



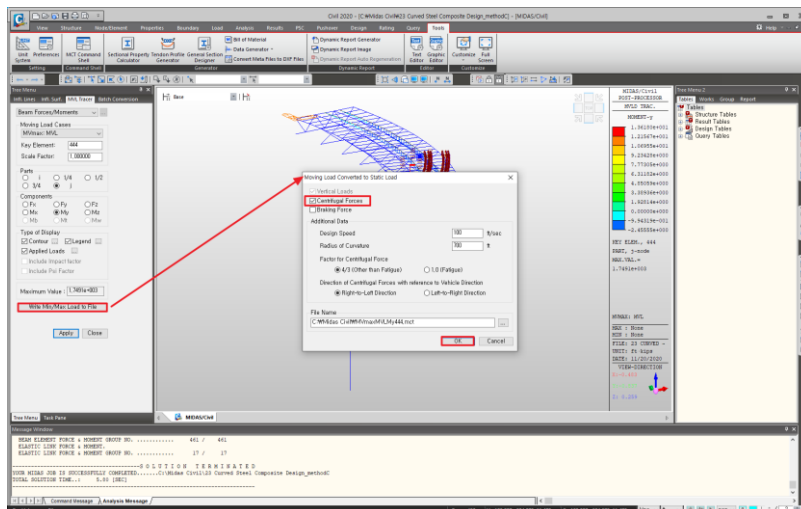
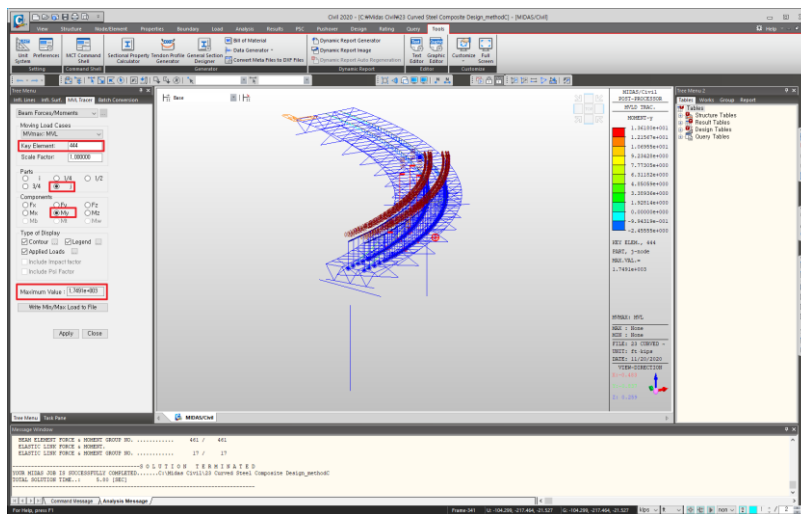
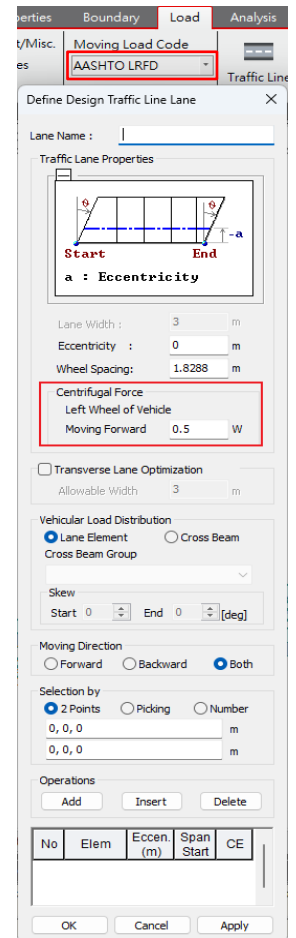
如何在移動載重(Moving Load)中考慮離心力？



在 midas Civil 中，AASHTO LRFD 可以自動考慮離心力(即水平移動載重)。其他的規範則需要透過半手動的方式輸入。

在 midas Civil，Moving Load Code 選擇 AASHTO LRFD 時，可以輸入離心力所需的參數，如右圖。

但在選擇其他規範時，則需透過半手動的方式輸入。首先，使用 Moving Tracer，找到所要考慮的極值，並點選 Write Min/Max Load to File，並勾選 Centrifugal Force。

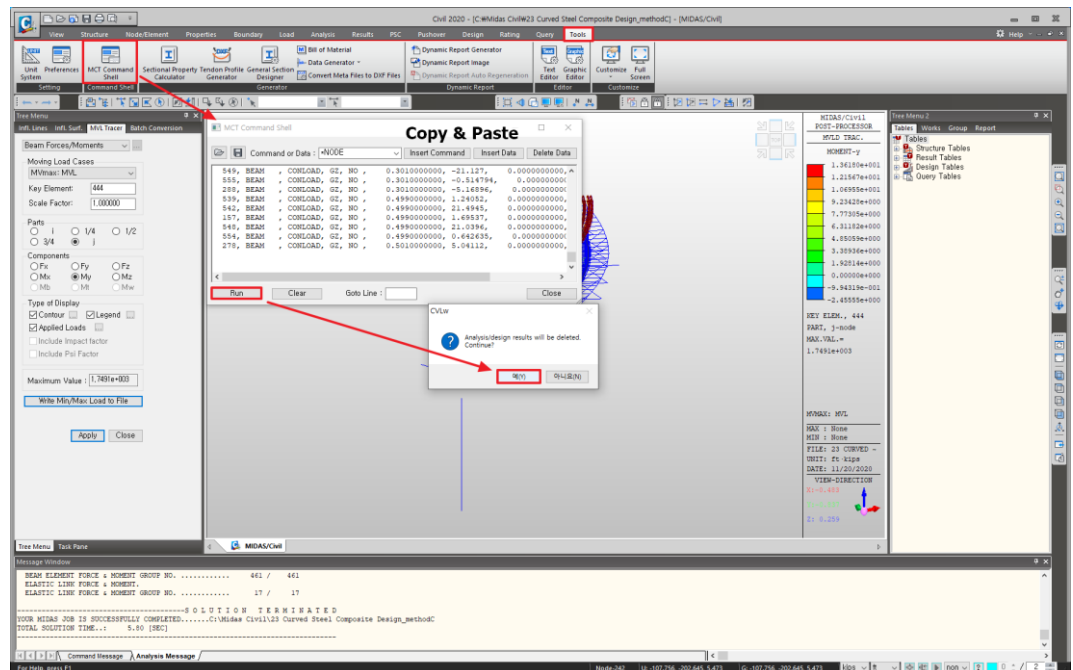


點選輸出後，會產生一MCT檔。將此檔案的內容複製，並到 Tools > MCT Command Shell 將文字檔輸入並執行。如此一來，垂直的活載重和相對應的離心力即可被轉為靜載重。但需要注意的是，此方法所得到之離心力僅有極值點所相對應的離心力。

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MIDAS/Text Editor - [MvmaxMVLMy444]
File Edit View Window Help
00001 *VERSION
00002 5.4.0
00003
00004 *VERSION
00005 7.0.0
00006
00007 *UNIT
00008 : FORCE, LENGTH, HEAT, TEMPERATURE
00009 KIPS, FT, BTU, F
00010
00011 *VERSION
00012 5.4.0
00013
00014 *STLDCASE : Static Load Cases
00015 : LCLNAME, LCTYPE, DESC
00016 MvmaxMVLMy444, USER,
00017
00018 *USE-STLD, MvmaxMVLMy444
00019
00020 *BEAMLOAD : Element Beam Loads
00021 : ELEM_LIST, CND, TYPE, DIR, bPROJ, D1, P1, D2, P2, D3, P3, D4, P4, GROUP
00022 540, BEAM, *DOWLOAD, GZ, NO, 0.3010000000, -2.59627, 0.0000000000, 0.0, 0.0, 0.0, 0.0
00023 543, BEAM, *DOWLOAD, GZ, NO, 0.3010000000, -25.5255, 0.0000000000, 0.0, 0.0, 0.0, 0.0
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00035 513, BEAM, *DOWLOAD, GZ, NO, 0.3000000000, -1.22107, 0.0000000000, 0.0, 0.0, 0.0, 0.0
00036 293, BEAM, *DOWLOAD, GZ, NO, 0.3000000000, -1.32201, 0.0000000000, 0.0, 0.0, 0.0, 0.0
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00070 519, BEAM, *DOWLOAD, GZ, NO, 0.5000000000, -1.81871, 0.0000000000, 0.0, 0.0, 0.0, 0.0

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內容參考：<https://www.midasbridge.com/en/blog/tipstutorials/how-to-add-horizontal-moving-load>