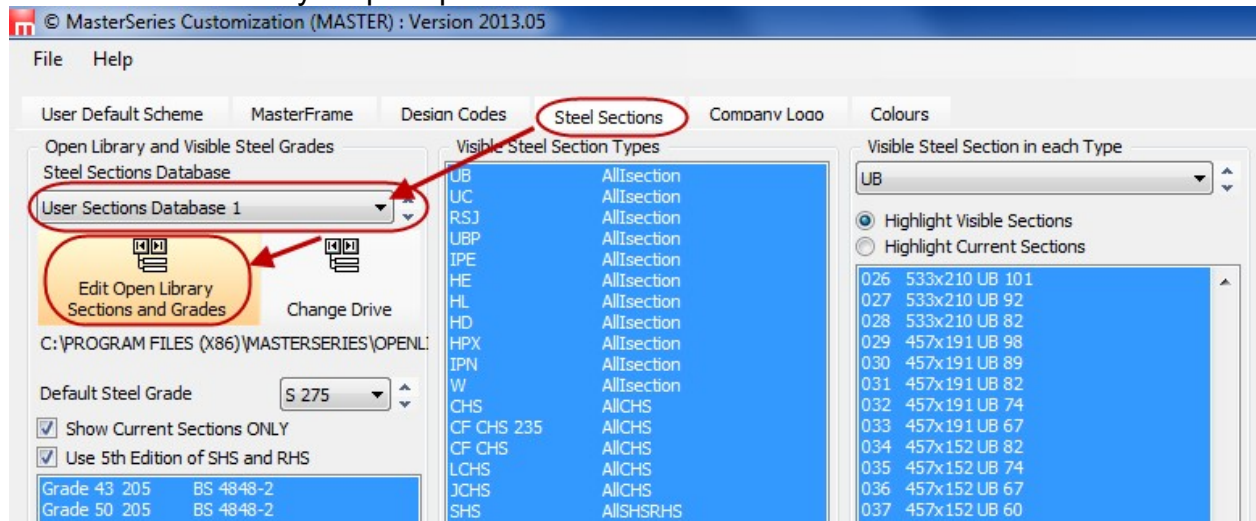


Technical Note

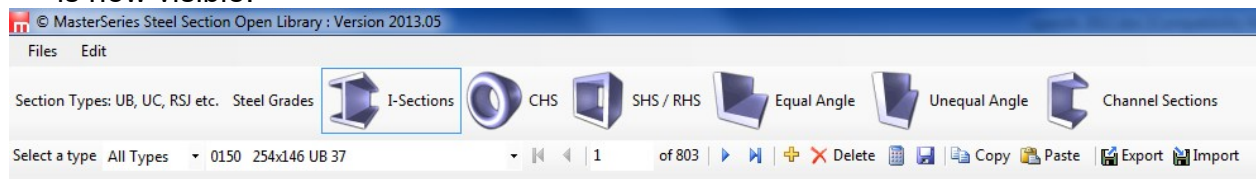
Title: Open Library
Date: 03/06/2013
Versions: 2007+
Program: MasterFrame

How to place a user steel section in the Open Library

1. From the opening MasterSeries screen, go to 'Utilities' and select 'Open Libraries'.
2. On the left hand side of the Steel Sections screen, select from the drop list the steel sections database which you wish to use, eg:- 'User Steel Sections Database 1'. You may be prompted to create this database if it does not already exist. Click on the large button – 'Edit Open Library, Sections and Grades'. You may be prompted to save the current customisation file.



3. You will now be in the open library. From the icons on the top of the screen, select which type of section you wish to add, eg:- I-Sections. A sections table is now visible.



- Click on the '1. Add New Section' icon. Fill the basic data of your section into the boxes beside the red labels. Then click on the '2. CalculateValues' icon to generate the rest of the properties. If you make a mistake, you can click the 'Delete' icon and start again. Click on the '3. Save Section Changes' icon when the data has been correctly entered.

Select a type All Types 0150 254x146 UB 37 1 of 803 Delete Copy Paste Export Impo

1. Add New Section 3. Save Section Changes

Basic Section Values

Section Number (0001 - 0999) 150

Section Type HE

Section Depth D (mm) 706.4

Section Breadth B (mm) 357.8

Web Thickness t (mm) 18.4

Flange Thickness T (mm) 30.2

r1 (mm) 15.2

2. Calculate Values >>

Old Section Hide this Section

| | | | |
|--------------------------------------|----------------|-----------------------|------------|
| Section Name | 254x146 UB 37 | Kx3 | 37.97926 |
| Tee Section Name | 146x127 T 19 | Kx4 | 14.89415 |
| Castellated Section Name | 383x146 CUB 37 | Ky1 | 119.4 |
| Nominal Depth (mm) | 254 | Sx (cm ³) | 483.2 |
| Nominal Breadth (mm) | 146 | Sy (cm ³) | 119.4 |
| Depth between fillets d (mm) | 219 | J (cm ⁴) | 15.19729 |
| r2 (mm) | 0 | H (dm6) | 0.08561011 |
| Mass (kg) | 37.02 | u | 0.8903752 |
| Area (cm ²) | 47.16 | x | 24.40645 |
| Surface area (m ² /m run) | 1.07 | Kx1 | 483.2 |
| Ix (cm ⁴) | 5537.7 | Kx2 | 882.5657 |
| Iy (cm ⁴) | 571.5 | nx | 0.3128626 |
| | | Ky3 | 255.0534 |
| | | Ky4 | 0.3534859 |
| | | fa | 0 |
| | | Ds (mm) | 254 |
| | | Dc (mm) | 383 |
| | | Pitch (mm) | 274.3 |
| | | Acast (mm) | 60 |

- Add additional sections as required, repeating step 4 above.
- Click on the 'Files > Close Open Library' icon to close the database. From 'File', select to 'Exit Using Current Settings', and click 'yes' when prompted to save the changes to the current customisation file.

From within the MasterSeries you will now be able to see your new user section when selecting a steel section for the member properties.

Regards

MasterSeries Team 😊