

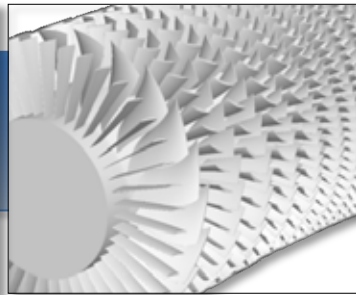
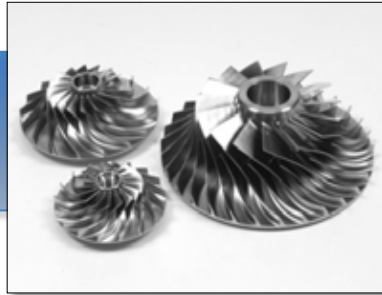
midas NFX



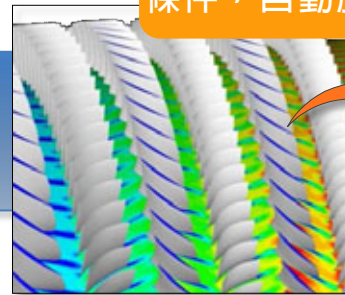
midas NFX-CFD 分析功能

產品設計導向分析軟體

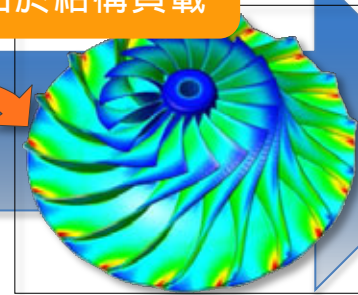
midas **NFX-CFD**



CAD分析模型



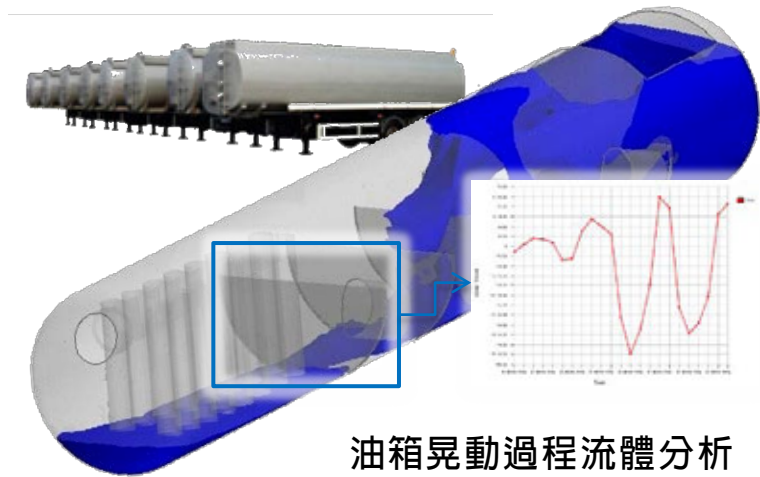
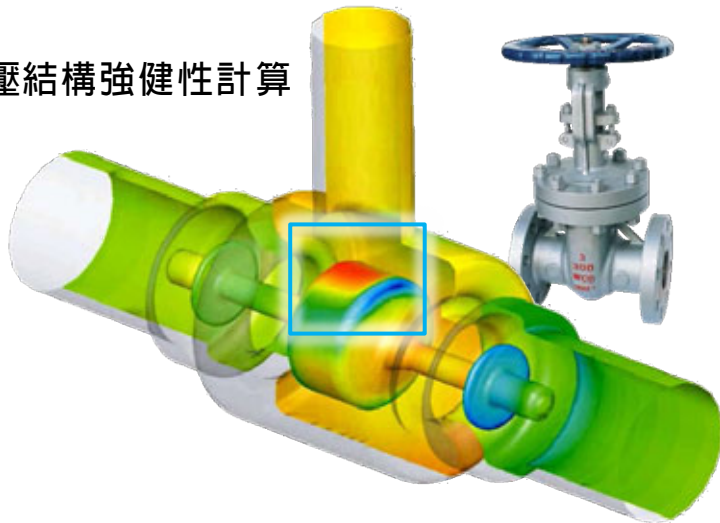
表面壓力分佈(流體分析)



應力分佈(結構分析)

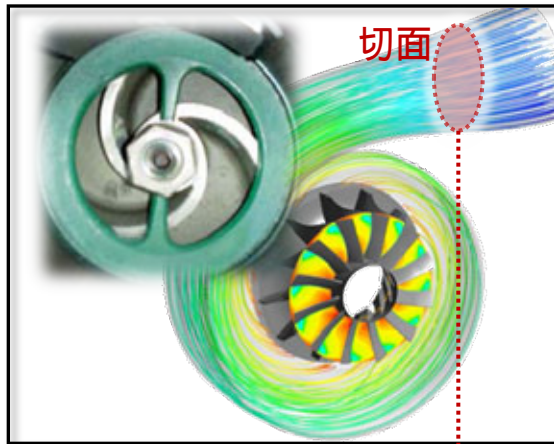
流體分析獲得之壓力分佈條件，自動施加於結構負載

液壓結構強健性計算

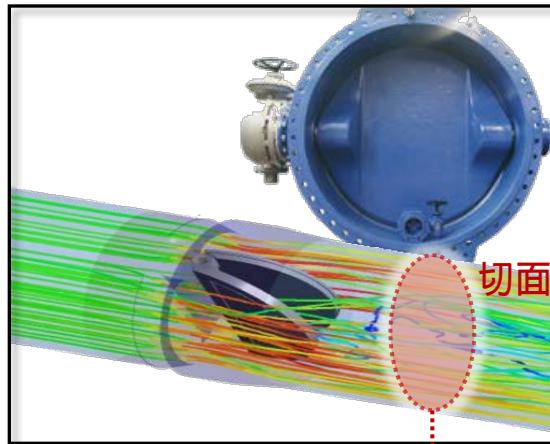


油箱晃動過程流體分析

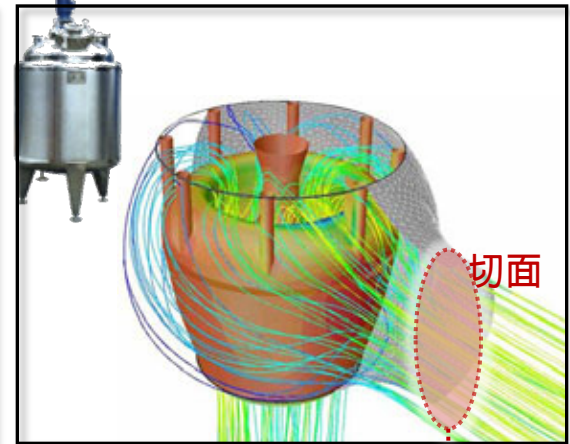
midas **NFX-CFD**



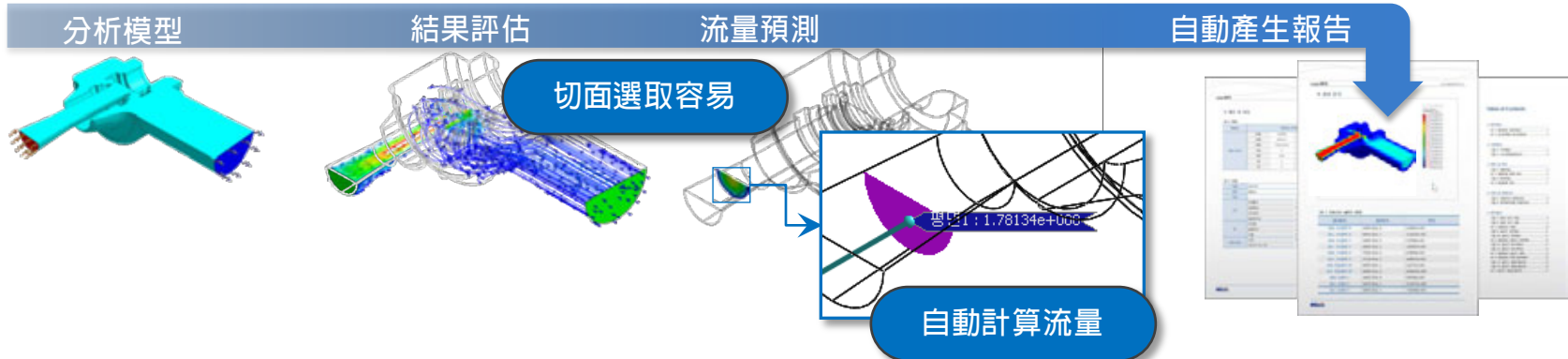
鼓風機



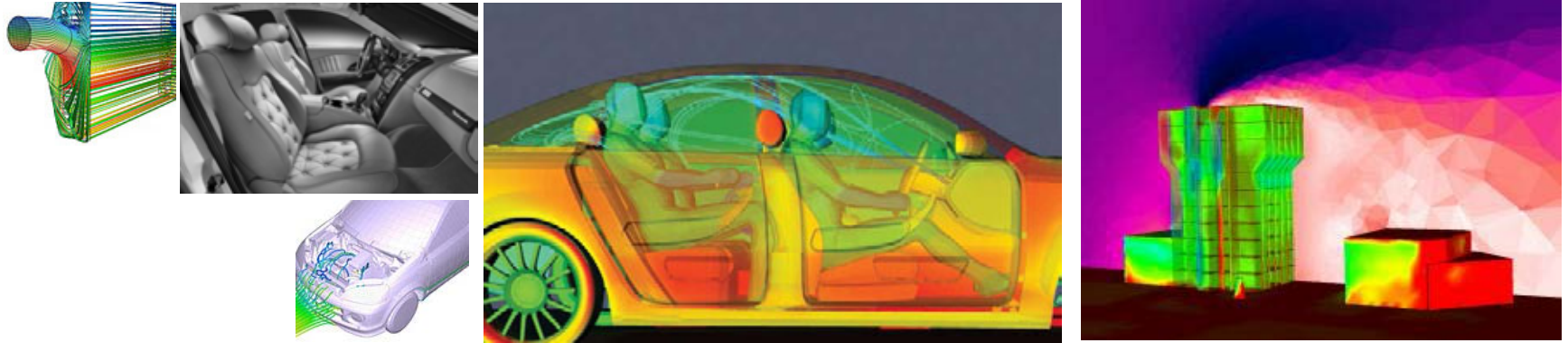
蝶閥



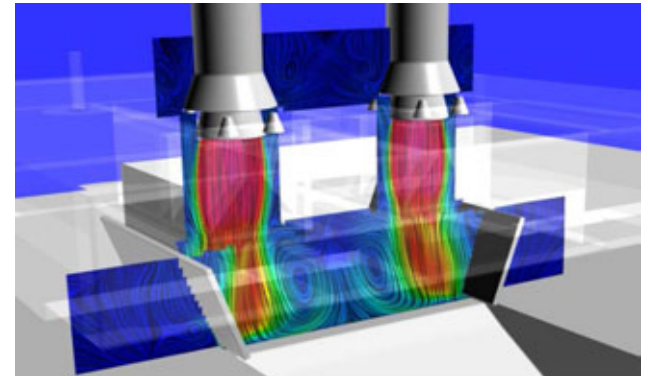
反應器



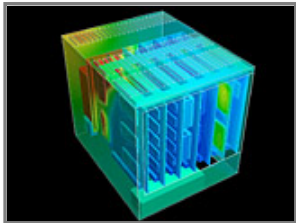
midas **NFX-CFD**



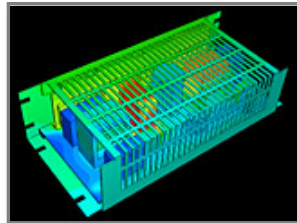
- 共軛熱傳模擬，提供14種湍流模型 ($k-\epsilon$, $k-\omega$, $k-\omega$ -SST, LES, Etc.)
- 自由對流計算過程考慮密度變化
- 流體-固體不相連接網格，採用CFD接觸
- 穩態和瞬態分析功能



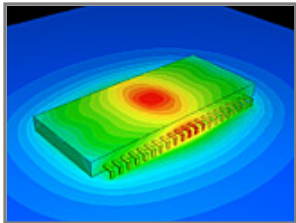
midas NFX-CFD



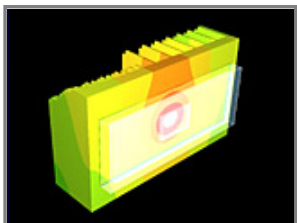
電腦機箱



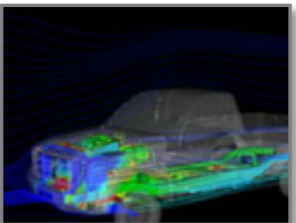
電源供應器



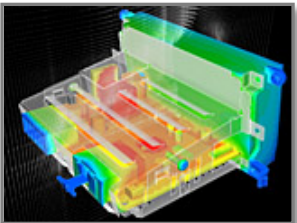
半導體



散熱器

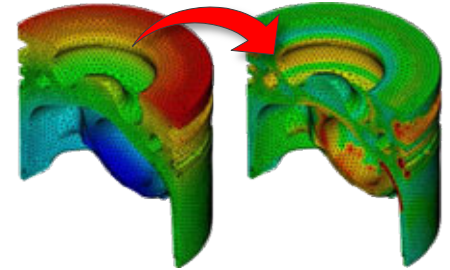


引擎蓋溫度

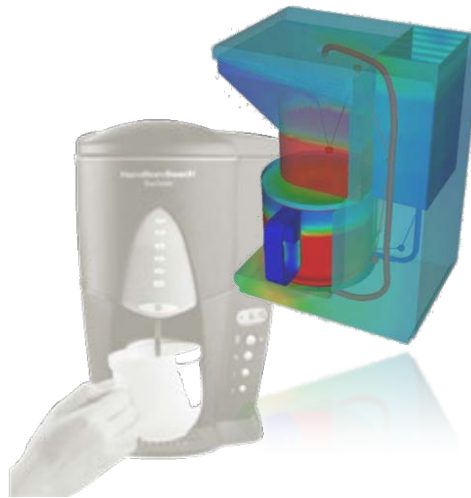


汽車音響

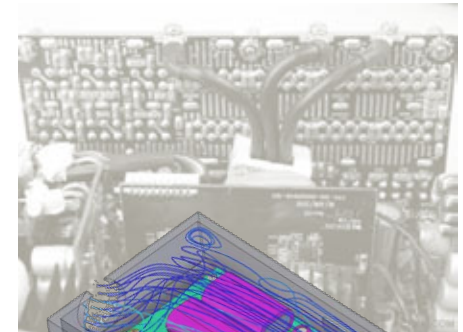
midas NFX-CFD進行流體力學分析計算後，能夠直接將計算結果直接匯入midas NFX，使用者可以在單一操作環境很容易的進行流體-結構耦合分析。



熱變形/應力計算

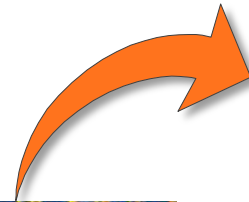
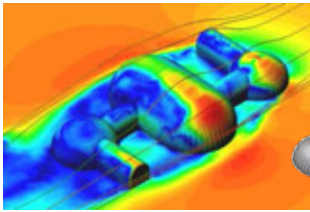


咖啡壺熱流分析

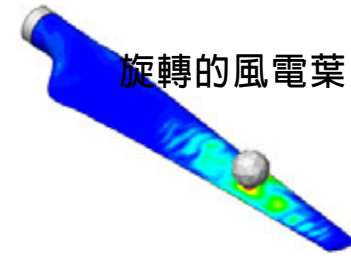


電子裝配共軛熱傳模擬

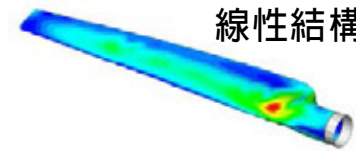
midas **NFX-CFD**



CFD分析自動輸出葉片表面上的力做為結構荷載

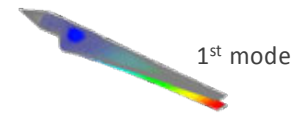


旋轉的風電葉片的耐撞性評估

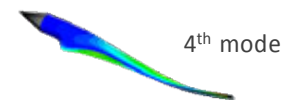


線性結構分析

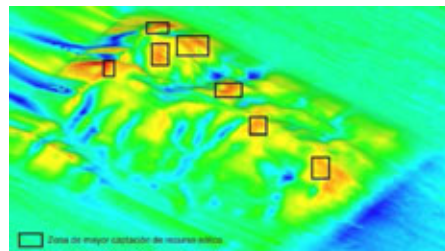
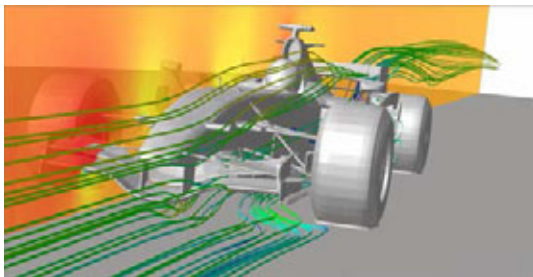
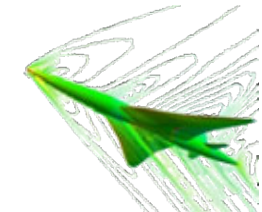
模態分析



1st mode



4th mode

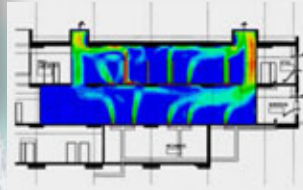
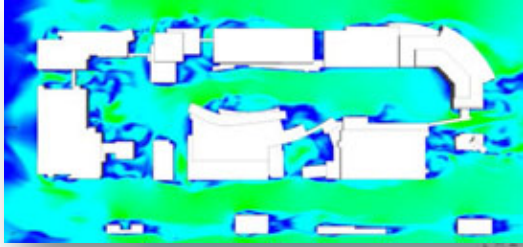


midas **NFX**
Total Solution for True Analysis-driven Design

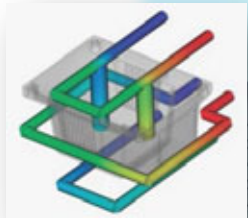
建築物風場流動特性和流速計算

midas **NFX-CFD**

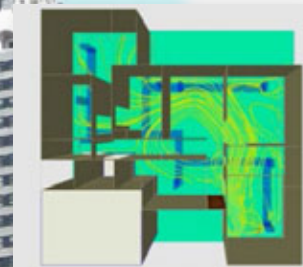
建築物周圍風場數值模擬



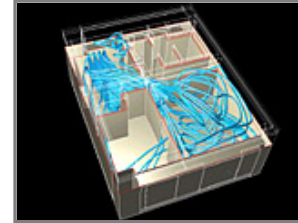
建築物通風分析



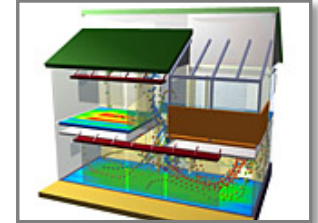
管道系統通風設計



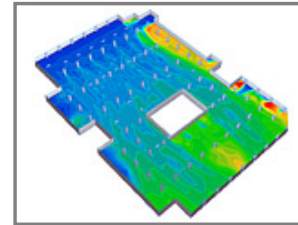
室內空氣流動



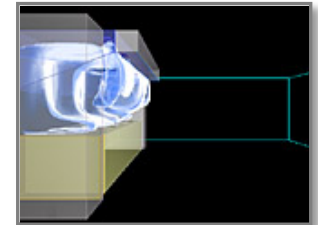
室內通風



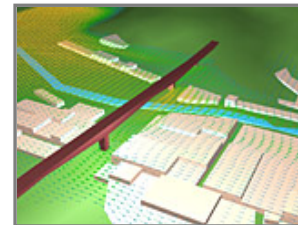
室內通風



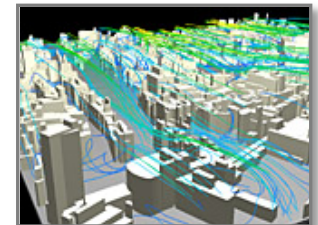
停車系統通風



廚房水槽通風

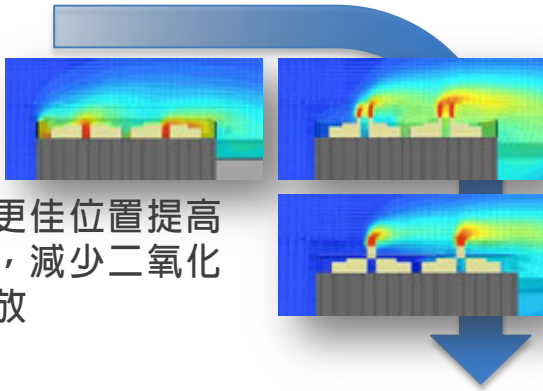


橋樑結構受風壓作用探討



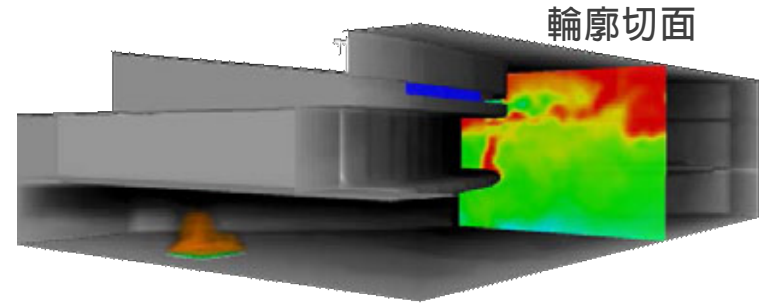
建築物通風設計

midas **NFX-CFD**



煙囪排列更佳位置提高
能源效率，減少二氧化
碳氣體排放

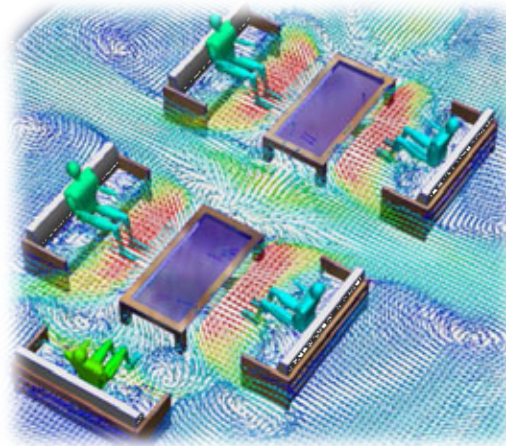
燃燒材料擴散趨勢評估



輪廓切面

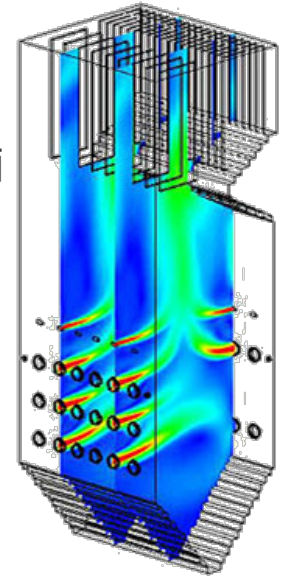


城市空氣污染的擴散評估



密閉空間空氣擴散性評估

輪廓切面

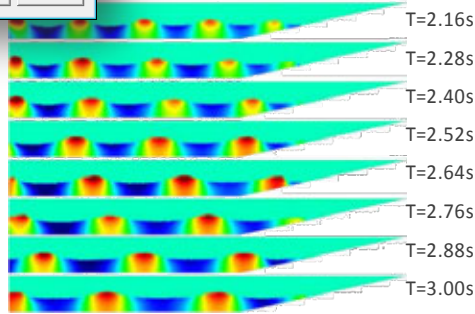
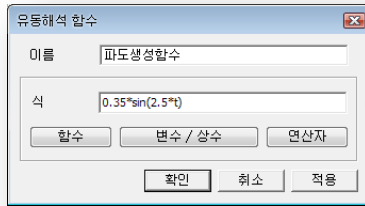


吸入設施評
估

波浪形成力對於建築結構安全性評估

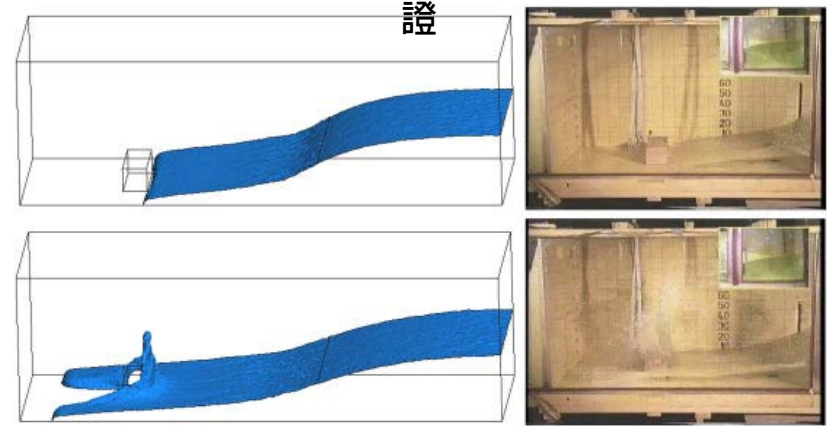
midas NFX-CFD

波的形成可以透過函數輸入

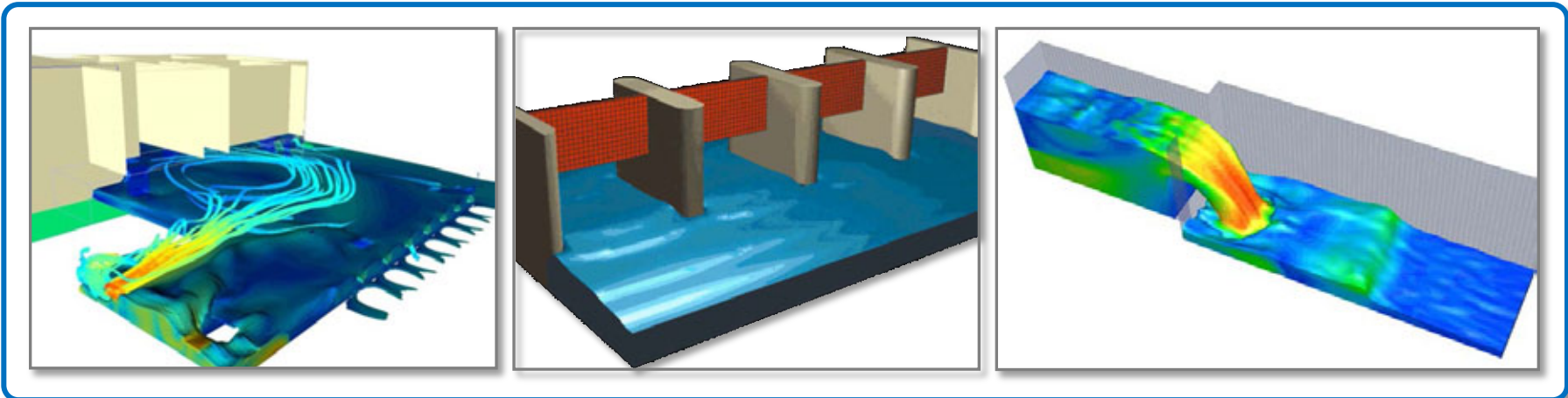


波浪形成和等壓區域呈週期性變化

midas NFX-CFD自由面計算功能經過實驗驗證

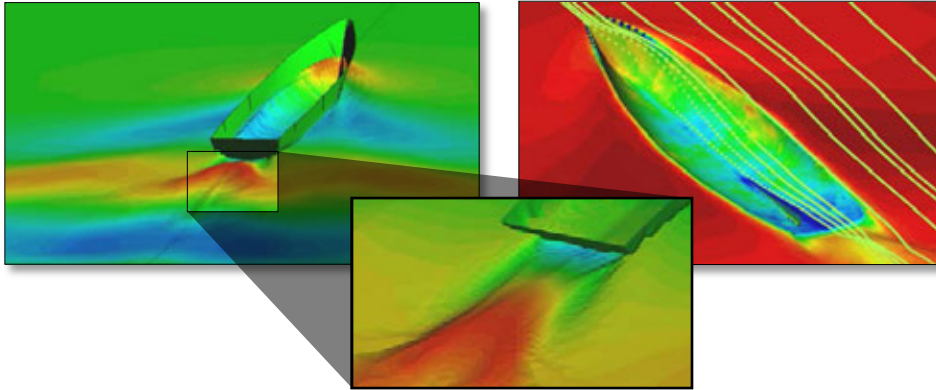


ODDLS: A new unstructured mesh finite element method for the analysis of free surface flow problems, Julio Garcia-Espinosa, *Int. J. Numer. Meth. Engng* (2008)

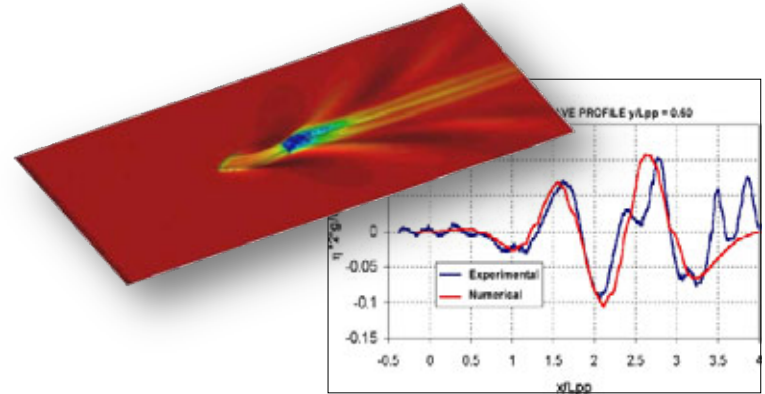


波浪形成力對於結構安全性評估

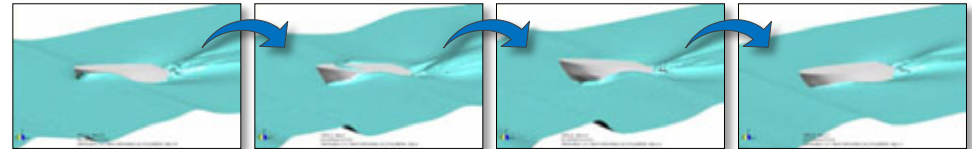
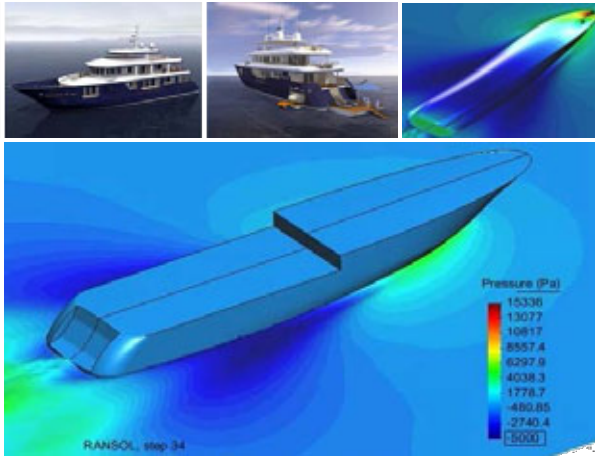
midas **NFX-CFD**



船體受波浪形成力之影響



波浪形成力分析與實驗資料比對



船體受波浪形成力作用運動預測



輸入船體外形和重量，自動計算自由表面運動過程及表面壓力。