Hafele Free Swing User Guide.



Introduction

Overview

- The 'Hafele Free Swing Package' from Solid Setup Plus adds the Hafele Free Swing door Lift system to Cabinet Vision.
- It provides drilling for the Cabinet and Door parts, for CNC output.
- *(You can change the drilling diameters and depths to the tools you want to use.)*
- It also adds 3d graphics for the Mechanisms and brackets etc.
- The Mechanisms and brackets etc are added as a separate parts and materials for reporting purposes.
- All material descriptions contain the Hafele order number after the # symbol.
- UCS calculates weight of Door by using the density of board and handle weight.
- User can adjust density, handle weight or Total weight using attributes.
- The Total weight determines which Lift Mechanism to use, automatically.

Included in This Package

User Created Standards

The Following UCS is provided

- { DOOR } -- Hafele Free Swing Attributes -Adds Hafele Free Swing Attributes to DOR
- { DOOR } -- Hafele Free Swing -Adds Hafele Free Swing to DOR_OPEN

Library

- CVS Hafele.cvc Cabinet Vision Catalog of Hafele Library parts

Parts

- HNGDXF — Hinge type part used for Mechanisms
- HNGPLT — Hinge type part used for Mech Covers
- HNGSTAY — Hinge type part used for Arms
- ROD — Assembly type part used for Connecting Rods
- BRKT — Part used for EDrive bumpers

Miscellaneous Materials:

FreeSwing Brkt	FreeSwing Bracket (hide)
FreeSwing Kit Gry S1sw	FreeSwing Kit Grey S1sw #372.34.700
FreeSwing Kit Gry S2sw	FreeSwing Kit Grey S2sw #372.34.710
FreeSwing Kit Gry S3sw	FreeSwing Kit Grey S3sw #372.34.720
FreeSwing Kit Gry S4sw	FreeSwing Kit Grey S4sw #372.34.701
FreeSwing Kit Gry S5sw	FreeSwing Kit Grey S5sw #372.34.711
FreeSwing Kit Gry S6sw	FreeSwing Kit Grey S6sw #372.34.721
FreeSwing Kit Gry S7sw	FreeSwing Kit Grey S7sw #372.34.702
FreeSwing Kit Gry S8sw	FreeSwing Kit Grey S8sw #372.34.712
FreeSwing Kit Gry S9sw	FreeSwing Kit Grey S9sw #372.34.722
FreeSwing Kit NA	FreeSwing Kit Not Available
FreeSwing Kit Wte S1sw	FreeSwing Kit White S1sw #372.34.500
FreeSwing Kit Wte S2sw	FreeSwing Kit White S2sw #372.34.510
FreeSwing Kit Wte S3sw	FreeSwing Kit White S3sw #372.34.520
FreeSwing Kit Wte S4sw	FreeSwing Kit White S4sw #372.34.501
FreeSwing Kit Wte S5sw	FreeSwing Kit White S5sw #372.34.511
FreeSwing Kit Wte S6sw	FreeSwing Kit White S6sw #372.34.521
FreeSwing Kit Wte S7sw	FreeSwing Kit White S7sw #372.34.502
FreeSwing Kit Wte S8sw	FreeSwing Kit White S8sw #372.34.512
FreeSwing Kit Wte S9sw	FreeSwing Kit White S9sw #372.34.522
FreeSwing MecCov Gry	FreeSwing Mech Cover Grey (hide)
FreeSwing MecCov Wte	FreeSwing Mech Cover White (hide)

Free Swing Usage

Door Requirements.

For the Free Swing to appear on a door the following conditions must be met

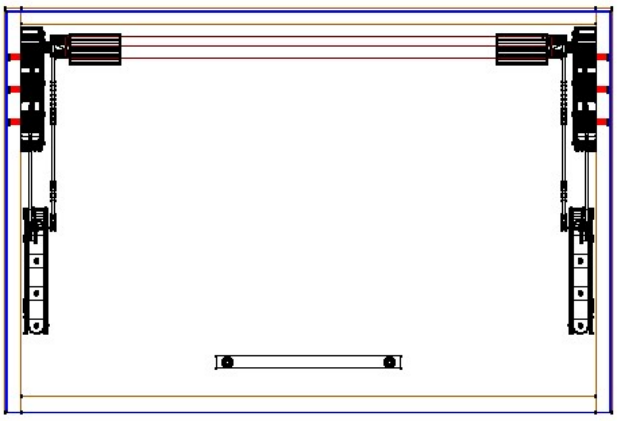
- Door must be hinged at top.
- Door must have its hinge quantity set to zero.
- Door height **must** be in size range **370-800 High** and door must be **260-1800 Wide**
- The **"Free Swing?"** Attribute will then appear on the Door to switch on Free Swing.
- (You must be in the orthographic or "Smiley" views to click on the door and see the attributes)

Attributes

- If the **"Free Swing?"** attribute is changed to "**True**" the following attributes will appear on the Door, along with the Mechanisms and Arms.

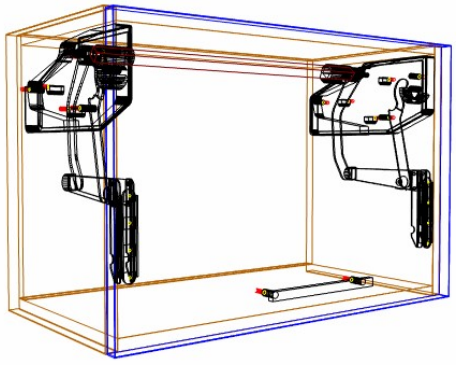
- **NOTE**: - If the Door is not within the above size ranges, or is too heavy for any Mechanism the Free Swing parts will **not** be added to the Door.

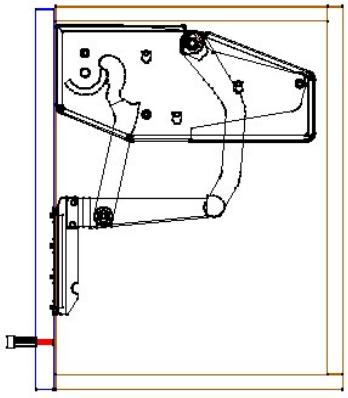
Free Swing ?	True
Free Swing Colour	White
Free Swing Dor Kg/m3	800
Free Swing Dor Kg	5.14
Free Swing Dor Pull gm	200
Free Swing Dor Total Kg	5.34
Free Swing Open?	False
Free Swing Pos Lh	16
Free Swing Pos Rh	16
Free Swing Pos Top	97

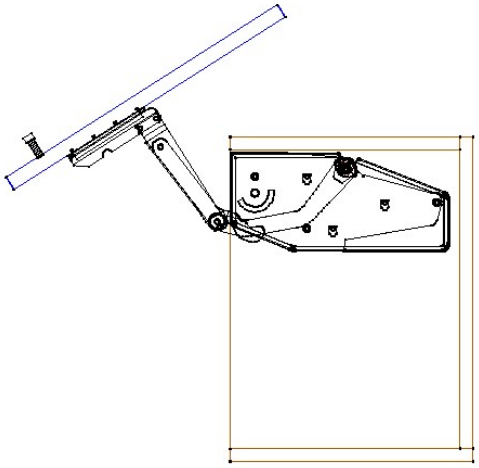


- **Free Swing Dor Kg/m3** This value is the density of the door measured in kilograms per cubic meter and is used to calculate the weight of the door – ***change this to the density of the board you are using if known (If you are using MDF its density varies between 680 and 830 Kg/m3)***
- **Free Swing Dor Kg** -This is the weight of the door as calculated by the **density** value **you** entered multiplied by the door size and thickness. – ***(If you already know the door weight you can change this value rather than using the density calculated weight.)***
- **Free Swing Dor Pull gm** -This value is the weight of the handle in grams and is used to calculate the total weight of the door plus handle – ***(change this to the total weight of the handle(s) you are using.)***
- **Free Swing Dors Total Kg** -This is the total weight of the door and handle added together and is used to select the correct Lift Mechanism ***(If you already know the total door weight plus handle, you can change this value rather than using the density calculated weight.)***
- **Free Swing Colour?** -Changes the Cover Colour **(Grey, White)**
- **Free Swing Open?** -Shows the door in the open position.
- **Free Swing Pos Lh** -Can be used to move the x position of the left Arm.
- **Free Swing Pos Rh** -Can be used to move the x position of the right Arm.
- **Free Swing Pos Top** - 97mm - **Distance from top to bottom mech holes**

Some Example Images:

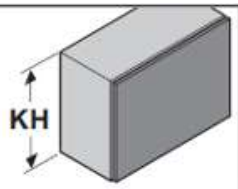
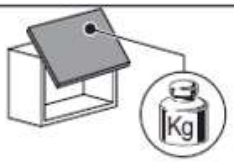
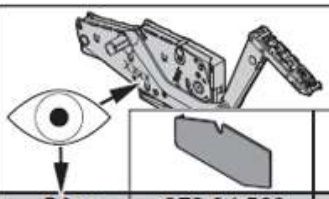






A 400mm high cabinet with a Door Weight of 4Kg.

The following tables show which Lift Mechanism is used, for different door heights and weights:

				
370	1,8 - 4,0 kg	S1sw	372.34.500	372.34.700
	3,4 - 6,5 kg	S4sw	372.34.501	372.34.701
	5,2 - 10,3 kg	S7sw	372.34.502	372.34.702
400	1,8 - 3,9 kg	S1sw	372.34.500	372.34.700
	3,3 - 6,3 kg	S4sw	372.34.501	372.34.701
	5,0 - 10,0 kg	S7sw	372.34.502	372.34.702
450	1,9 - 3,7 kg	S1sw	372.34.500	372.34.700
	3,2 - 6,1 kg	S4sw	372.34.501	372.34.701
	4,8 - 9,4 kg	S7sw	372.34.502	372.34.702
500	1,90 - 3,5 kg	S1sw	372.34.500	372.34.700
	3,0 - 5,8 kg	S4sw	372.34.501	372.34.701
	4,50 - 8,9 kg	S7sw	372.34.502	372.34.702
500	2,5 - 5,9 kg	S2sw	372.34.510	372.34.710
	5,0 - 10,0 kg	S5sw	372.34.511	372.34.711
	8,2 - 15,9 kg	S8sw	372.34.512	372.34.712
550	2,5 - 5,6 kg	S2sw	372.34.510	372.34.710
	4,8 - 9,6 kg	S5sw	372.34.511	372.34.711
	7,8 - 15,2 kg	S8sw	372.34.512	372.34.712
600	2,5 - 5,3 kg	S2sw	372.34.510	372.34.710
	4,7 - 9,3 kg	S5sw	372.34.511	372.34.711
	7,5 - 14,5 kg	S8sw	372.34.512	372.34.712
670	2,5 - 4,8 kg	S2sw	372.34.510	372.34.710
	4,5 - 8,8 kg	S5sw	372.34.511	372.34.711
	7,0 - 13,5 kg	S8sw	372.34.512	372.34.712
670	3,2 - 6,5 kg	S3sw	372.34.520	372.34.720
	5,7 - 11,3 kg	S6sw	372.34.521	372.34.721
	8,5 - 17,1 kg	S9sw	372.34.522	372.34.722
700	3,1 - 6,3 kg	S3sw	372.34.520	372.34.720
	5,6 - 11,1 kg	S6sw	372.34.521	372.34.721
	8,4 - 16,7 kg	S9sw	372.34.522	372.34.722
750	3,0 - 6,0 kg	S3sw	372.34.520	372.34.720
	5,4 - 10,7 kg	S6sw	372.34.521	372.34.721
	8,2 - 16,0 kg	S9sw	372.34.522	372.34.722
800	2,9 - 5,7 kg	S3sw	372.34.520	372.34.720
	5,3 - 10,3 kg	S6sw	372.34.521	372.34.721
	8,0 - 15,3 kg	S9sw	372.34.522	372.34.722

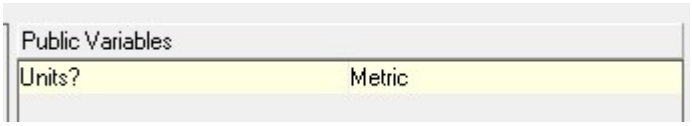
Drilling Setup

UCS Public Variables

- To change these variables go to the Utilities – Edit User Created Standards from the Room Plan or Elevation views

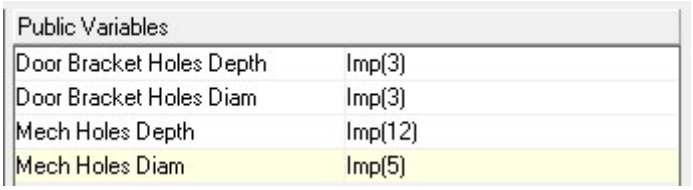


- Then click on the **"{ DOOR } -- Hafele Free Swing Attributes"** UCS. The Public Variables are at the top right of the screen.



- **Units?** If you are using **imperial** units the variable must be set to **imperial** but if you are using **metric** units it must be set to **metric.**

- Now click on the **"{ DOOR } -- Hafele Free Swing"** UCS. Here we set the various drilling sizes.



- Edit the **Imp()** values to the diameter and depths you require.
- If you are using imperial sizes simply replace the whole **imp()** with the imperial measurement instead.
- E.g.: **Imp(3)** might become **1/8**
- Change the **Mech Pilot Holes** value to **0** if you normally do not want to drill the Mechanism screw pilot holes in the cabinet ends or leave it as **1** if you normally do drill them.

Once you have changed these values to your requirements, close the UCS editor.

Tools Required

- The drill diameters you choose in the UCS Public Variables above are all required for this package to work. You must have these tool diameters in your tool catalog and in your machine.

Package Exclusions

There may be some items shown in various images contained in this document which are not included in this Package. Any items not specifically mentioned in this guide are part of our other packages which are sold separately.

See our website for more detailed information on these packages.