

Archon AISC Shapes



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Table of Contents

Foreword	0
Part I Program Operation	3
Part II Property Descriptions	4
Part III Archon	5
Index	0

1 Program Operation

Program Operation:

CAUTION

The program accesses three data files: VER7.CSV, VER8.CSV and VER9.CSV. By reviewing these files you may be tempted to modify them by adding data. If you do so, it's at your own risk. Modifying the data could make the program inoperable.

Perform the following steps to operate the program:

1. Select the version of the AISC data you would like to review. Normally you will use the 9th edition, which is the default version. If you are doing some retrofit work you may wish to use either the 7th or 8th version. To select the version, click on the appropriate option button.
2. You will note that several "Shape Categories" are displayed in the list box on the left side of the screen. Click on the general category that you would like to review.
3. Next, select the particular shape you would like to review from the drop down box, located near the center of the screen. The properties will now be displayed in the properties list box.
To view the actual dimensions on the display drawing, click the "Values" option button. To go back and view the labels, click the "Labels" option button.
4. If you would rather see the units in metric, click the "Metric" option button. To go back to US units click the "US" option button. Note that the values will change in both the list box and on the member picture.
5. If you would like to select several members to print, just click the add to print list button for each member you display. To delete members from the list, just double click the item in the print list. Next, go to the "Print" menu item and select the "Print List" option. All the data will be printed for the items in your list. When the print setup screen comes up, you will have the option to print the data to a text file.
6. To print the data for the current member displayed as well as the picture, just go to the "Print" menu item and select the "Print Current Shape with Picture" option. Note, if your labels are displayed the labels will be printed. If the actual values are displayed, that is what will be printed.

That's all there is to it.

2 Property Descriptions

Property Descriptions

Area - Steel cross section area.

WT - Weight per unit length of member.

D - Member depth.

Bf - Member flange width

Tw - Member web thickness

Tf - Member flange thickness

OD - Pipe outside diameter

ID - Pipe inside diameter

t - Wall thickness

Ix - Moment of inertia about the X axis.

Iy - Moment of inertia about the Y axis.

Sx - Section Modulus about the X axis.

Sy - Section Modulus about the Y axis.

ry - Y axis radius of gyration.

rx - X axis radius of gyration.

K and K1 - Distance from flat surface past fillet radius.

rt - Radius of gyration of a section comprising the compression flange plus 1/3 of the compression web area, taken about an axis in the plane of the web.

Zx - X axis plastic section modulus.

Zy - Y axis plastic section modulus

3 Archon

Archon Engineering

Archon Engineering originally developed engineering applications in the late 1990s and distributed and enhanced them through 2011. Archon Engineering is first and foremost a consulting firm. While the customer base for Archon's applications is quite large, Solverware was given permission to continue to sell the apps. We have been a distributor of Archon applications since the late 1990s.

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