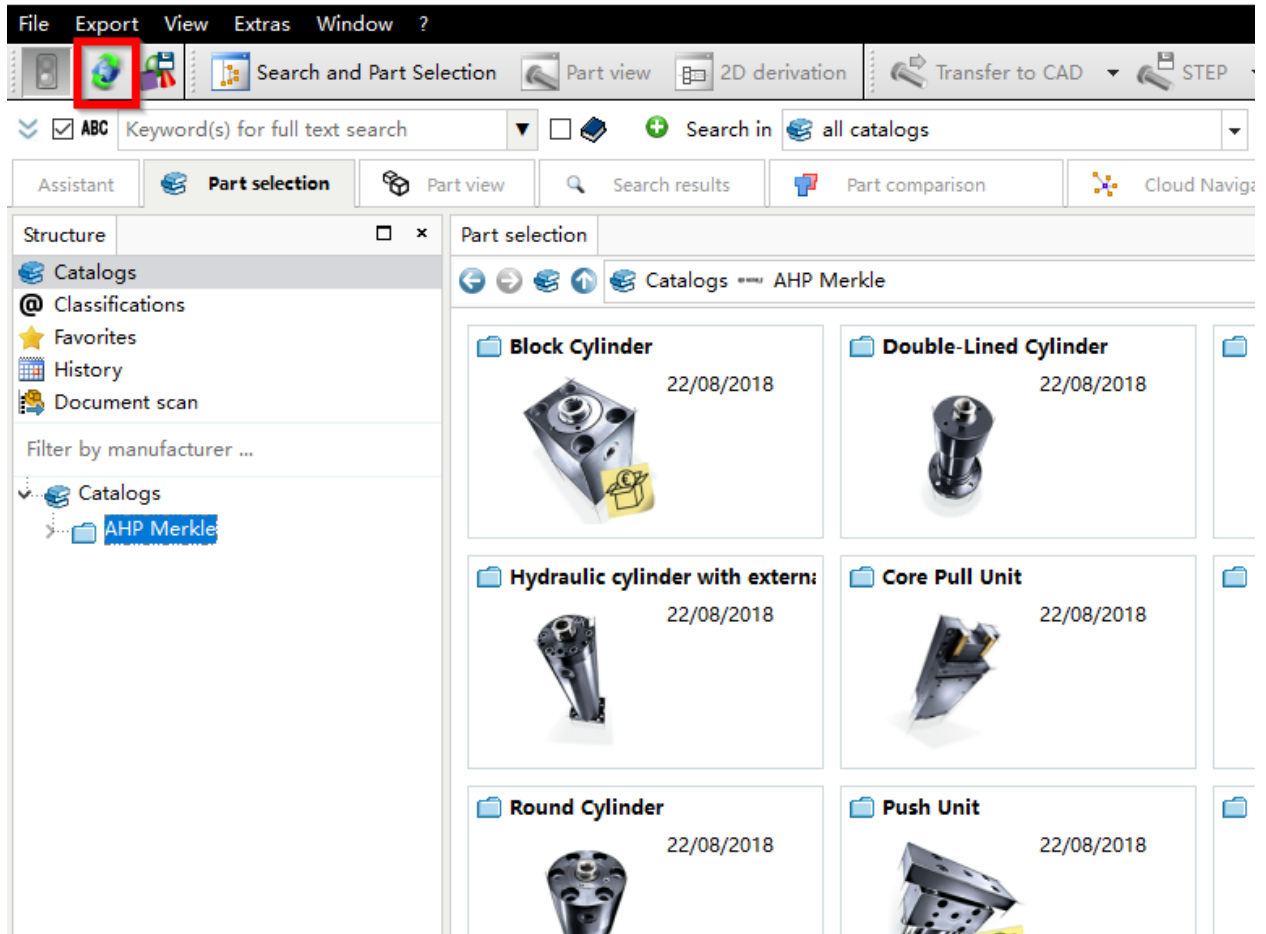
Here we ask you for your requirements and will suggest various cylinder choices. Once you found a matching cylinder that meets your requirements, you can switch to the assistant and finalize your needs.

In this calculator, you can find various calculators, such as the calculation of cushioning capacity, the calculation of cylinder force, pressure, piston speed and so on.



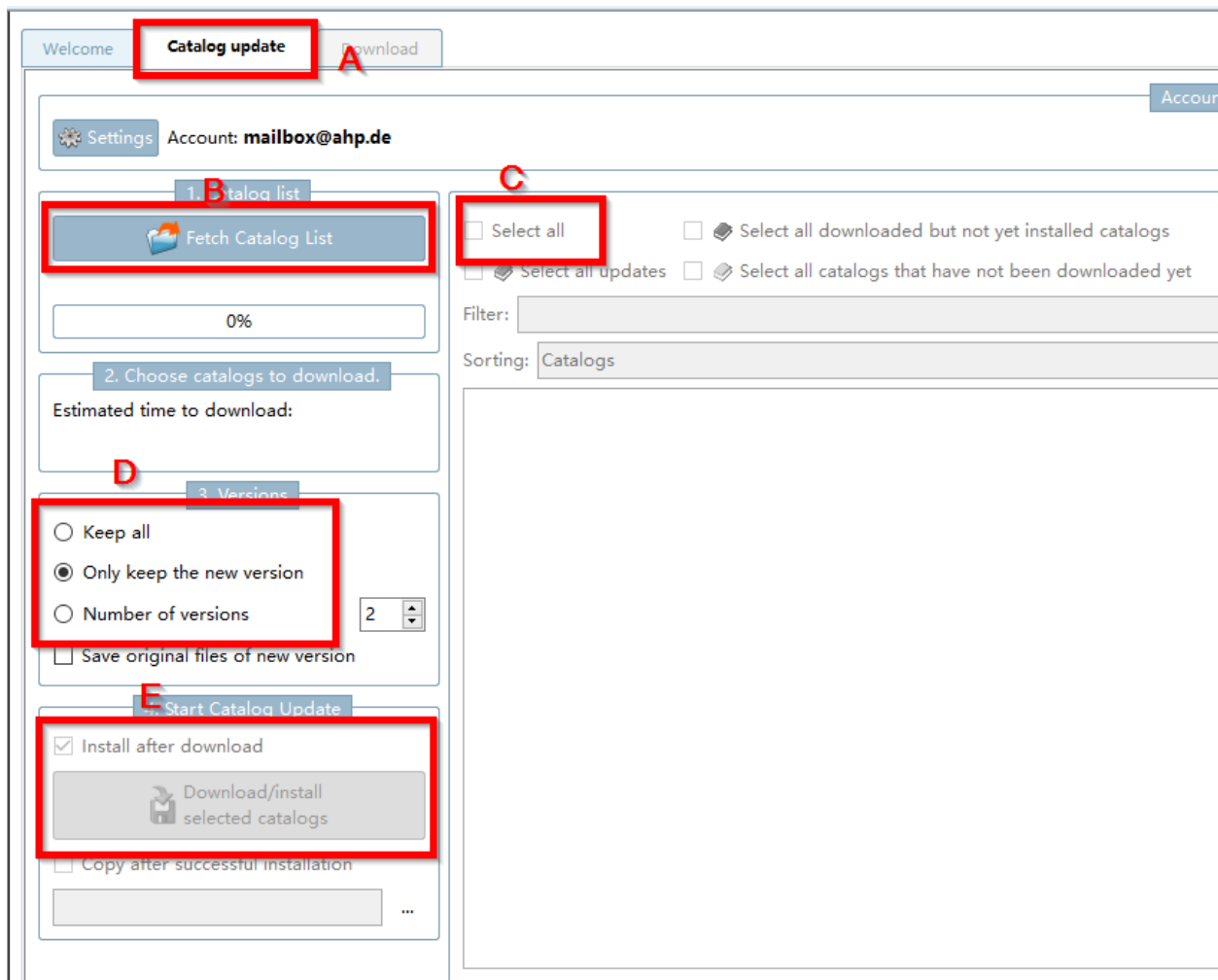
Update

Step1: Click the update button at the top left corner of the software.



Step2: The following operations are performed in the new window:

- A. Click “Catalog update”
- B. Click “Fetch Catalog List” and wait for it completing
- C. Click “Select all”
- D. Choose “ Only keep the new version”
- E. Choose “Install after download”, then click “Download/install selected version” and wait for the installation completing.

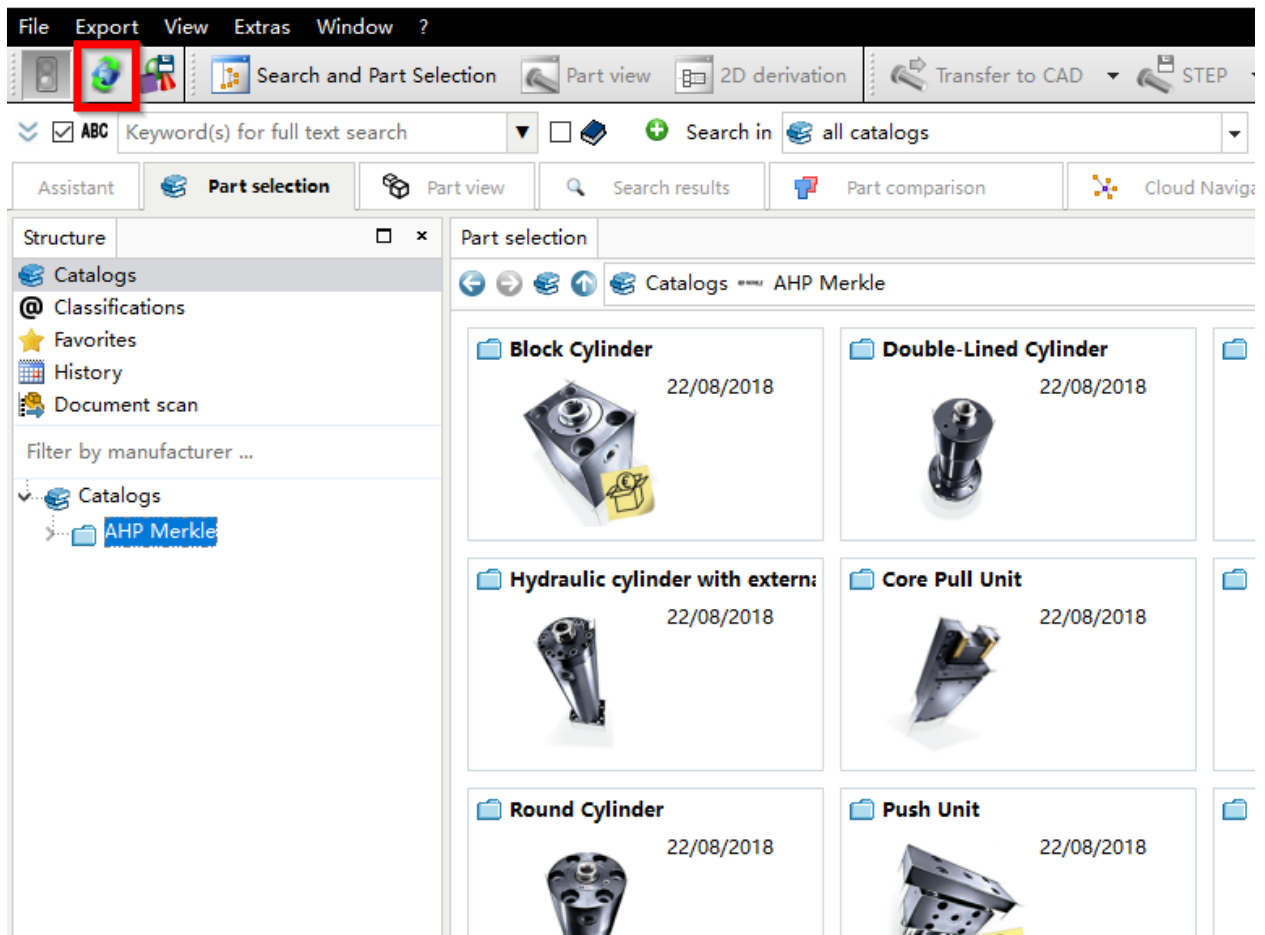


Step3: When the installation is completed, restart the software to use.

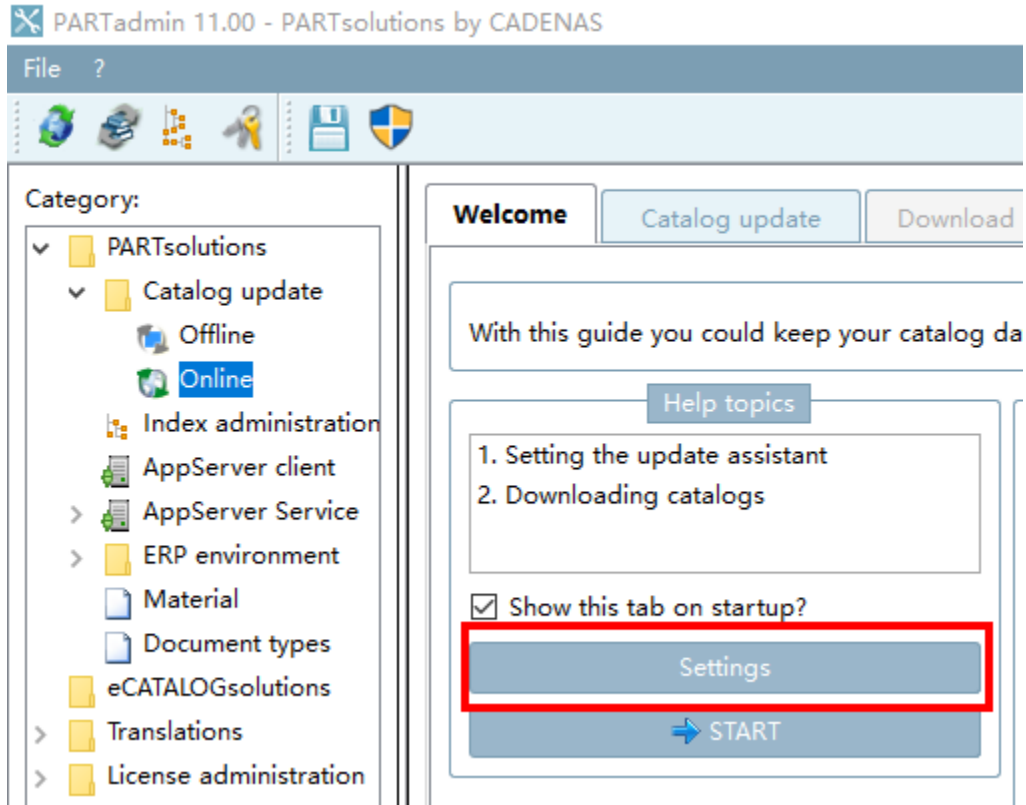
Get updated information

This software will be updated from time to time. If you want to receive an update reminder, you can follow these steps:

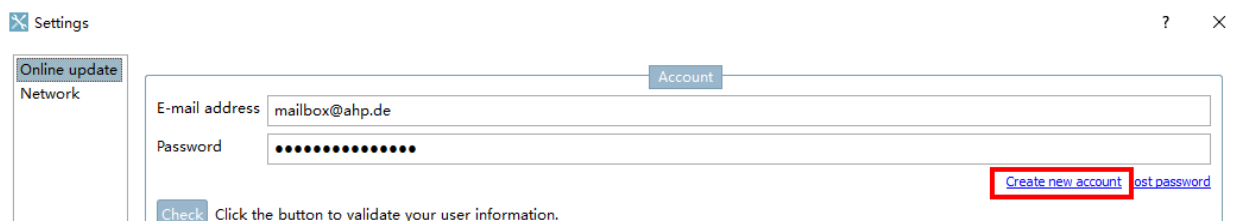
Step1: Click the update button at the top left corner of the software.



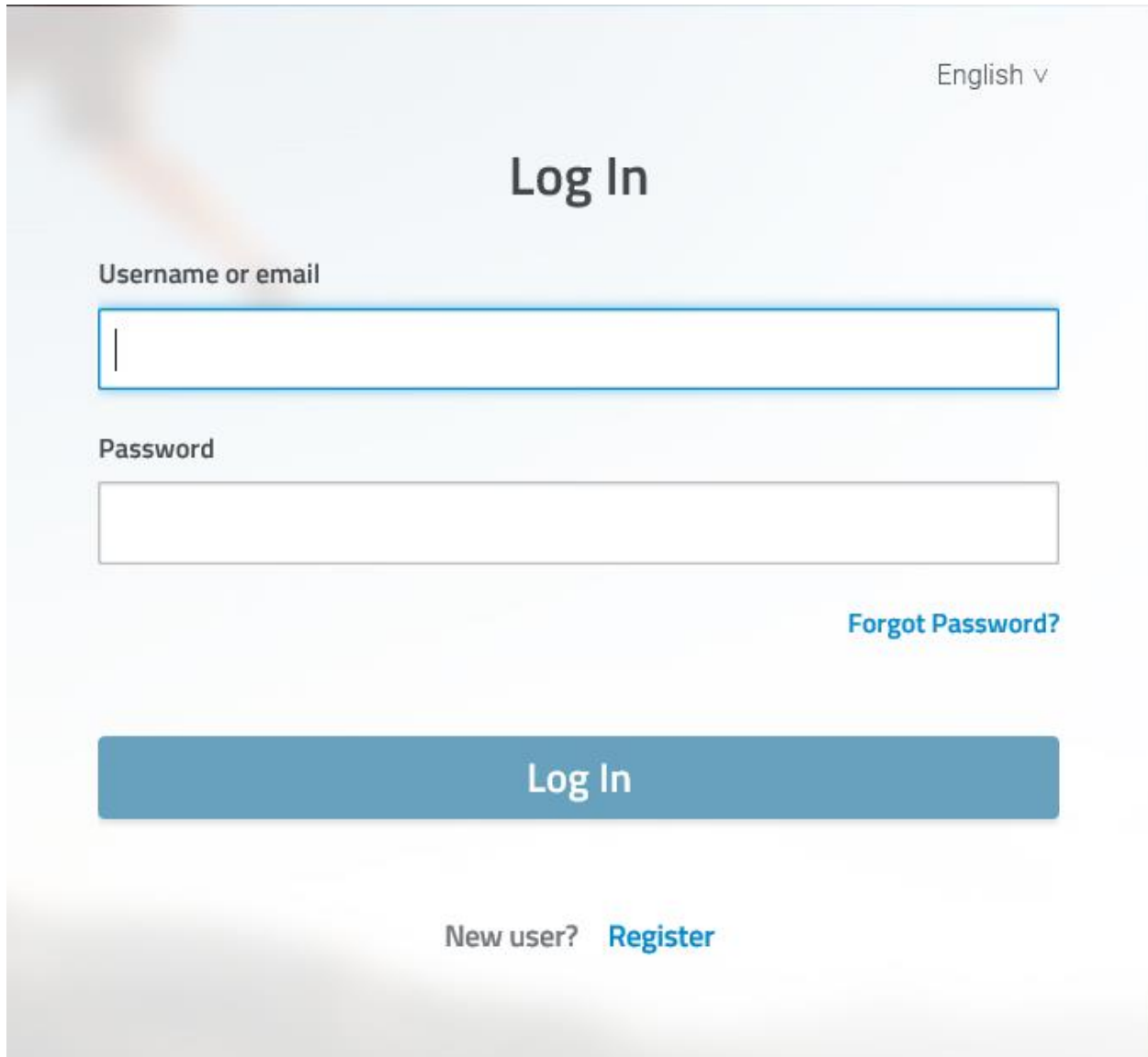
Step2: Click "Settings" button.



Step3: Click "Create new account".



Step4: Register and login.



The image shows a login page for AHP MERKLE. At the top right, there is a language selector showing 'English' with a dropdown arrow. The main heading 'Log In' is centered. Below it are two input fields: 'Username or email' and 'Password'. To the right of the password field is a link 'Forgot Password?'. A large blue 'Log In' button is centered below the fields. At the bottom, there is a link 'New user? Register'.

English ▾

Log In

Username or email

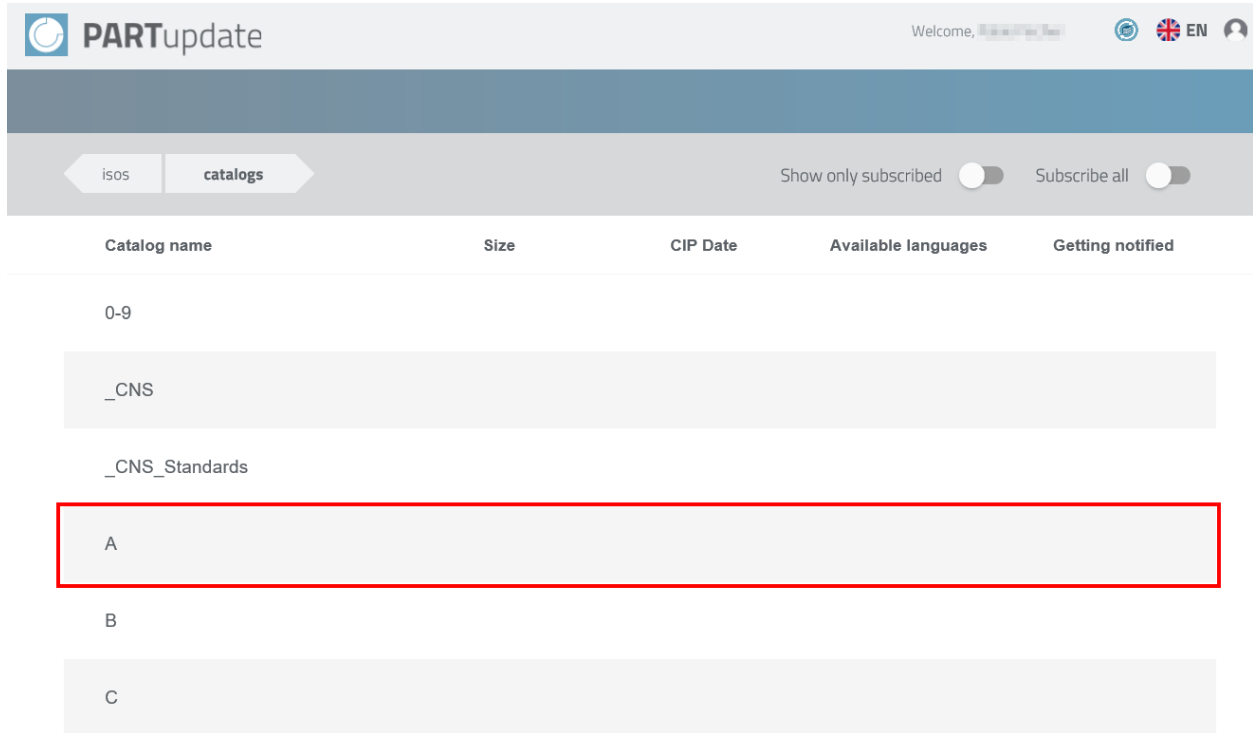
Password

[Forgot Password?](#)

Log In

New user? [Register](#)

Step5: Find the line “A”.







The screenshot shows the PARTupdate web interface. At the top, there is a header with the PARTupdate logo and a welcome message. Below the header, there are tabs for 'isos' and 'catalogs', with 'catalogs' being the active tab. To the right of the tabs, there are two toggle switches: 'Show only subscribed' and 'Subscribe all'. Below the tabs, there is a table with the following columns: 'Catalog name', 'Size', 'CIP Date', 'Available languages', and 'Getting notified'. The table contains the following rows:

Catalog name	Size	CIP Date	Available languages	Getting notified
0-9				
_CNS				
_CNS_Standards				
A				
B				
C				

The row with the catalog name 'A' is highlighted with a red box.

Step6: Find "AHP-Merkle" and tick in the box on the right.

	AGRU	~38.03 MB	19.06.2020	spanish portuguese ge	<input type="checkbox"/>
	AHP-Merkle	~239.99 MB	08.04.2021	swedish spanish russi	<input checked="" type="checkbox"/>
	Airtac	~195.85 MB	06.04.2021	spanish japanese italia	<input type="checkbox"/>
	ako armaturen	~4.32 MB	19.12.2018	turkish swedish spanis	<input type="checkbox"/>

After completing the above operation, you will receive email notification every time the software is updated. You can get the latest version of CAD software by following the operation in the "update" section above.