Include << C:\ProgramData\MC Sec\MC Sec.mcdx

TEST - Search functions

Search for a section with Fields values greater or equal to the specified Values
Output is sorted according to the "Sorting" property.

Search for:

Second moment of area $F1 := \text{"Iy"}$ $V1 := 3000000 \ \boldsymbol{cm}^4$

Second moment of area $F2 := \text{"Avz"}$ $V2 := 490 \ \boldsymbol{cm}^2$

Sort results over weight $S := \text{"G"}$

$$\text{search\_2\_sec}\left(F1, \frac{V1}{1 \ \boldsymbol{cm}^4}, F2, \frac{V2}{1 \ \boldsymbol{cm}^2}, S\right) = \text{"W920X420X1377;W36X16.5X925;HL920X1377;"}$$

To get an array with sections

$$Res := Search_{sec}2\left(F1, V1, F2, V2, S\right) = \begin{bmatrix} \text{"W920X420X1377"} \\ \text{"W36X16.5X925"} \\ \text{"HL920X1377"} \end{bmatrix}$$

To get a matrix with sections and properties

$$SearchTable_{sec}2\left(F1, V1, F2, V2, S\right) = \begin{bmatrix} 1 \ \boldsymbol{N} & \text{"Iy"} & \text{"Avz"} & \text{"G"} \\ \text{"Names"} & \text{"cm\^{}4"} & \text{"cm\^{}2"} & \text{"kg/m"} \\ \text{"W920X420X1377"} & 3034000 & 797.2 & 1377 \\ \text{"W36X16.5X925"} & 3034000 & 797.2 & 1377 \\ \text{"HL920X1377"} & 3034000 & 797.2 & 1377 \end{bmatrix}$$