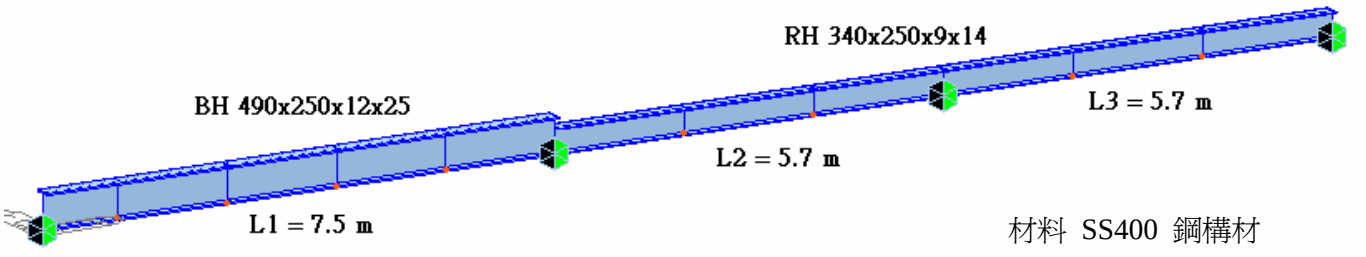
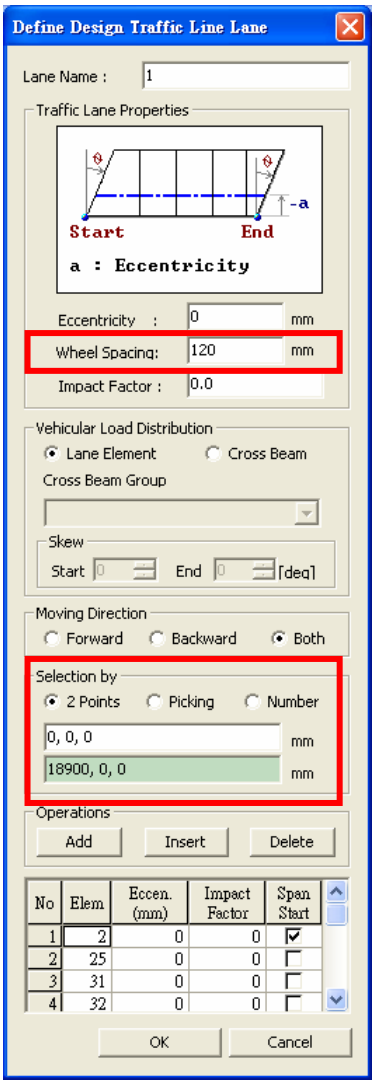
範例：天車梁移動載重(Moving Load)模擬

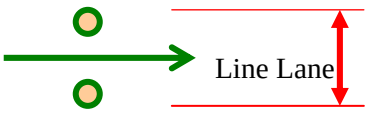


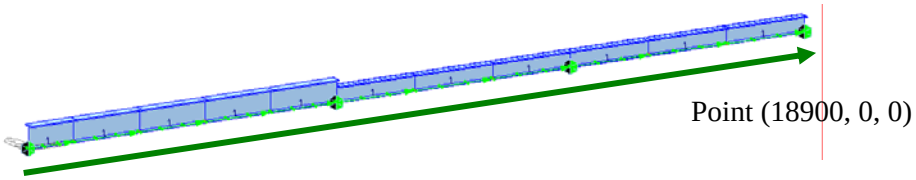
◆ 移動載重 (Moving Load) 建立步驟說明：

(1) 利用 *Load>Moving Load Analysis Data>Moving Load Code* 設定參照規範 (Taiwan)

(2) 利用 *Load>Moving Load Analysis Data>Traffic Line Lanes* 建立移動載重路線

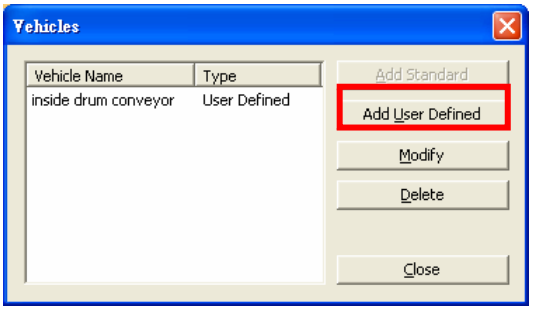


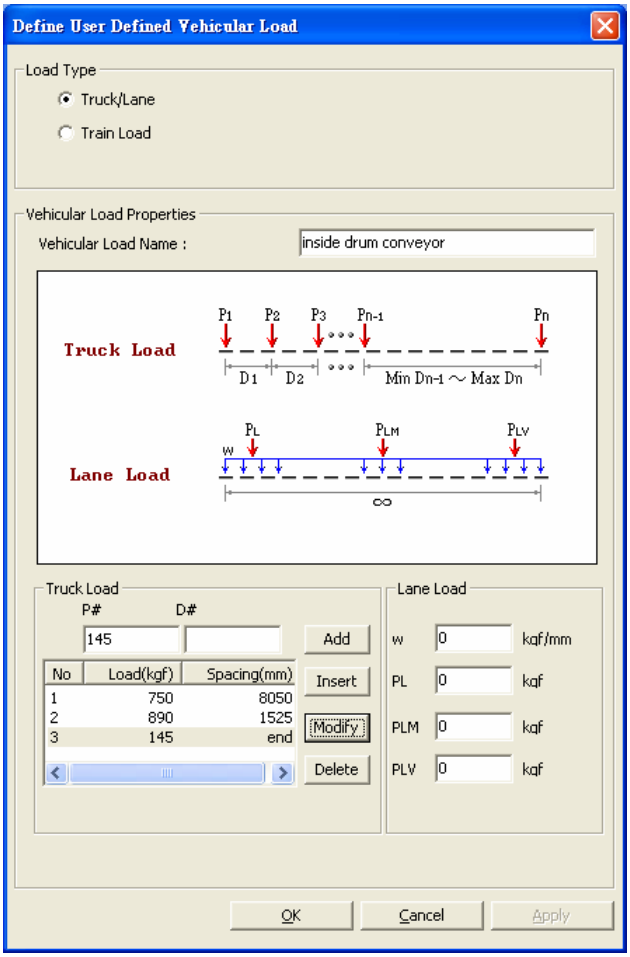


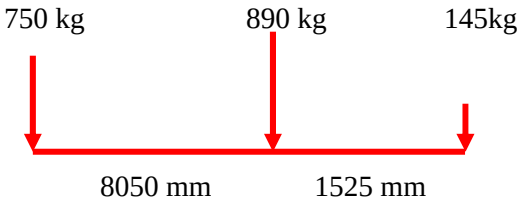


Point (0, 0, 0)

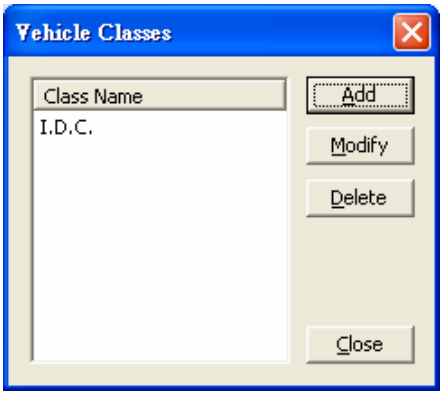
(3) 利用 *Load>Moving Load Analysis Data>Vehicles* 定義載重資料

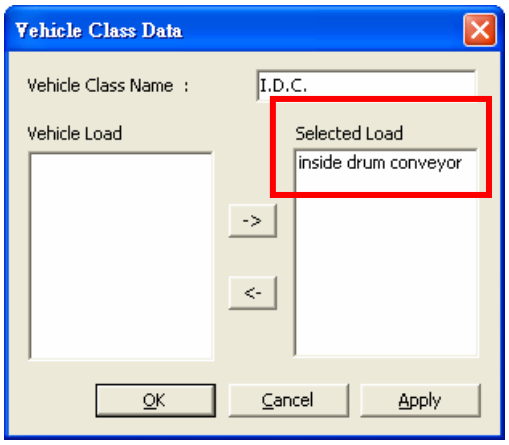




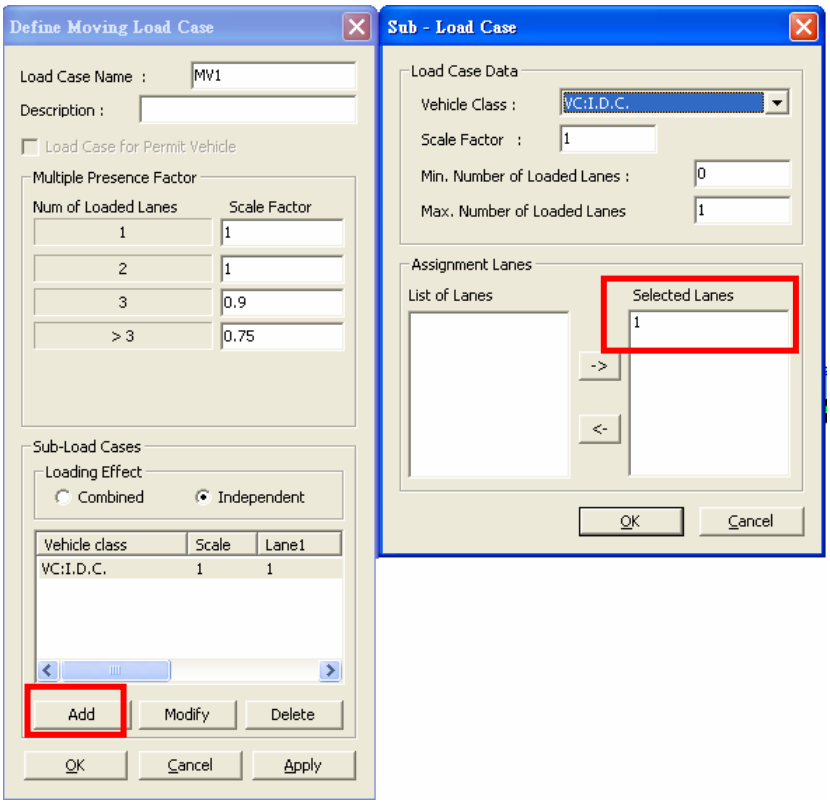


(4) 利用 *Load>Moving Load Analysis Data>Vehicles Classes* 定義載重組

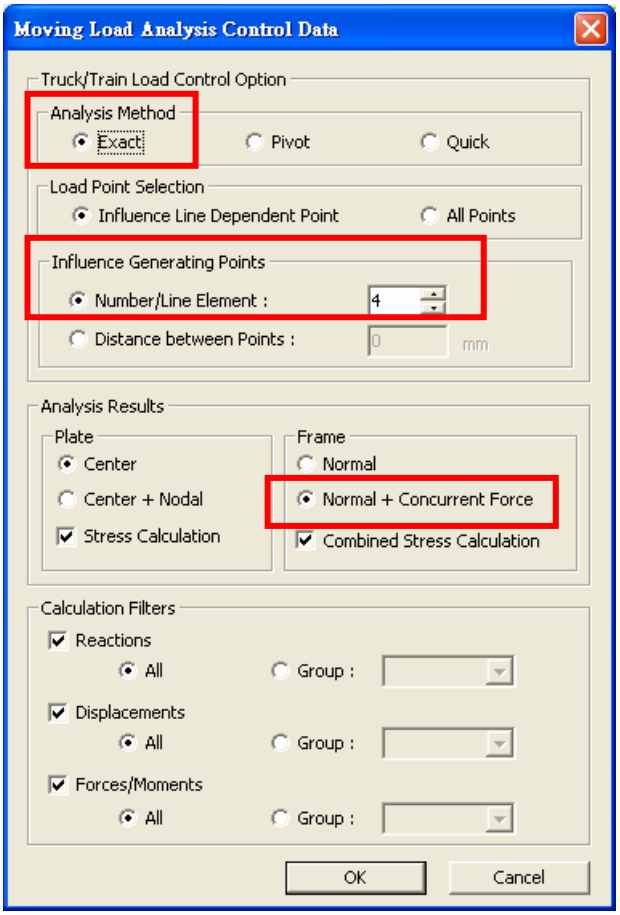




(5) 利用 *Load>Moving Load Analysis Data>Moving Load Case* 定義移動載重狀況

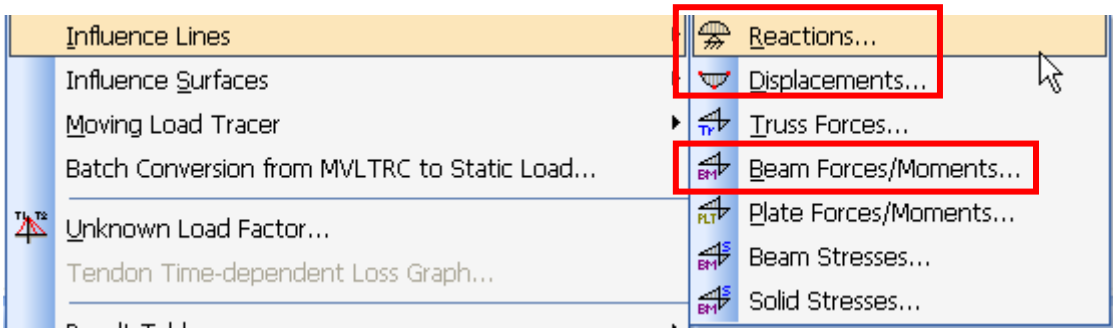


(6) 利用 *Analysis>Moving Load Analysis Control* 定義移動載重分析控制項

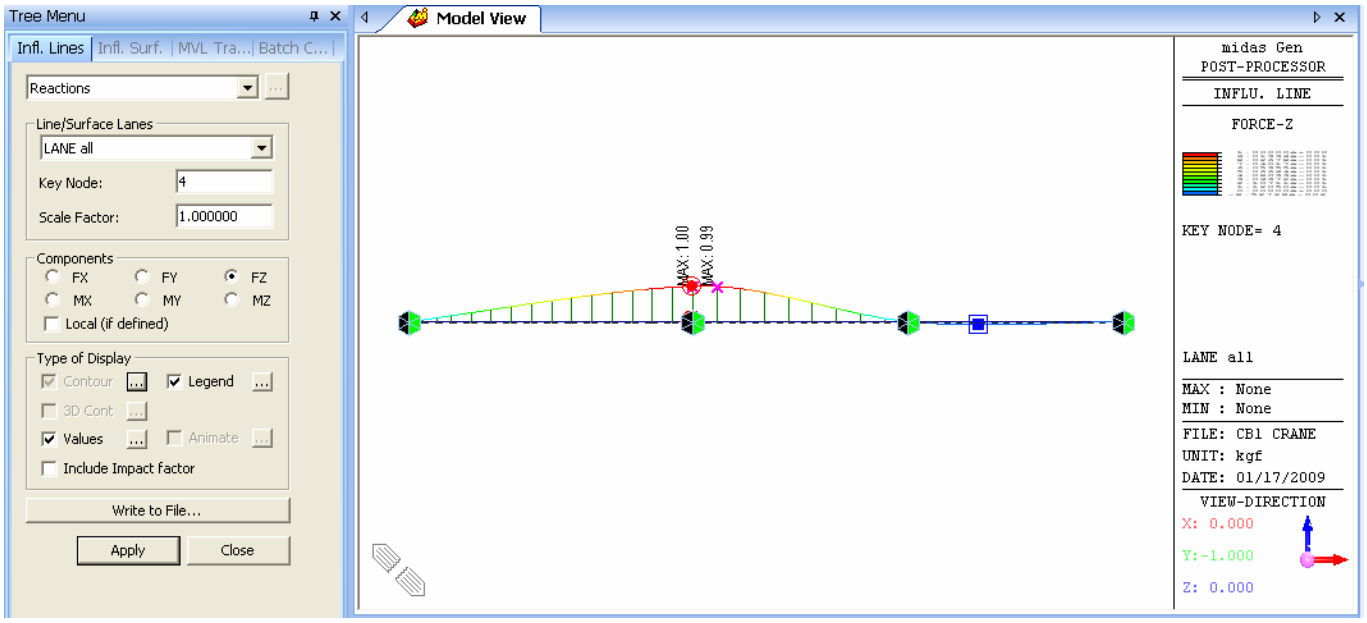


(7) *Perform Analysis* 執行分析

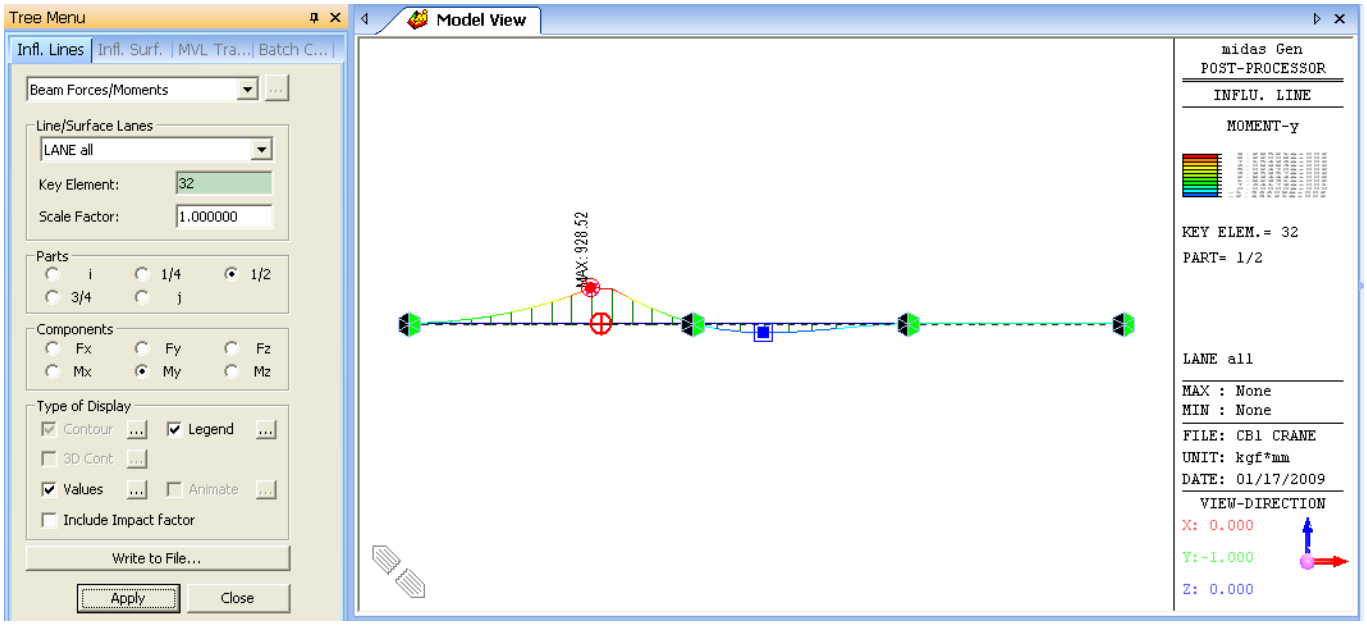
(8) 利用 *Results>Influence Lines>Reactions… / Displacements… / Beam Forces/Moments…* 等功能查看 反力/變形/內力 等影響線結果



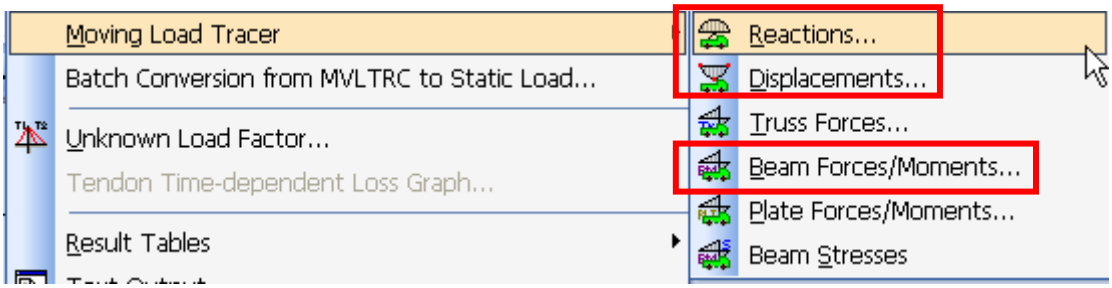
A. 反力影響線 – Key Node: 4 , Component: FZ



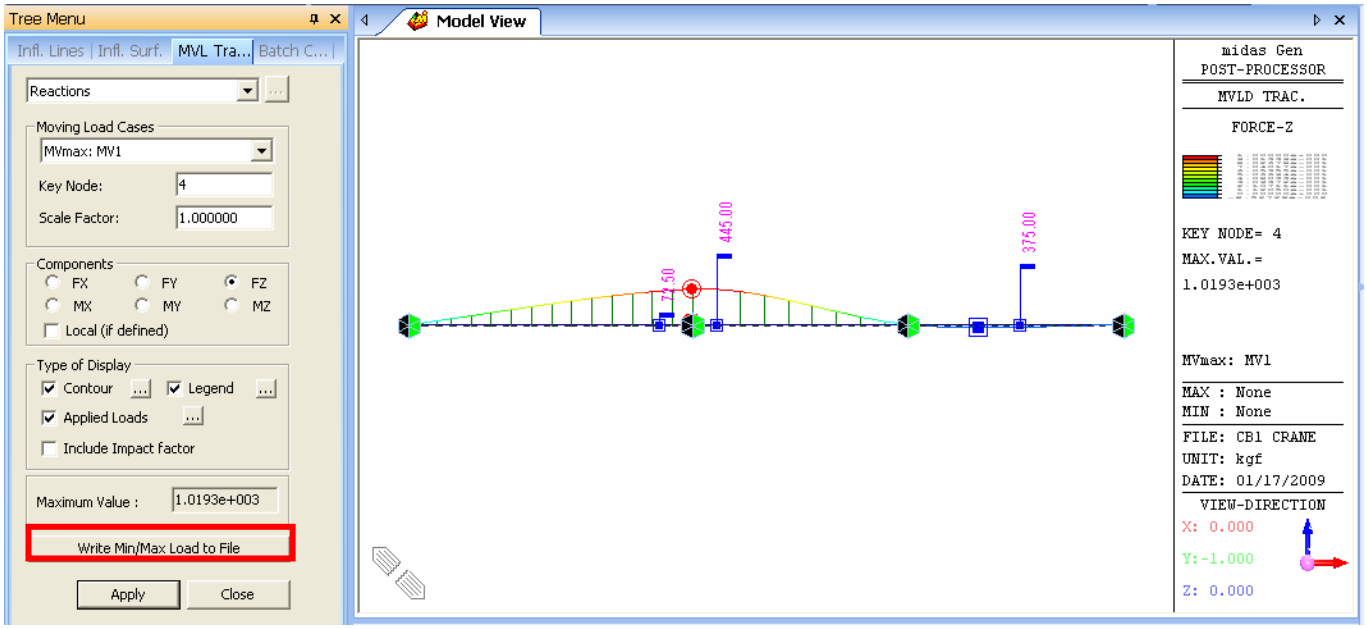
B. 梁內力影響線 – Key Element: 32 , Parts: 1/2 , Component: My



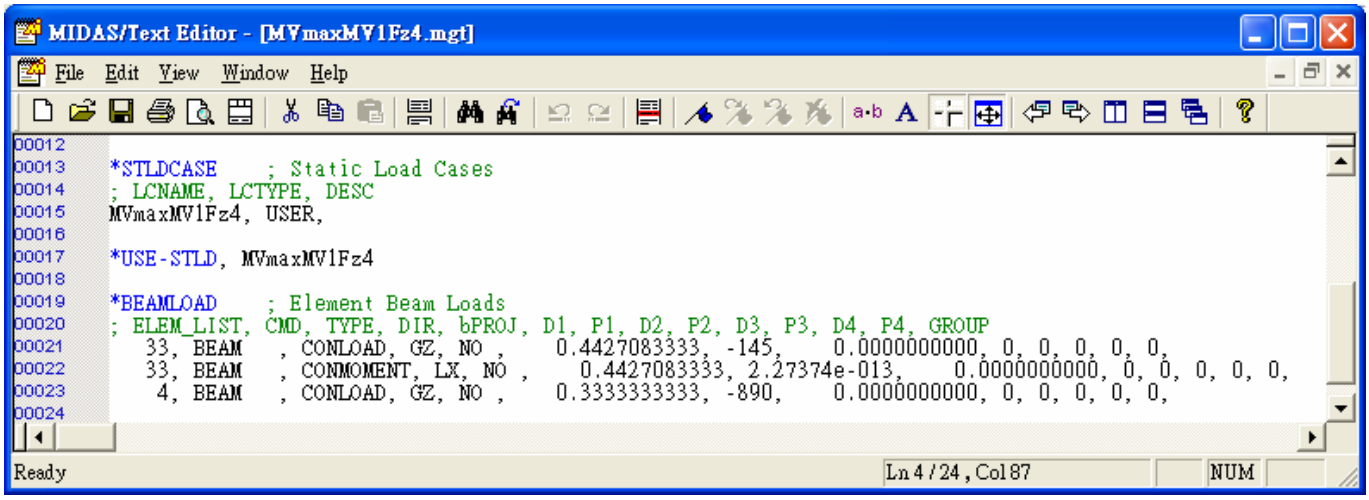
(9) 利用 *Results>Moving Load Tracer>Reactions… / Displacements… / Beam Forces/Moments…* 等功能查看造成最大/最小 反力/變形/內力 等結果下，移動載重位置。



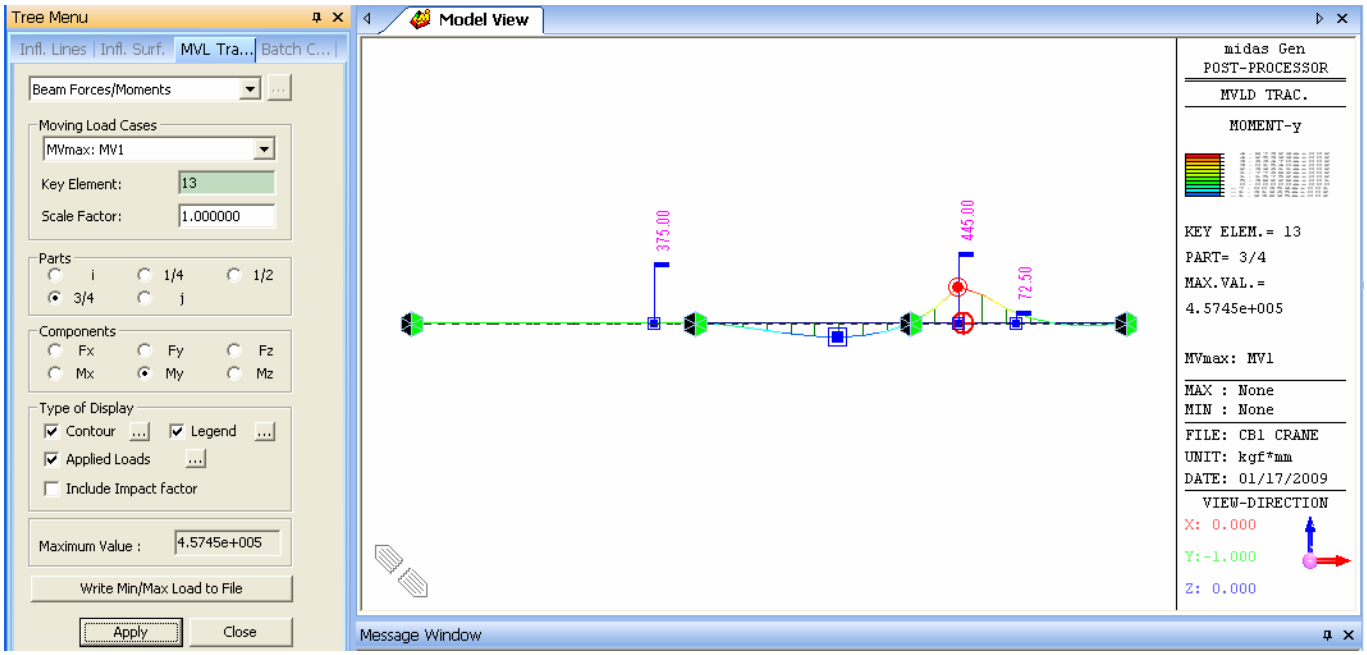
A. 反力 – Key Node: 4 , Component: FZ



找到造成節點 4 最大反力的移動載重加載位置後，可用 Write Min/Max Load to File 功能將該筆資訊寫到 mgt 語法格式。



B. 梁內力 – Key Element: 13 , Parts: 3/4 , Component: My



同樣用 Write Min/Max Load to File 功能將該筆資訊寫到 mgt 語法格式。

[批次輸出功能]

User 可利用 *Results>Batch Conversion for MVLTRC to Static Load…* 功能批次輸出造成最大/最小 反力/變形/內力 等結果下，移動載重位置到文字檔。