

圖 32、未安裝混合元件之螺桿幾何示意圖 圖 33、安裝方形插門混合元件之螺桿幾何示意圖

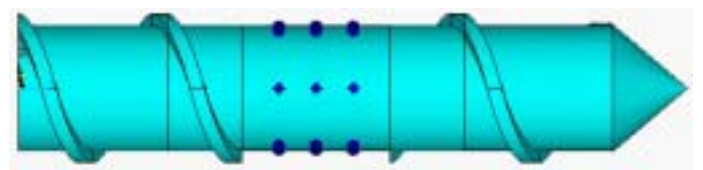
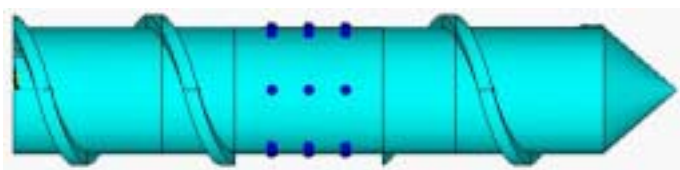
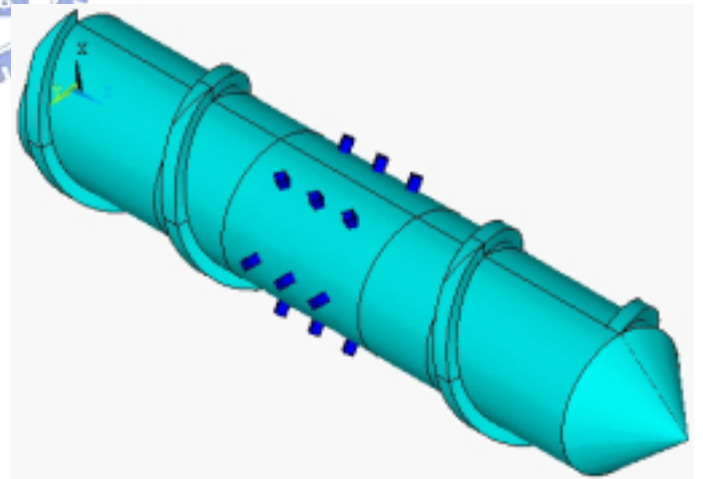
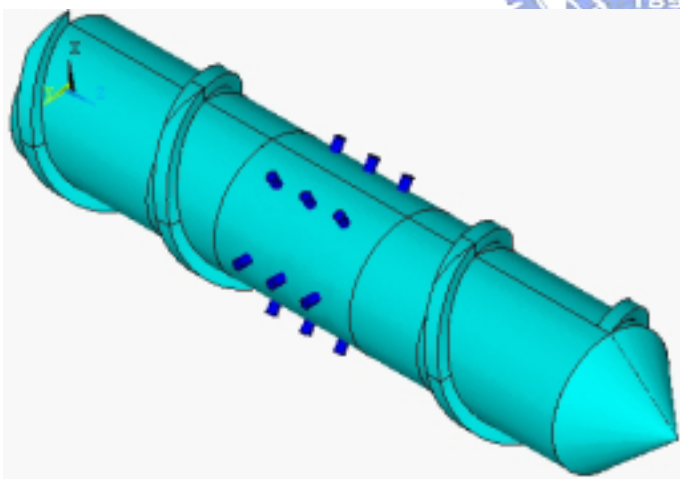


圖 34、安裝圓形插門混合元件之螺桿幾何示意圖 圖 35、安裝菱形插門混合元件之螺桿幾何示意圖

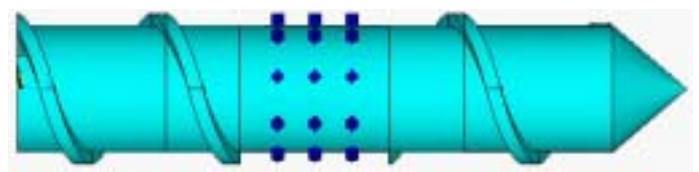
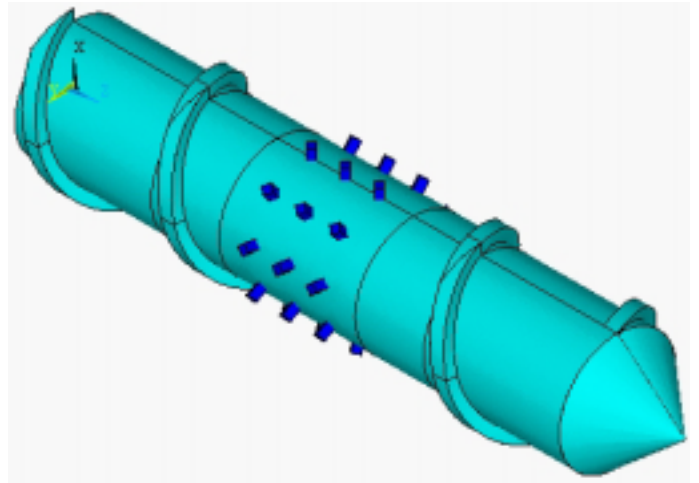
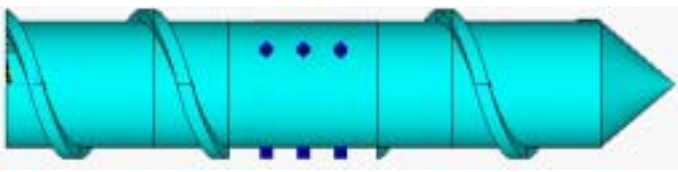
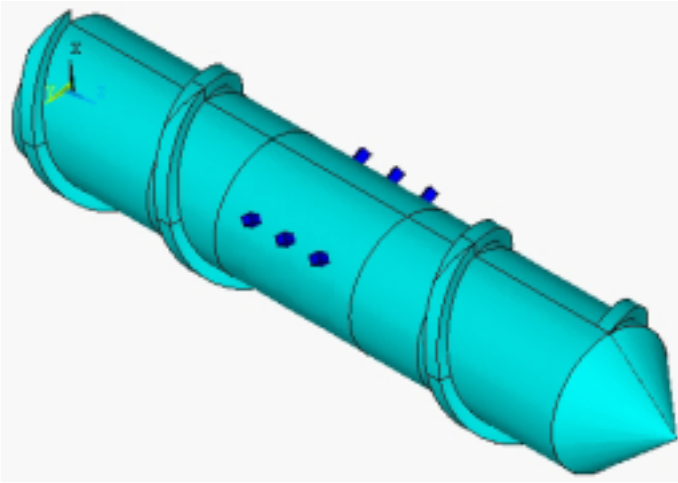


圖 36、橫截面安裝三支菱形插門混合
元件之螺桿幾何示意圖

圖 37、橫截面安裝九支菱形插門混合
元件之螺桿幾何示意圖

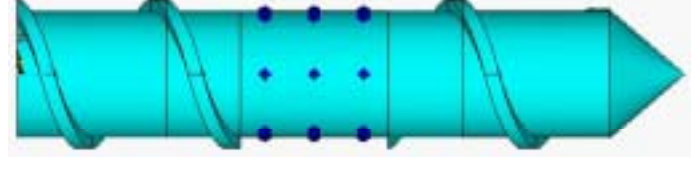
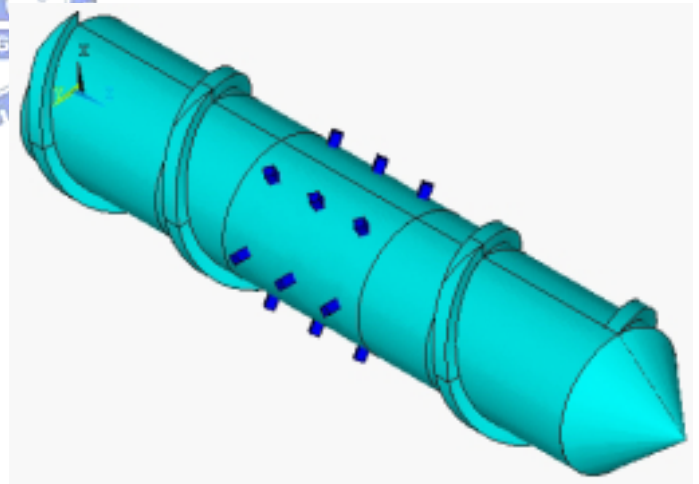
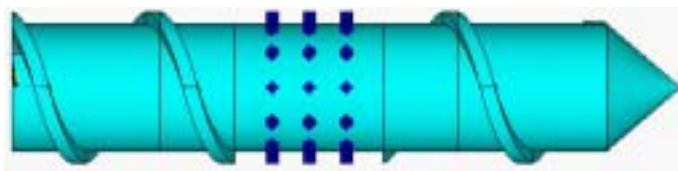
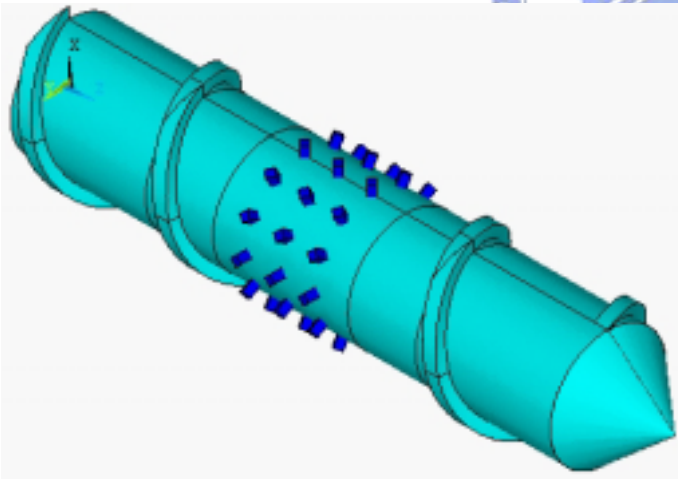


圖 38、橫截面安裝十二支菱形插門混
合元件之螺桿幾何示意圖

圖 39、安裝軸間距為 $1/3 D$ 的菱形插
門混合元件之螺桿幾何示意圖

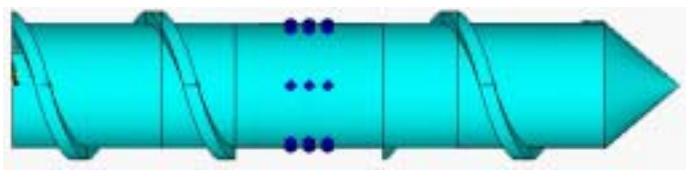
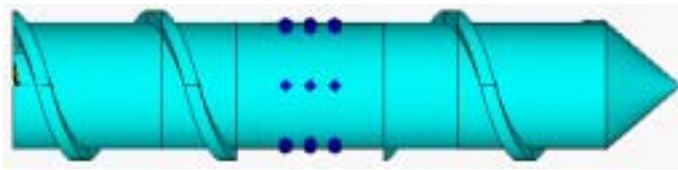
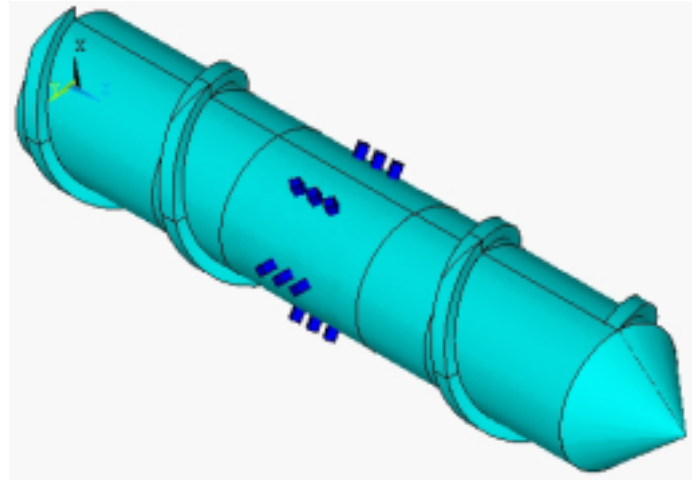
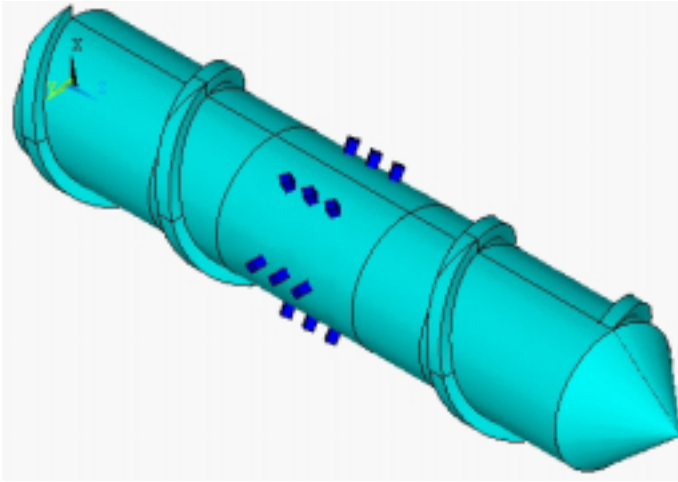


圖 40、安裝軸間距為 $1/6 D$ 的菱形插門混合元件之螺桿幾何示意圖

圖 41、安裝軸間距為 $1/8 D$ 的菱形插門混合元件之螺桿幾何示意圖

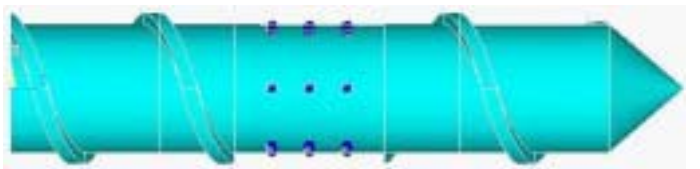
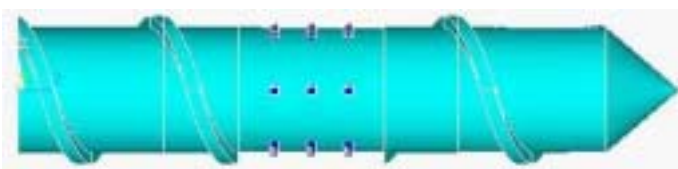
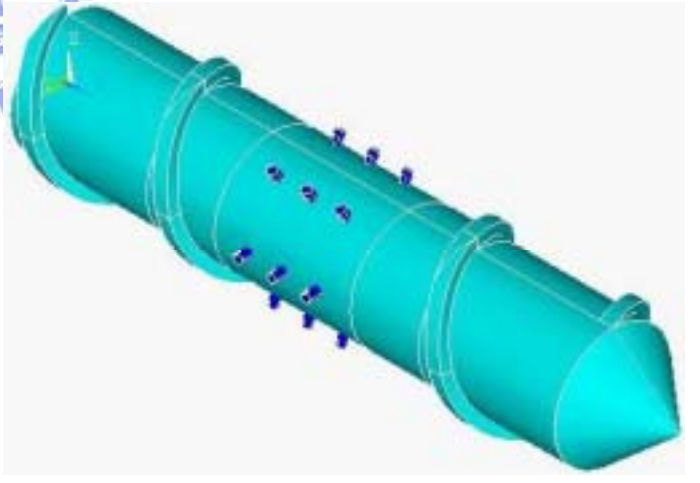
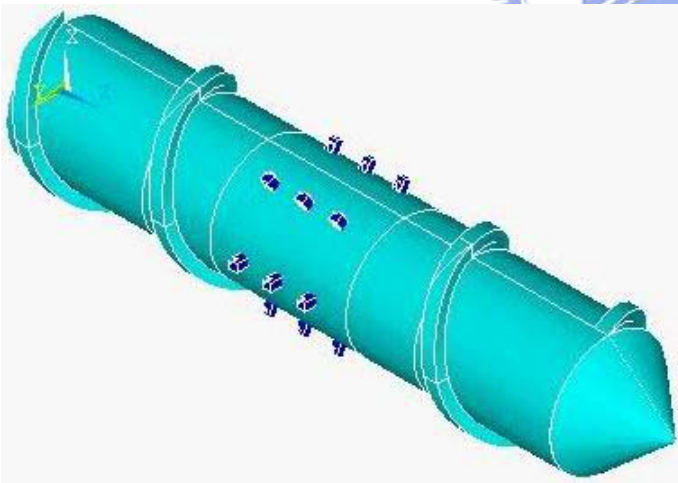


圖 42、安裝方形貫孔插門混合元件之螺桿幾何示意圖

圖 43、安裝圓形貫孔插門混合元件之螺桿幾何示意圖

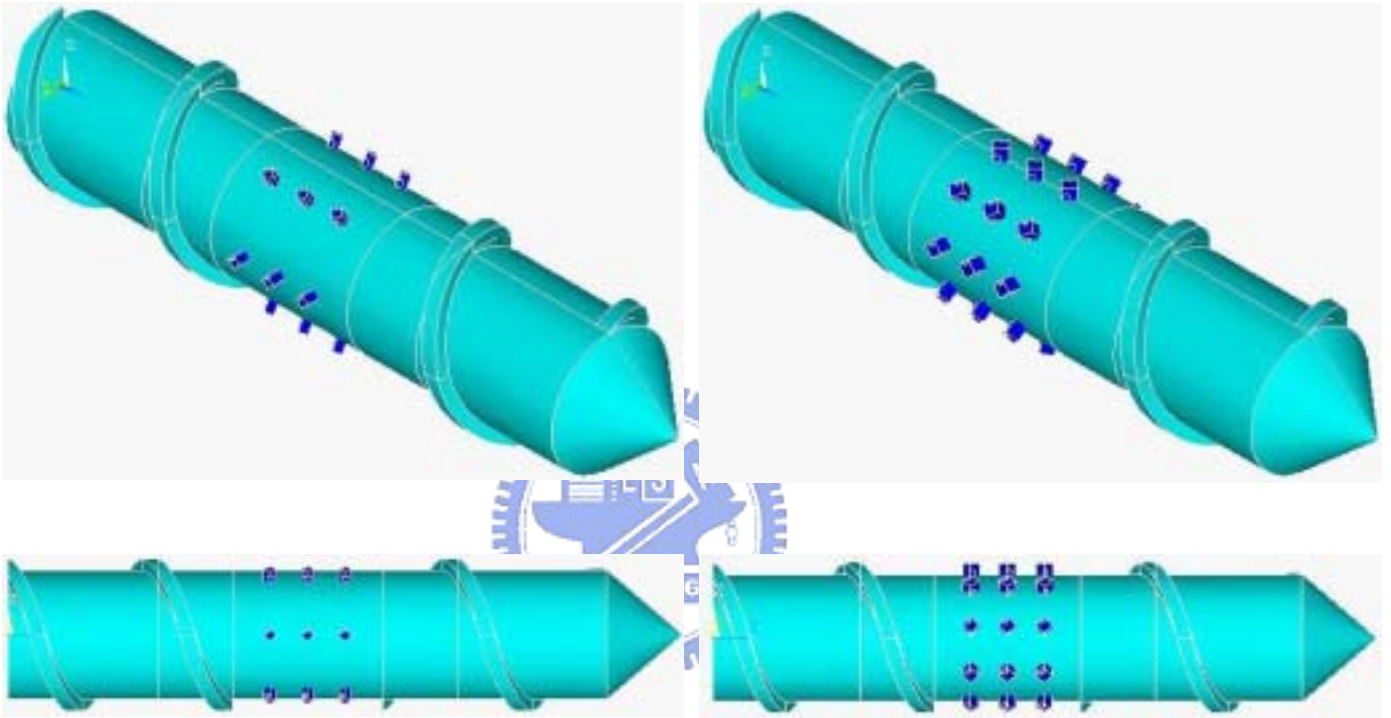
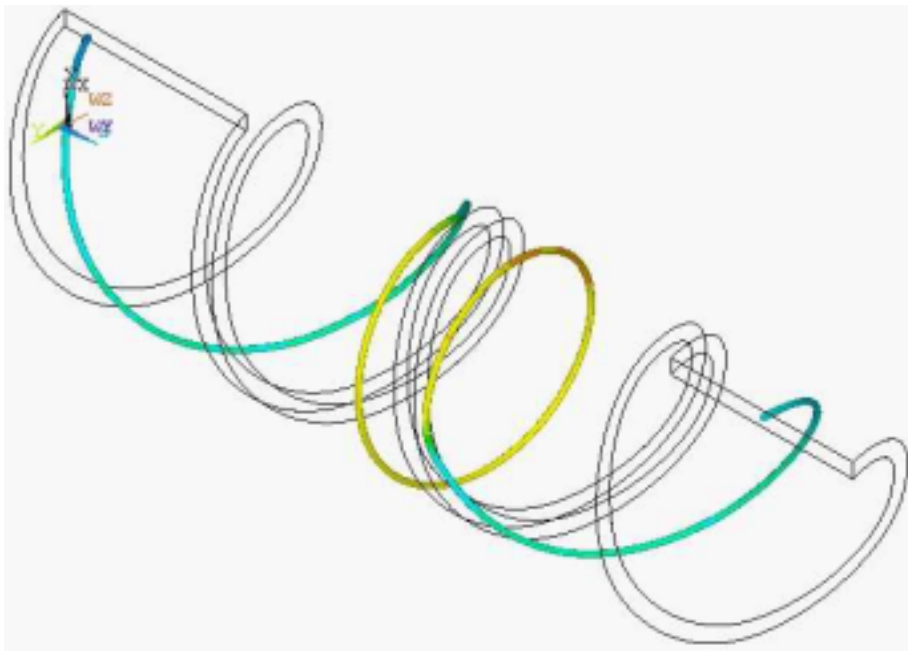
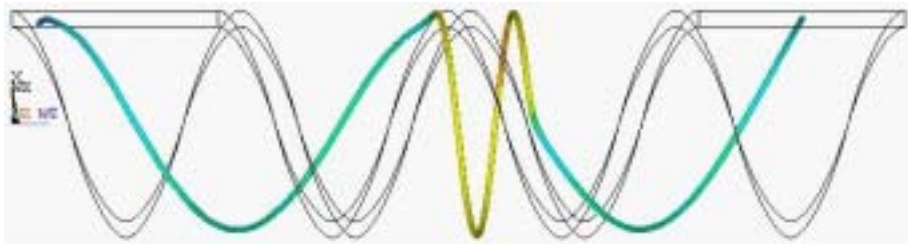


圖 44、安裝菱形貫孔插門混合元件之螺桿幾何示意圖

圖 45、安裝最佳化插門型混合元件之螺桿幾何示意圖



(a)



(b)



圖 46、未安裝混合元件之溝道流線圖
(a)俯視圖(b)側視圖

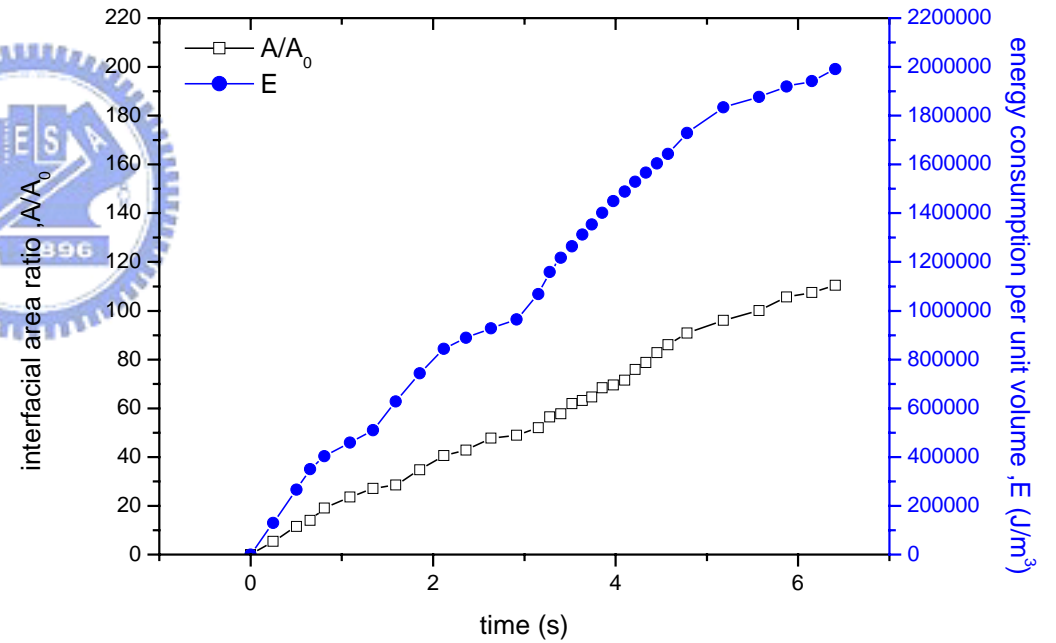
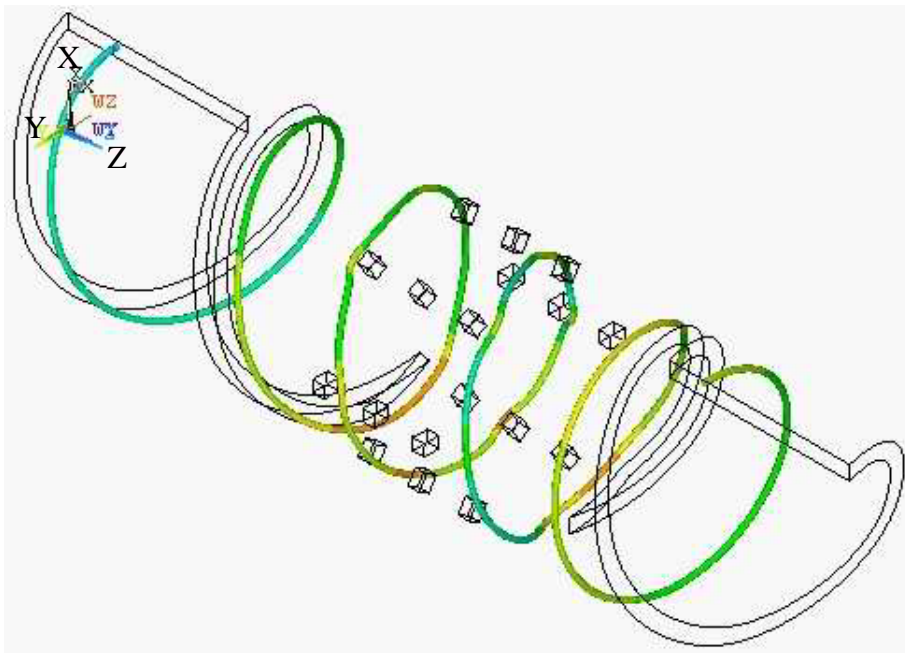
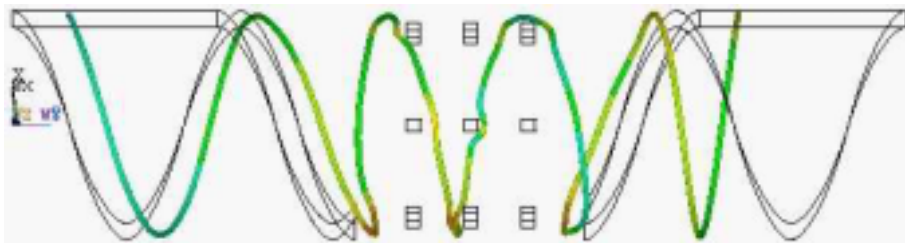


圖 47、未安裝混合元件之流線沿流動時間界面面積比增加和能量消耗圖



(a)



(b)



圖 48、安裝方形插門之溝道流線圖
(a)俯視圖(b)側視圖

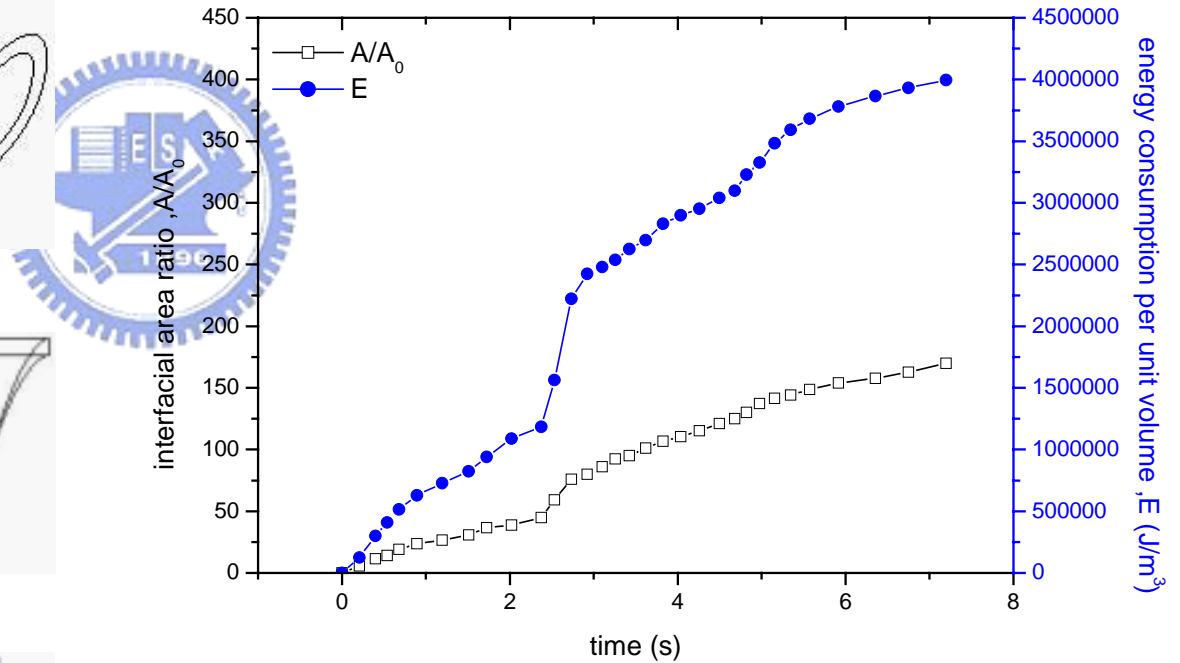


圖 49、安裝方形插門之流線沿流動時間
界面面積比增加和能量消耗圖

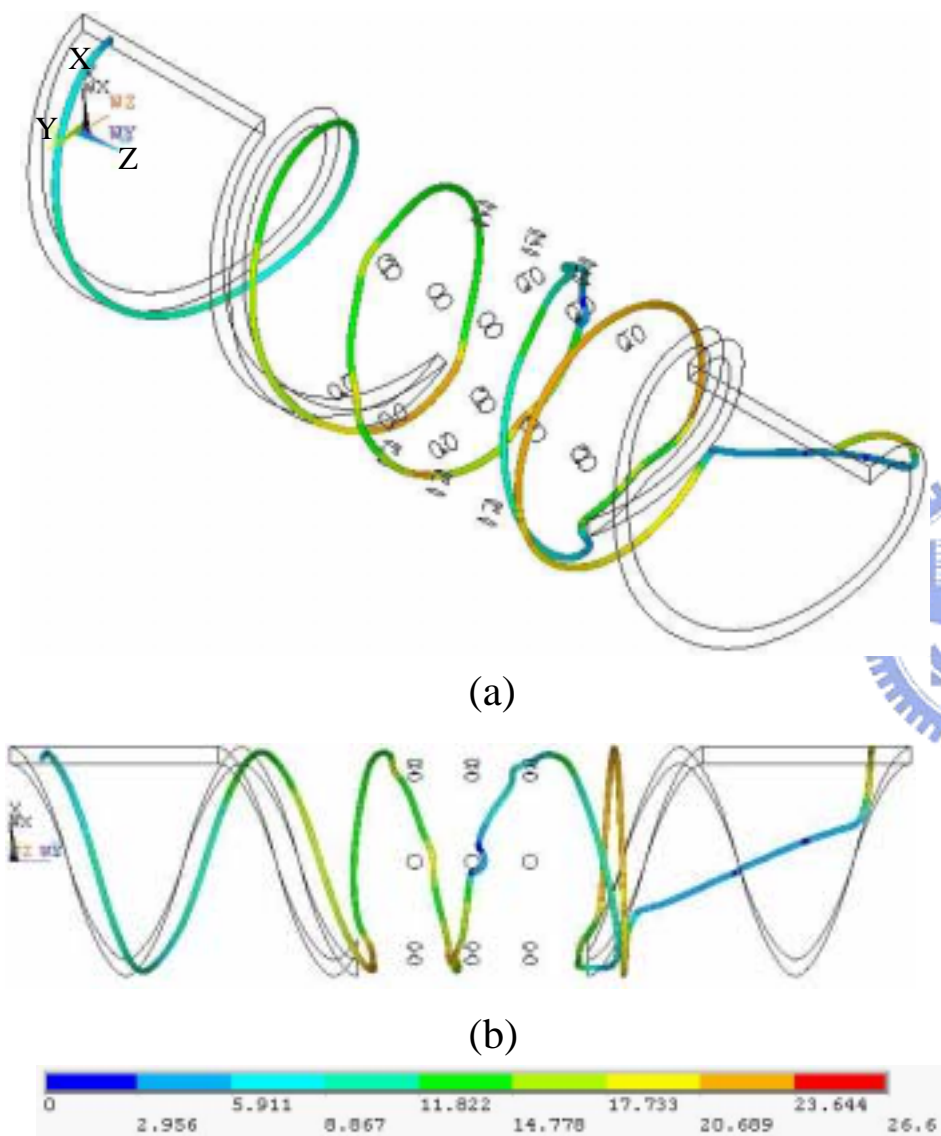


圖 50、安裝圓形插門之溝道流線圖
(a)俯視圖(b)側視圖

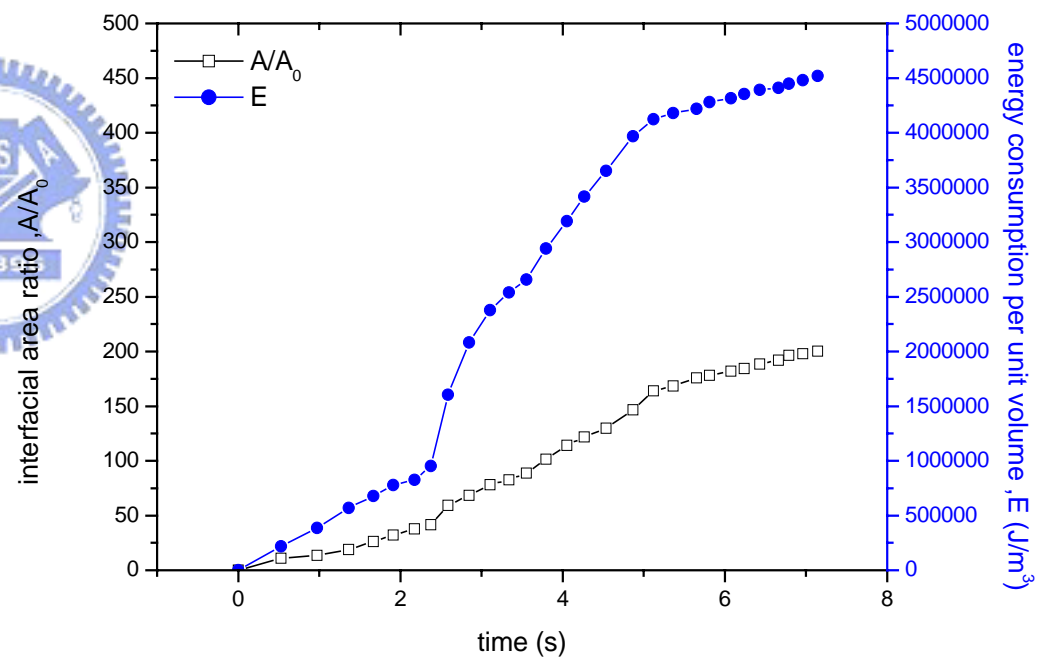


圖 51、安裝圓形插門之流線沿流動時間
界面面積比增加和能量消耗圖

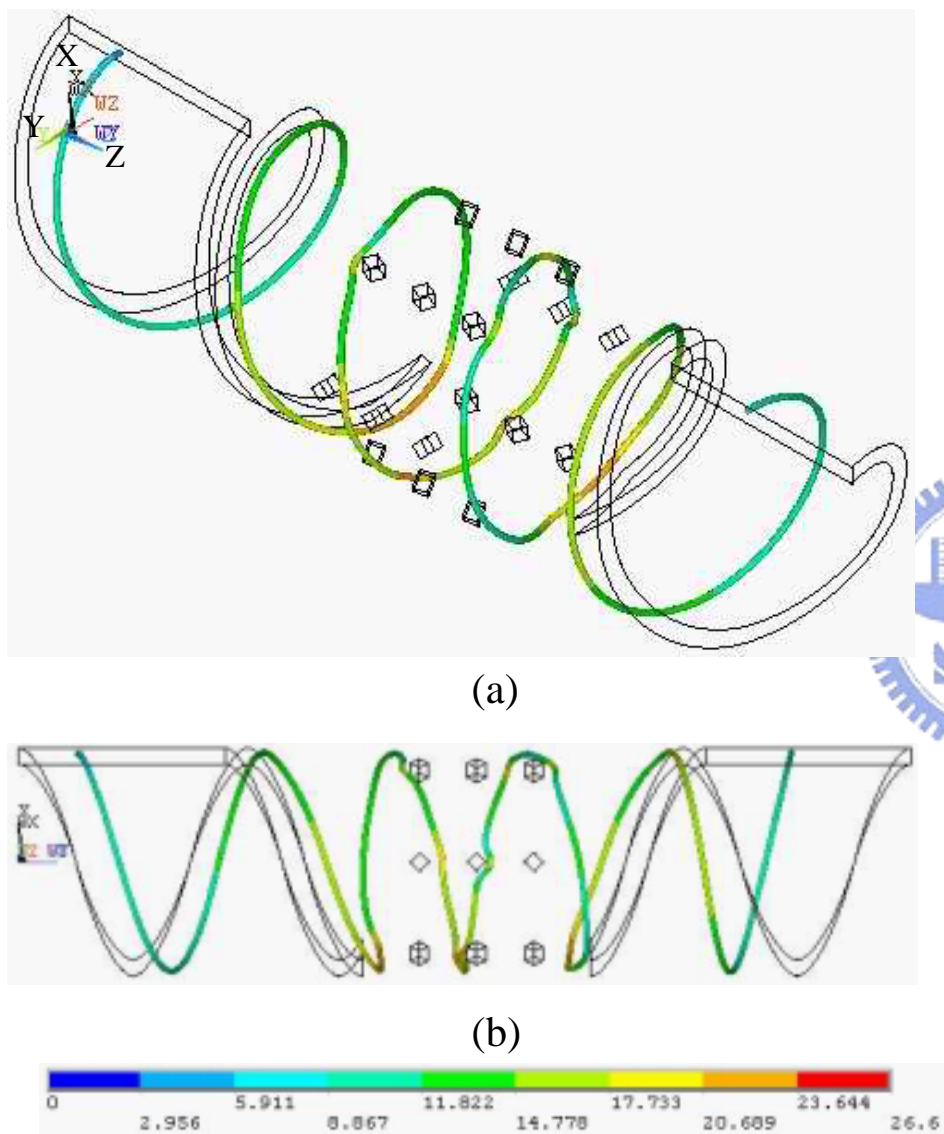


圖 52、安裝菱形插門之溝道流線圖
(a)俯視圖(b)側視圖

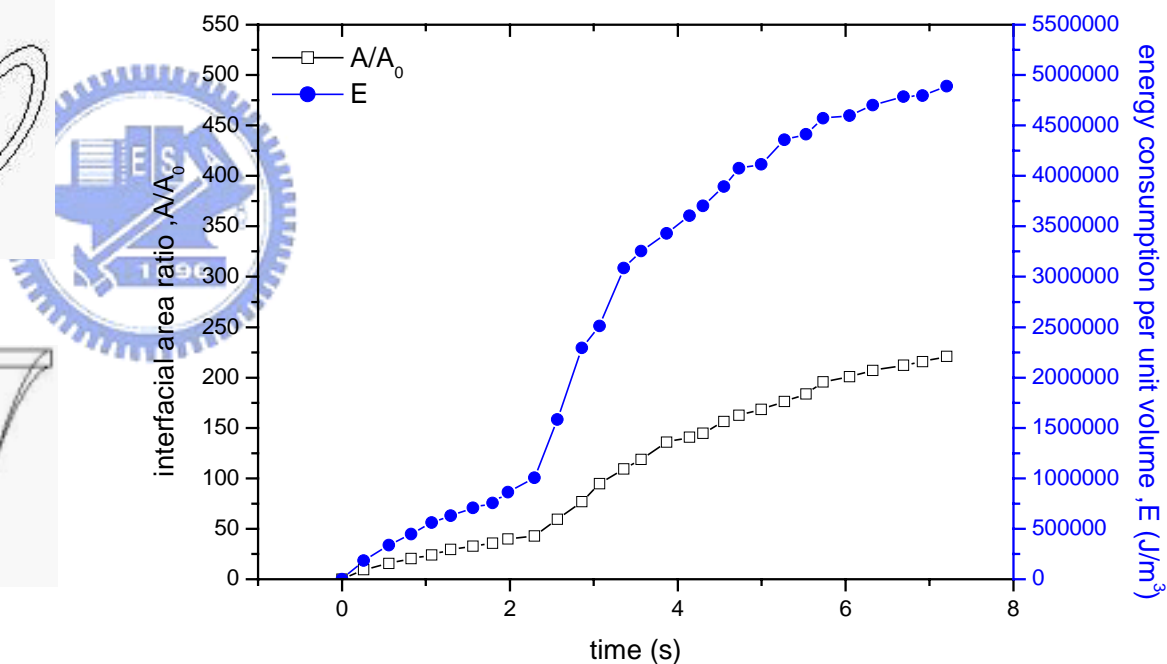
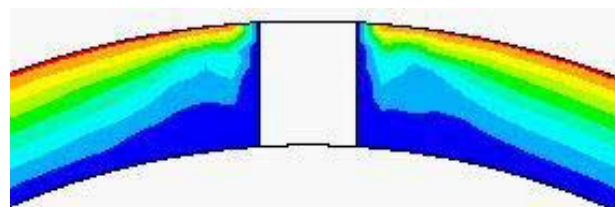
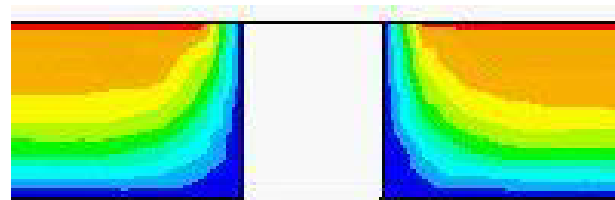


圖 53、安裝菱形插門之流線沿流動時間
界面面積比增加和能量消耗圖

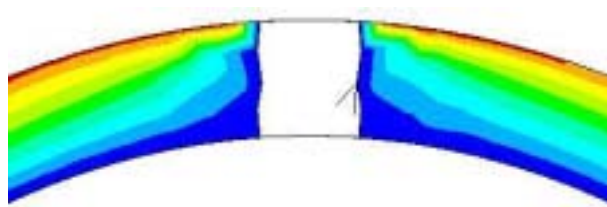


(a)

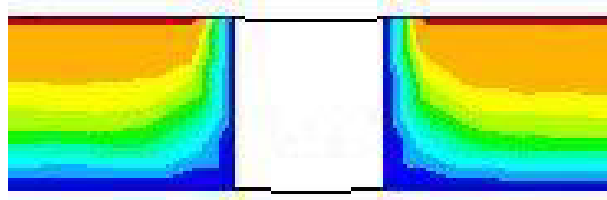


(b)

圖 54、方形插門周圍流場切面圖
(a)橫切面 (b)縱切面

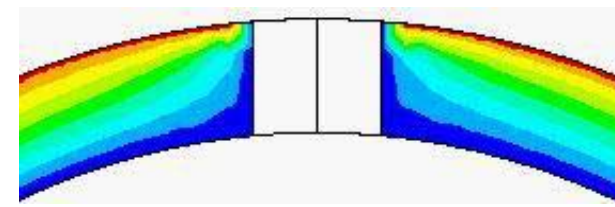


(a)

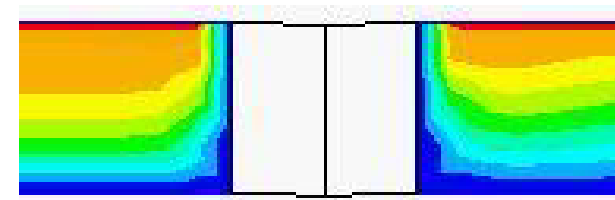


(b)

圖 55、圓形插門周圍流場切面圖
(a)橫切面 (b)縱切面

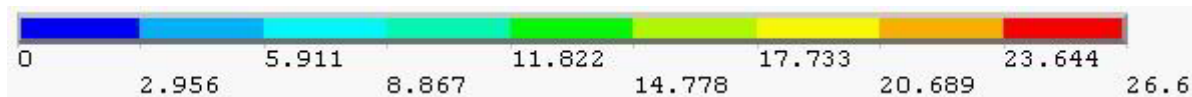


(a)



(b)

圖 56、菱形插門周圍流場切面圖
(a)橫切面 (b)縱切面



註：橫切面：與螺桿徑向平行的面；縱切面：與螺桿軸向平行的面

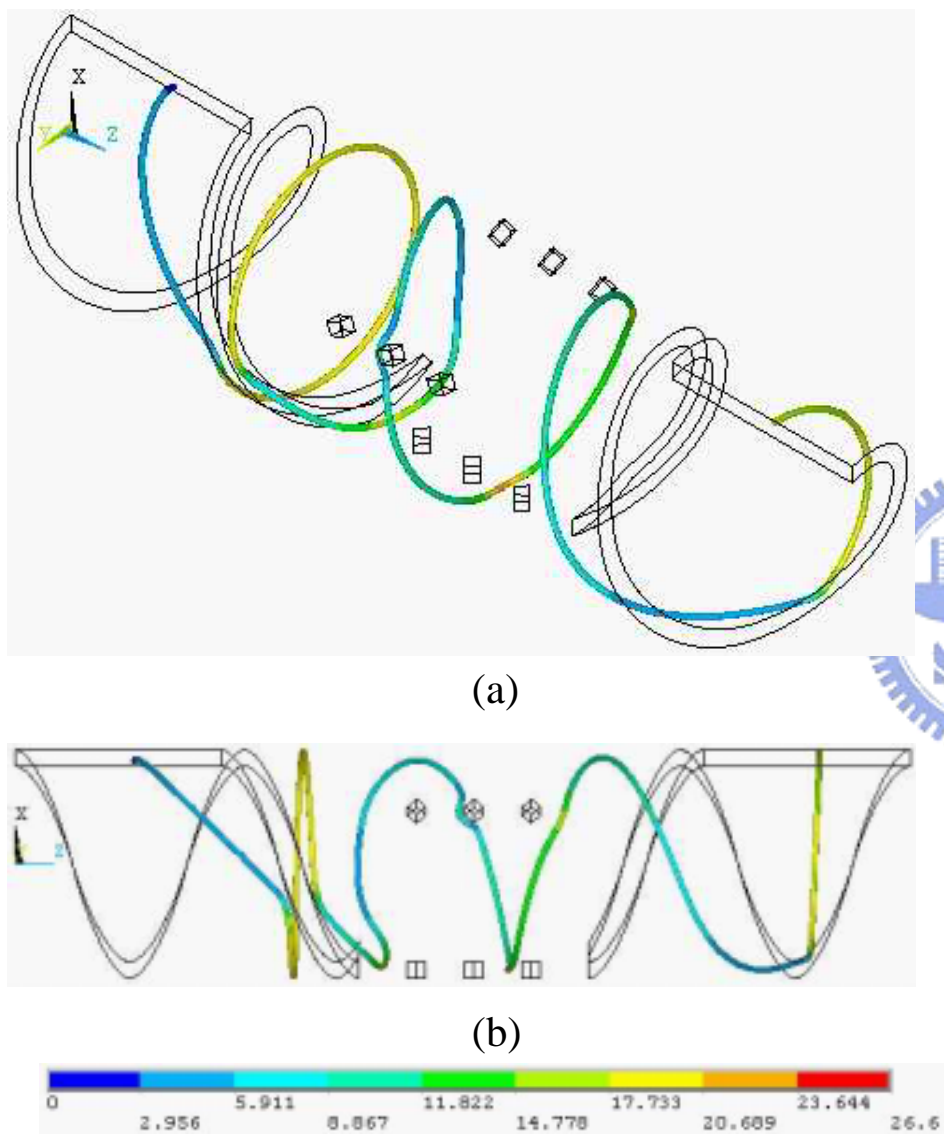


圖 57、橫截面三支菱形插門之溝道流線圖
(a)俯視圖(b)側視圖

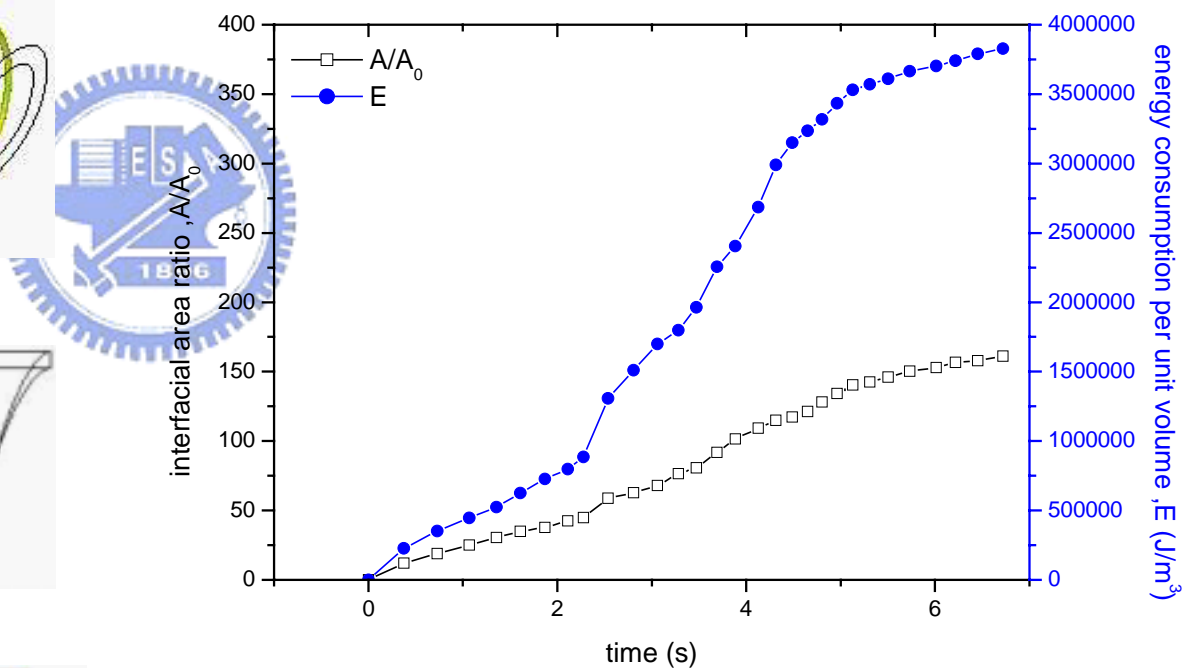
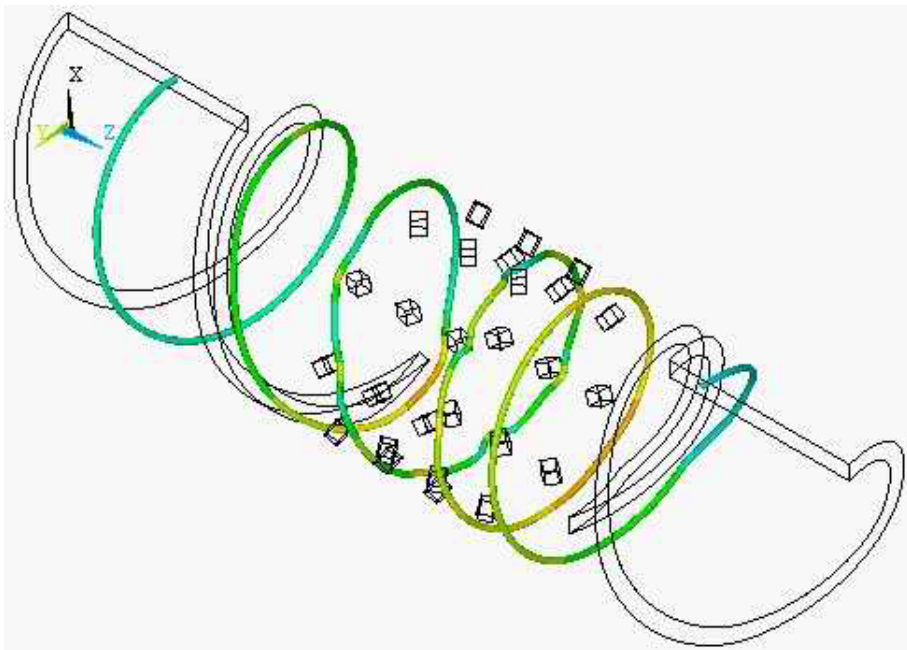
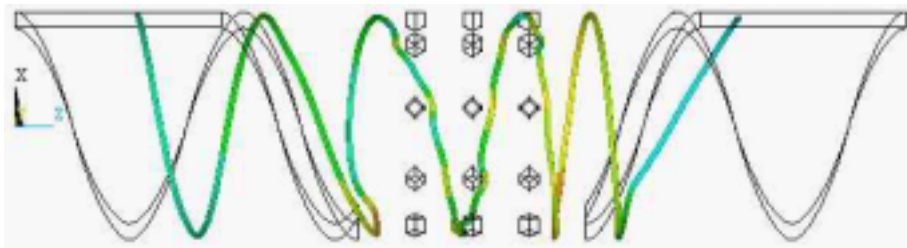


圖 58、橫截面三支菱形插門之流線沿流動時間界面面積比增加和能量消耗圖



(a)



(b)



圖 59、橫截面九支菱形插門之溝道流線圖
(a)俯視圖(b)側視圖

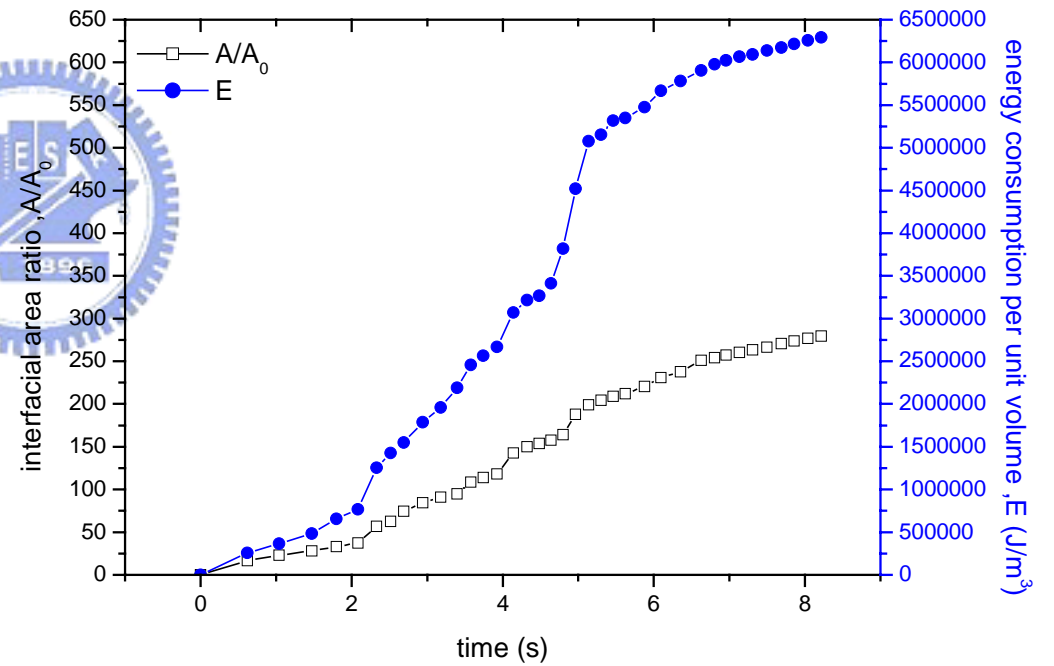
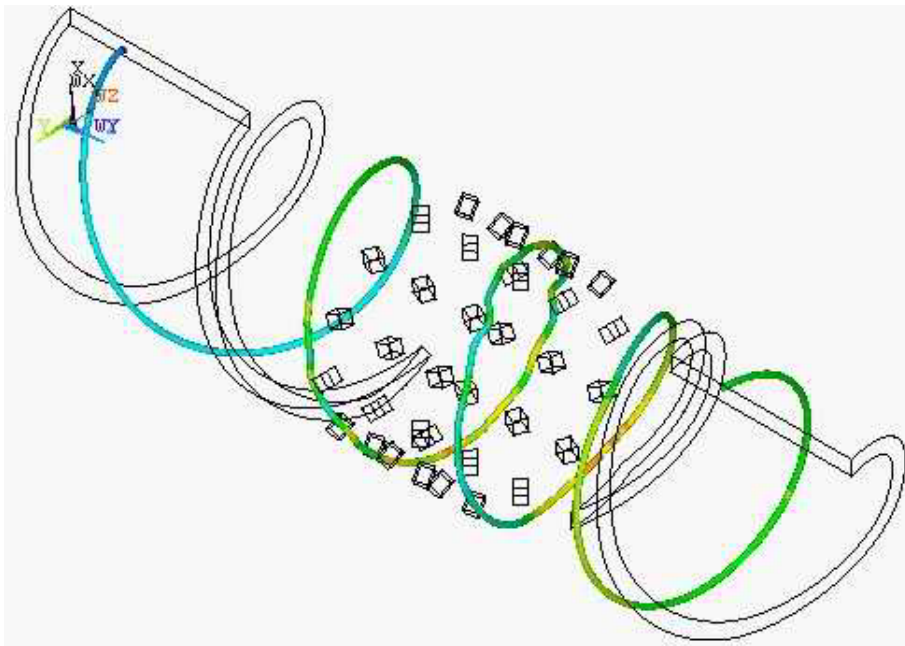
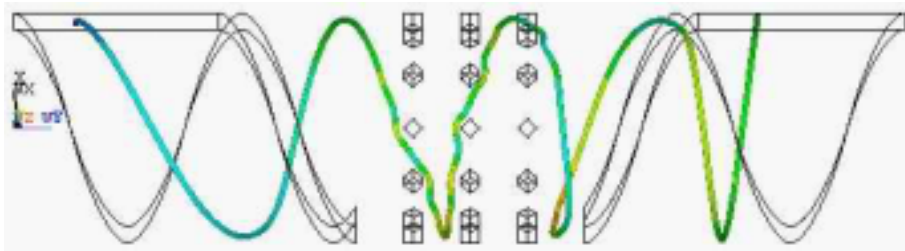


圖 60、橫截面九支菱形插門之流線沿流動時間界面面積比增加和能量消耗圖



(a)



(b)



圖 61、橫截面十二支菱形插門之溝道流線圖
(a)俯視圖(b)側視圖

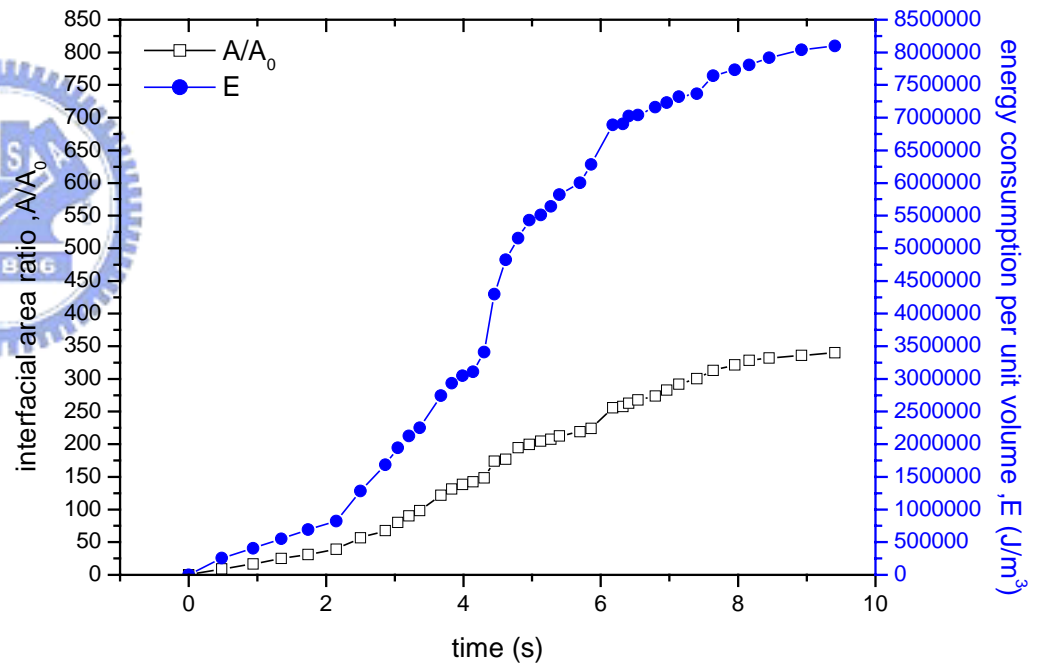
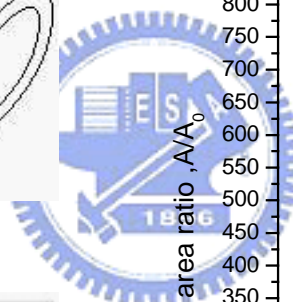


圖 62、橫截面十二支菱形插門之流線沿流動時間
界面面積比增加和能量消耗圖

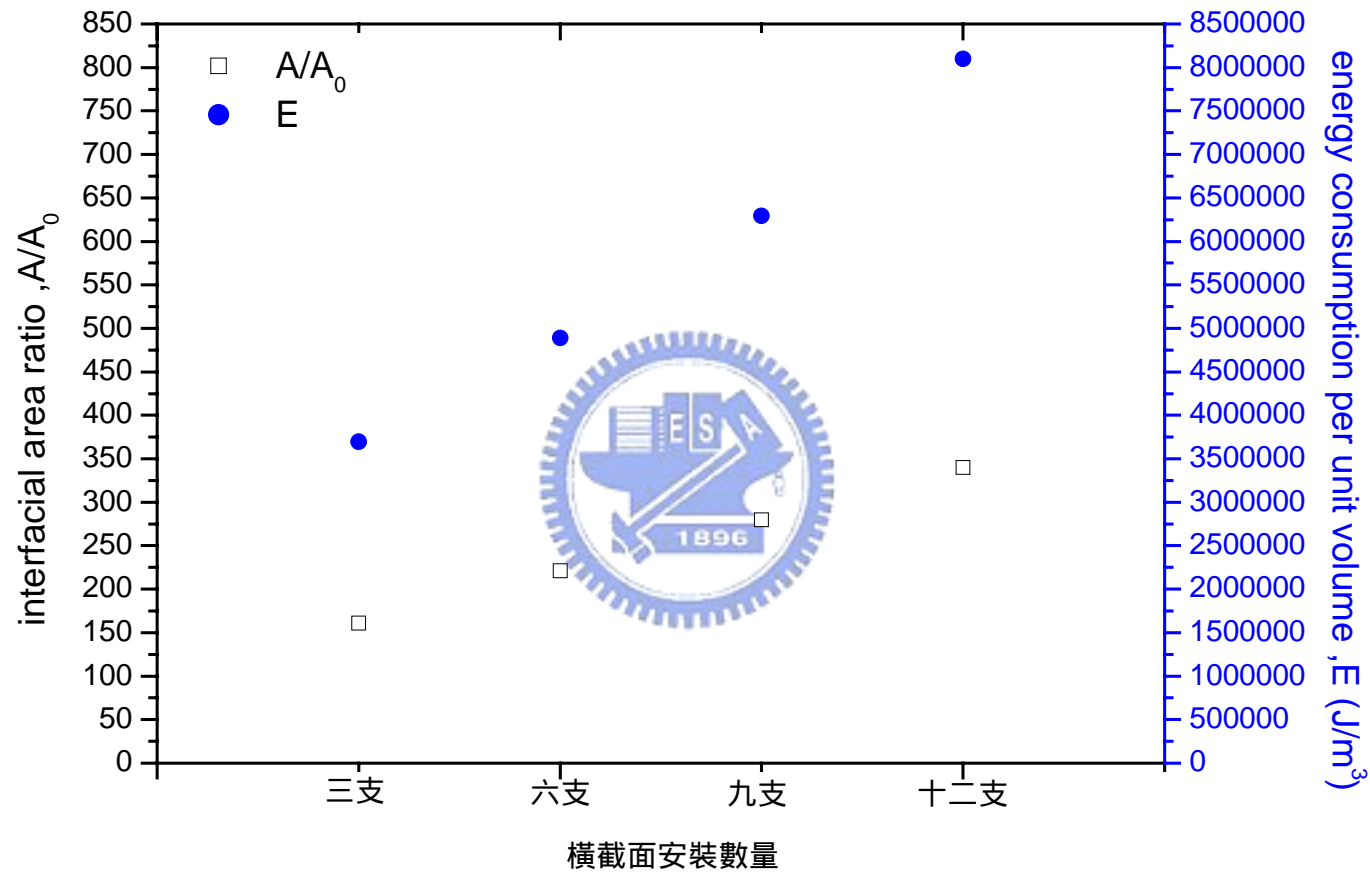
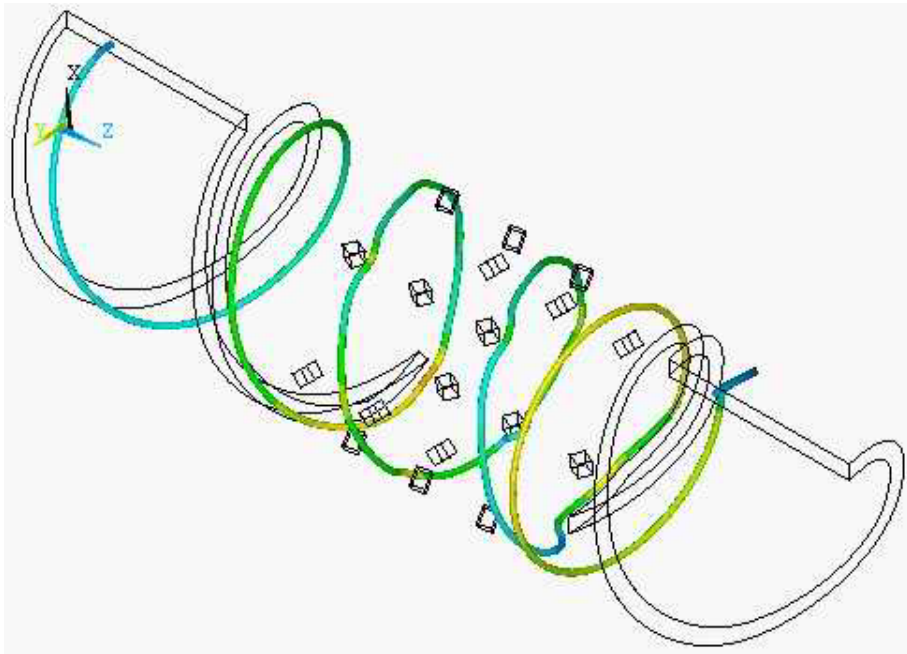
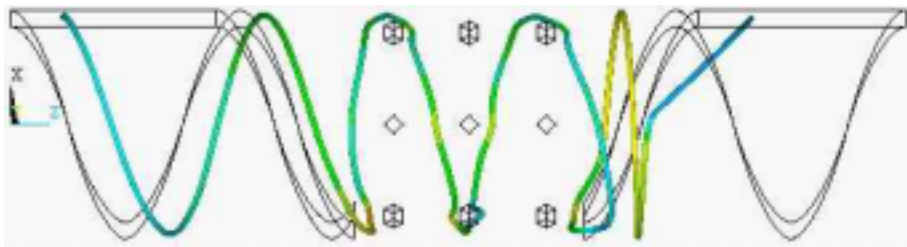


圖 63、橫截面安裝不同插門數量之界面面積比和能量消耗比較圖



(a)



(b)



圖 64、軸間距為 $1/3 D$ 的菱形插門之溝道流線圖 (a)俯視圖(b)側視圖

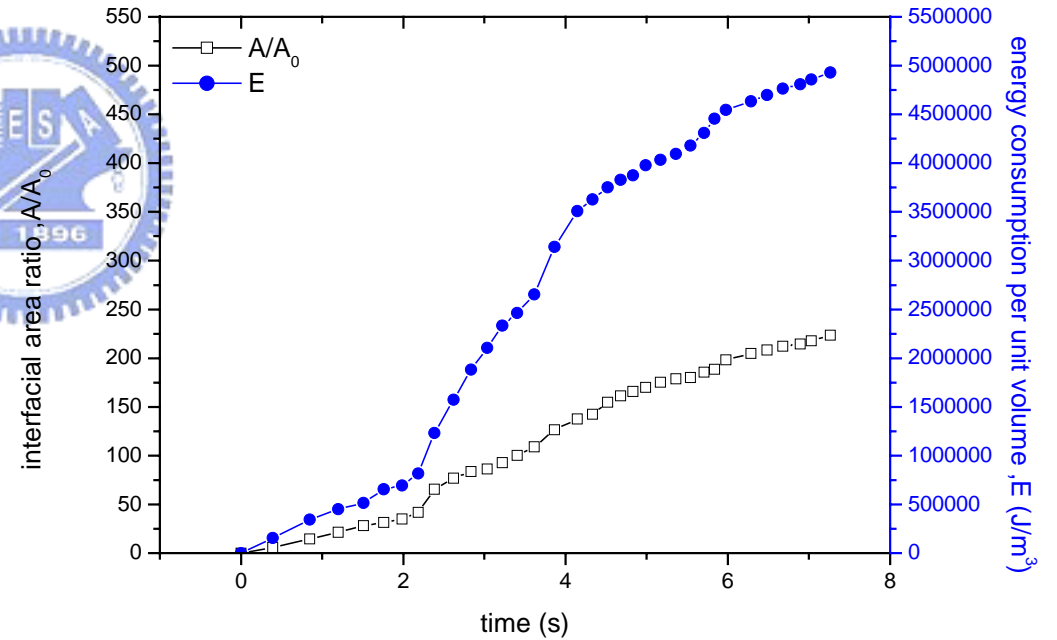
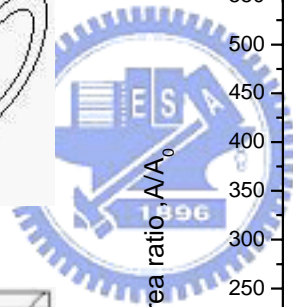
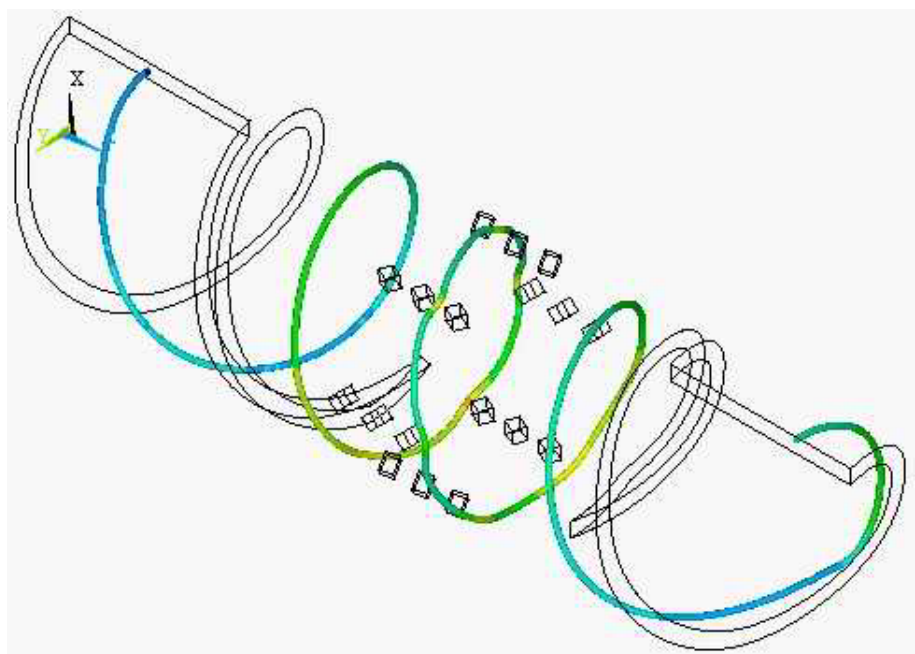
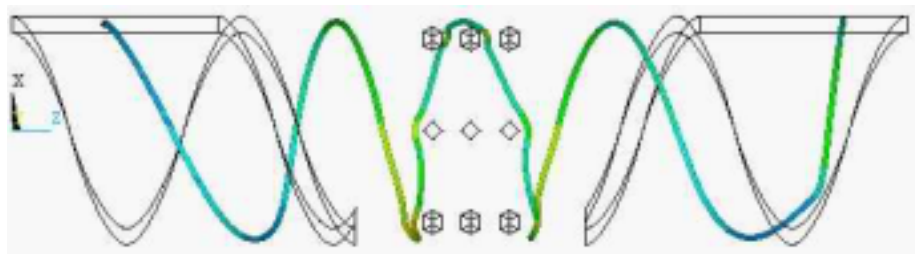


圖 65、軸間距為 $1/3 D$ 的菱形插門之流線沿流動時間界面面積比增加和能量消耗圖



(a)



(b)



圖 66、軸間距為 $1/6 D$ 的菱形插門之溝道流線圖 (a)俯視圖(b)側視圖

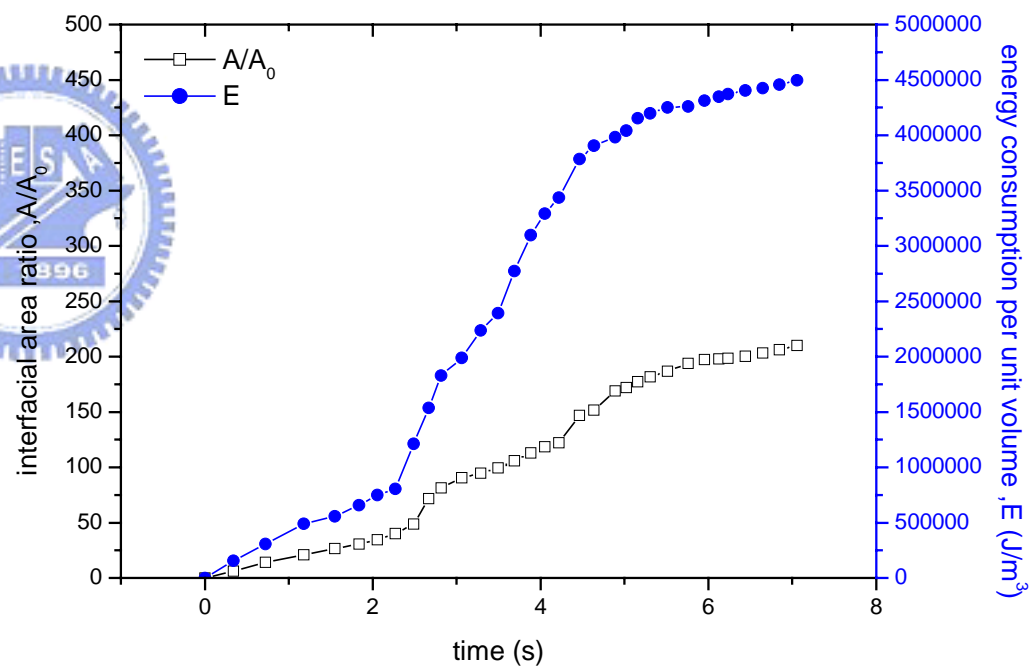
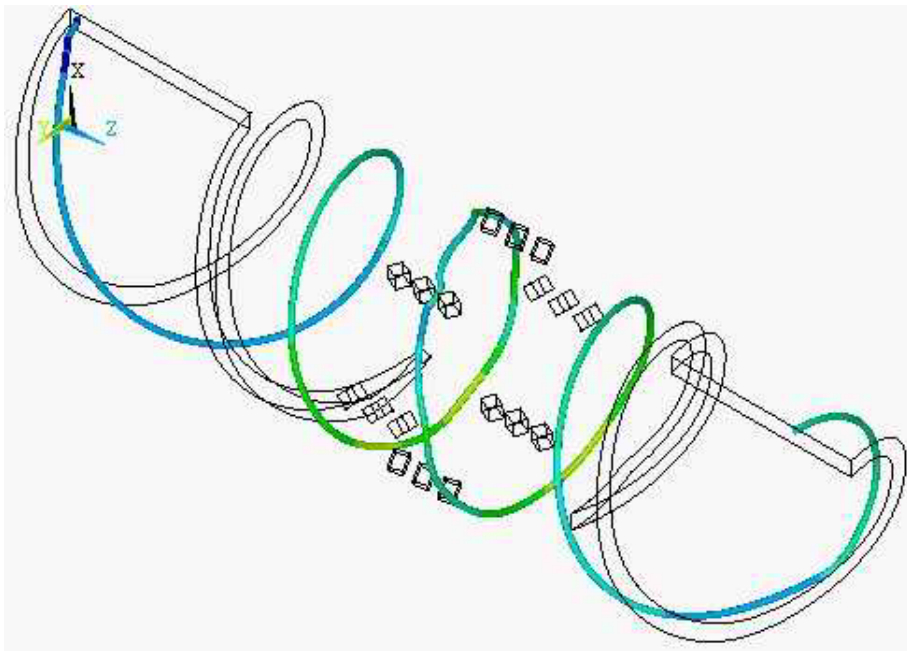
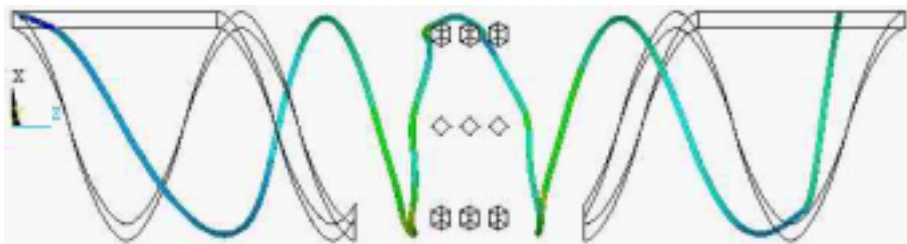


圖 67、軸間距為 $1/6 D$ 的菱形插門之流線沿流動時間界面面積比增加和能量消耗圖



(a)



(b)



圖 68、軸間距為 $1/8 D$ 的菱形插門之溝道流線圖 (a)俯視圖(b)側視圖

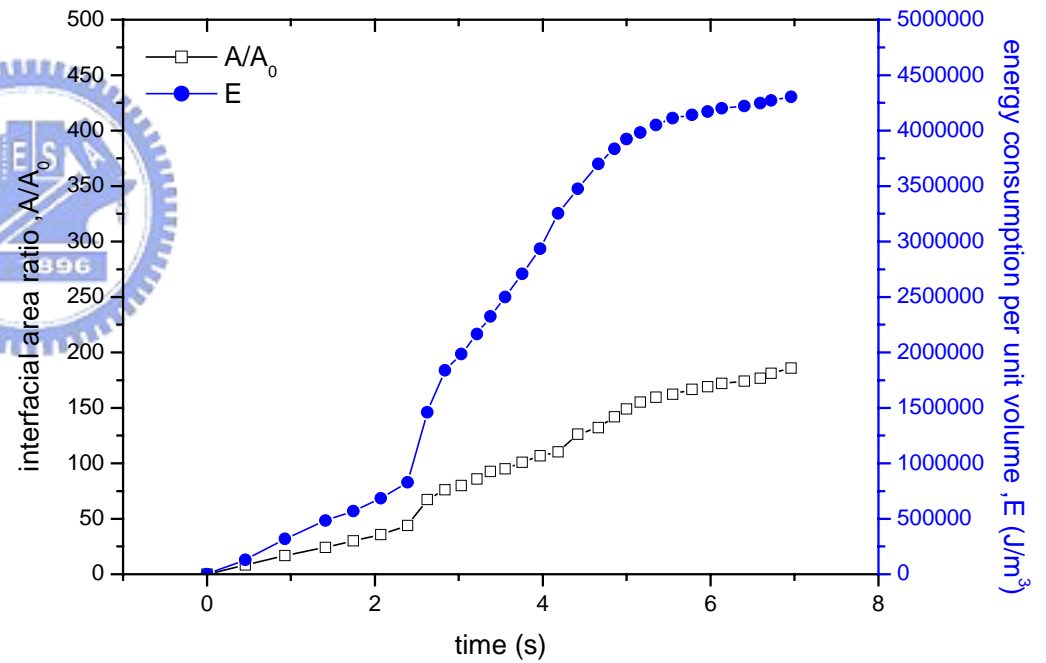


圖 69、軸間距為 $1/8 D$ 的菱形插門之流線沿流動時間界面面積比增加和能量消耗圖

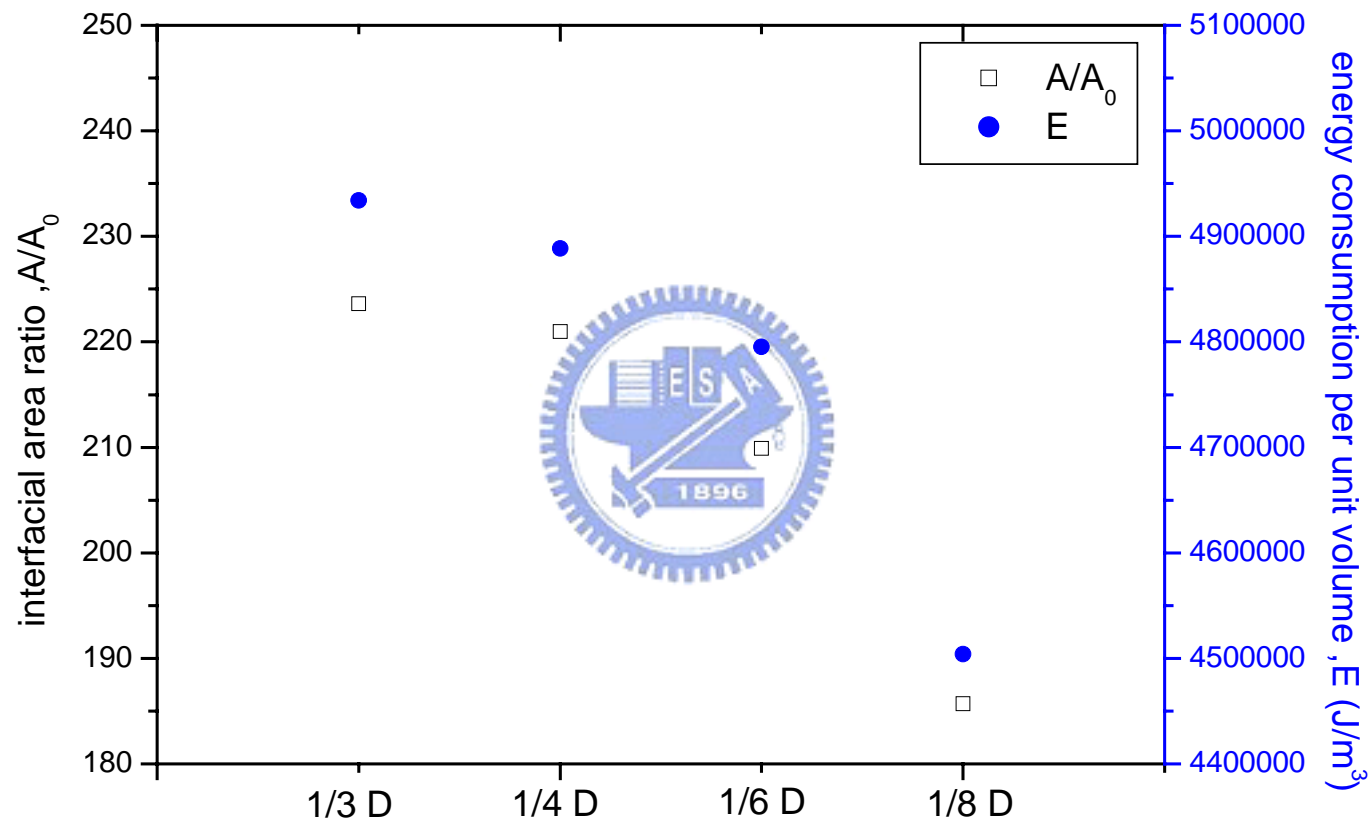
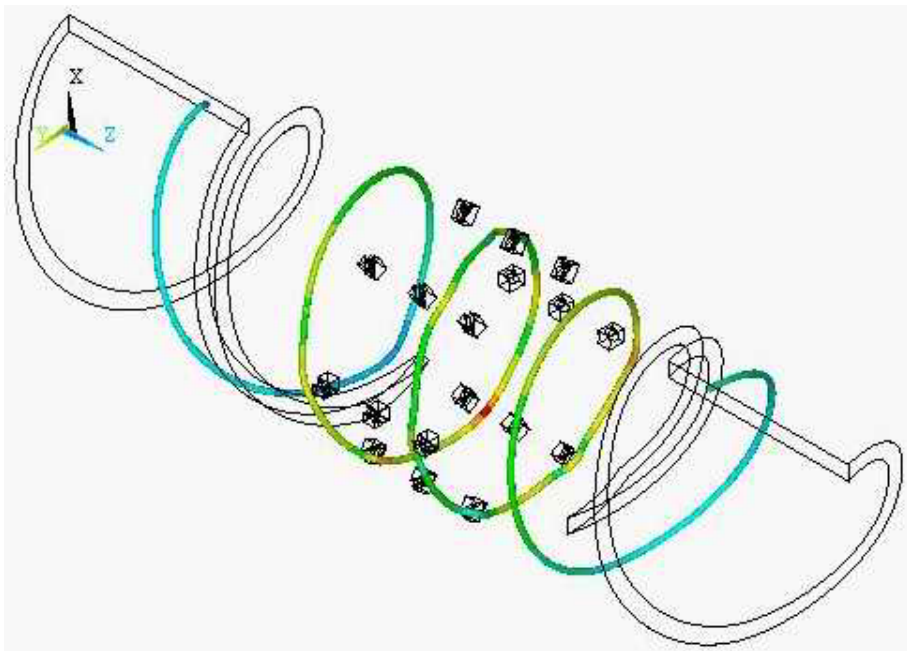
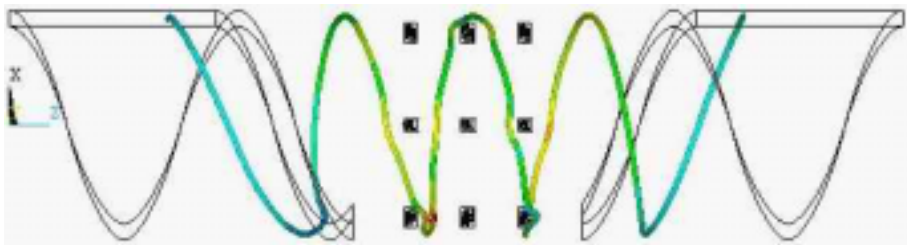


圖 70、不同插門軸向間距之界面面積比和能量消耗比較圖



(a)



(b)



圖 71、安裝方形貫孔插門之溝道流線圖
(a)俯視圖(b)側視圖

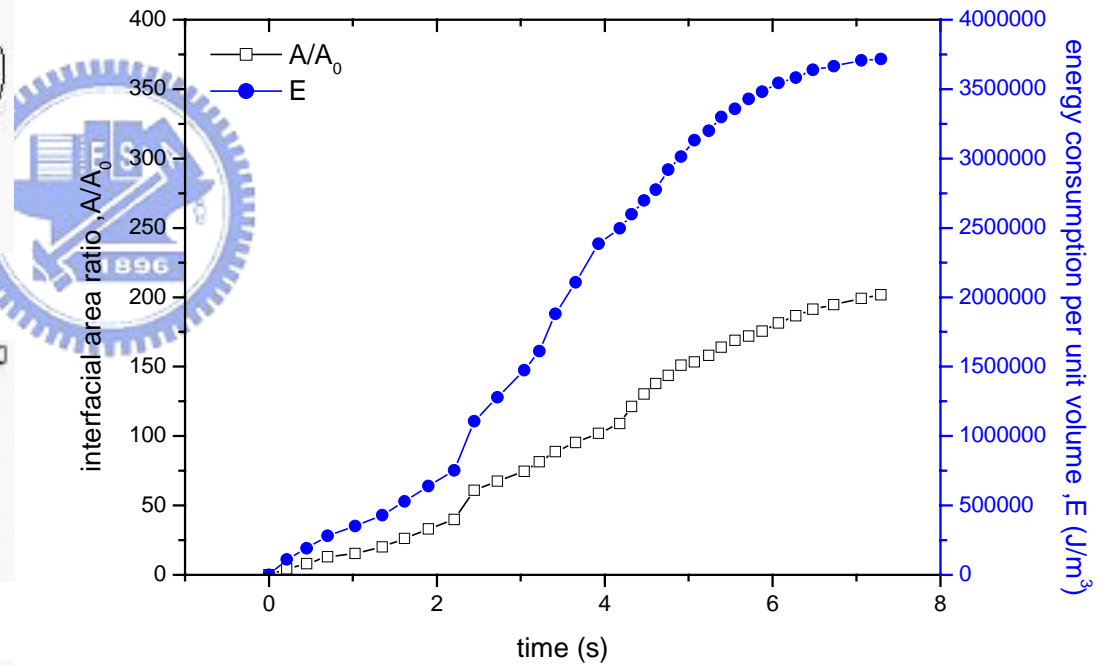
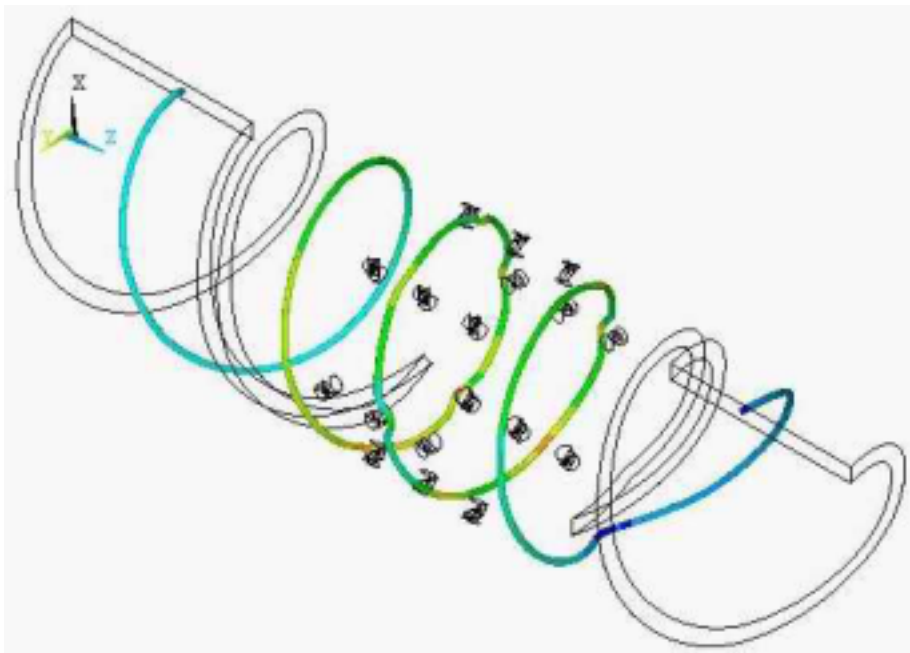
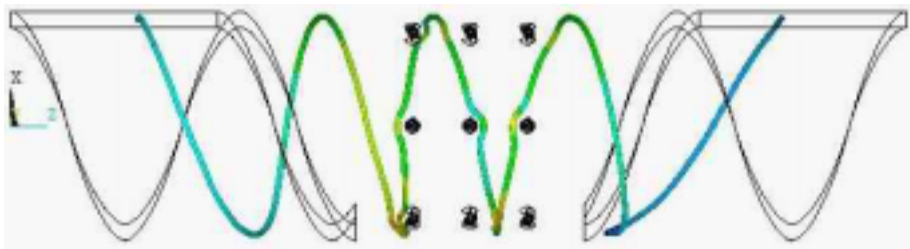


圖 72、安裝方形貫孔插門之流線沿流動時間界面面積比增加和能量消耗圖



(a)



(b)



圖 73、安裝圓形貫孔插門之溝道流線圖
(a)俯視圖(b)側視圖

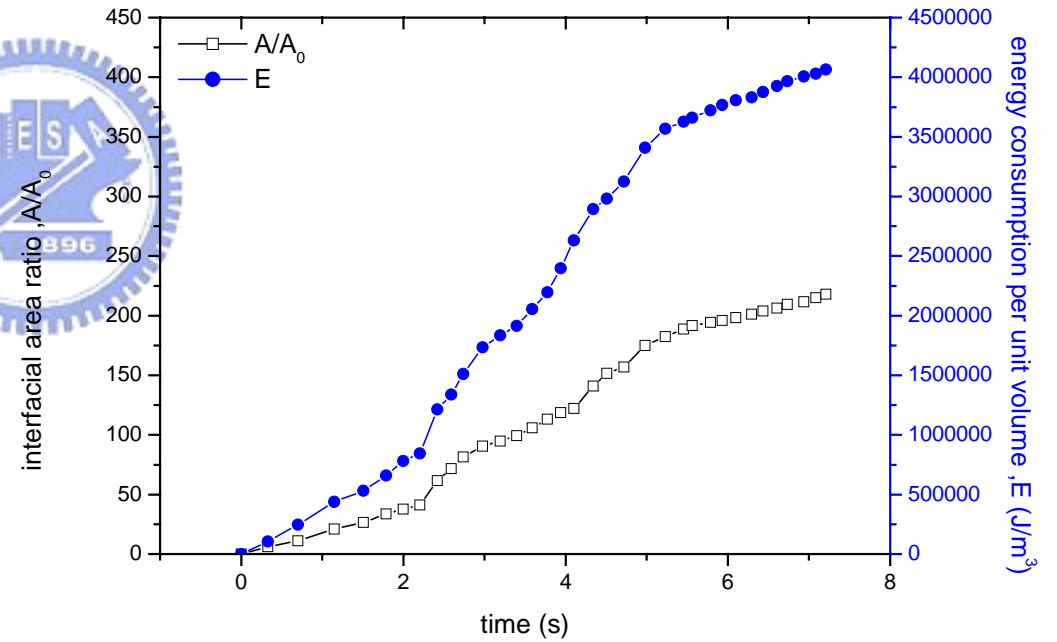
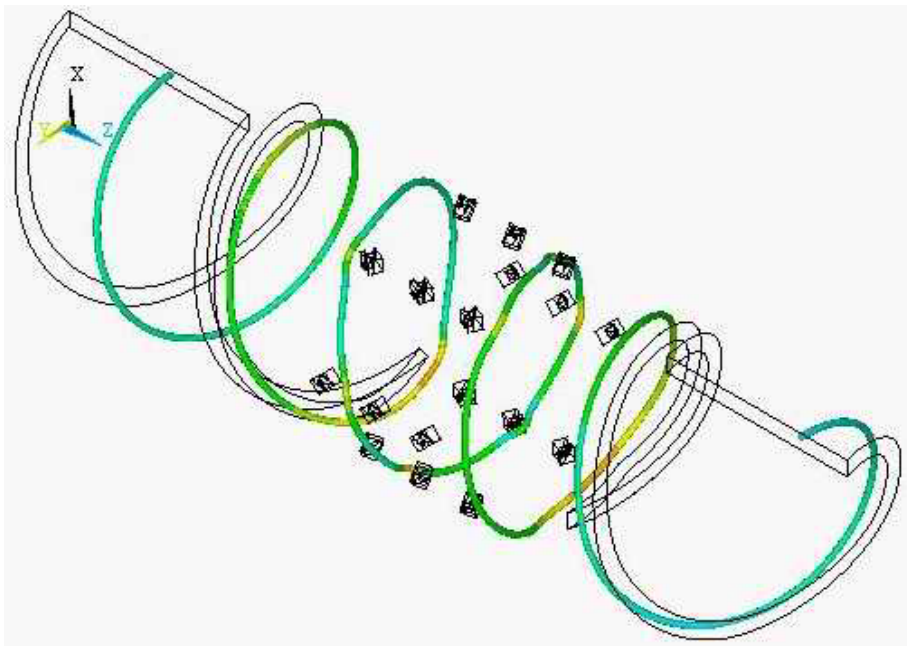
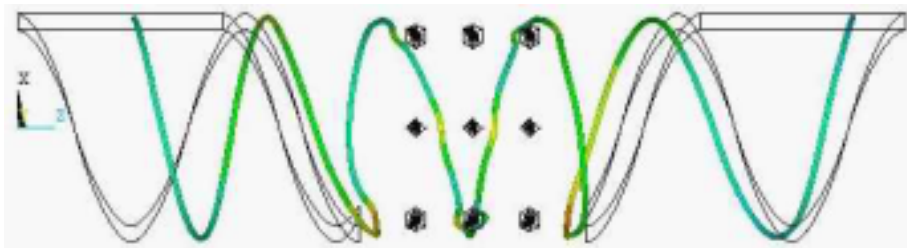


圖 74、安裝圓形貫孔插門之流線沿流動時間界面面積比增加和能量消耗圖



(a)



(b)



圖 75、安裝菱形貫孔插門之溝道流線圖
(a)俯視圖(b)側視圖

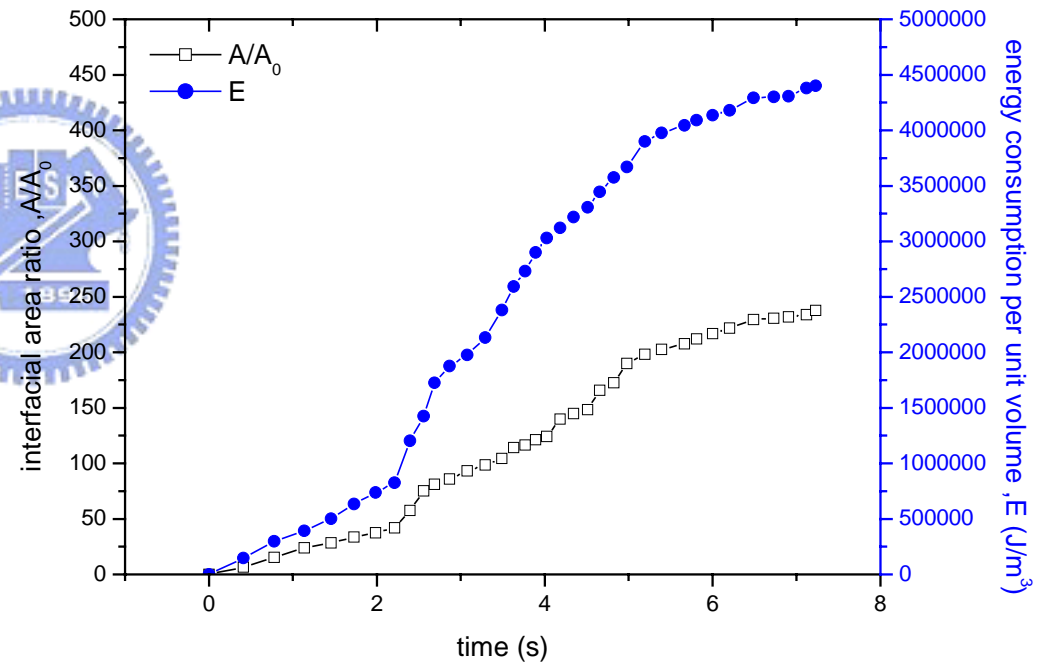
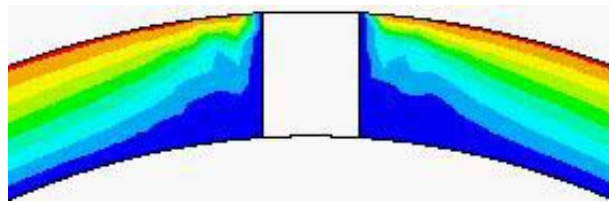
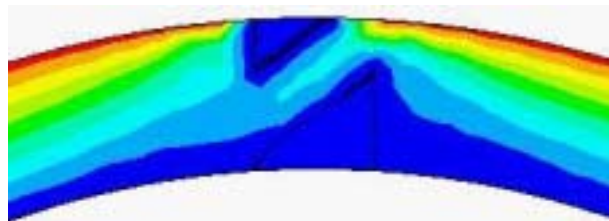


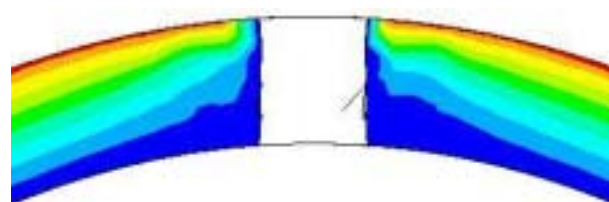
圖 76、安裝菱形貫孔插門之流線沿流動時間界面面積比增加和能量消耗圖



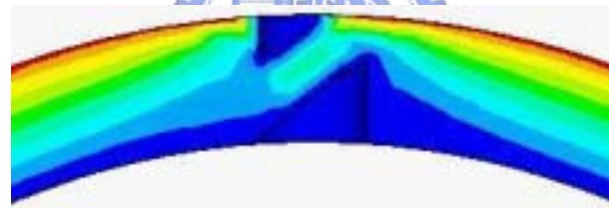
(a)



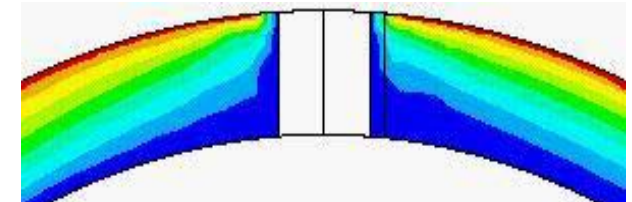
(b)



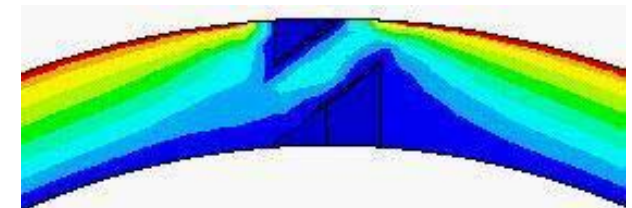
(a)



(b)



(a)

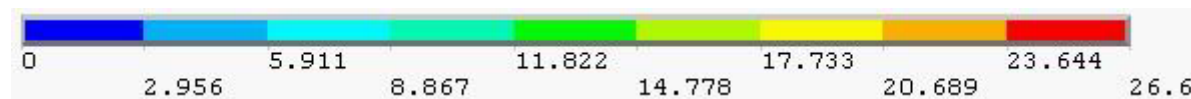


(b)

圖 77、方形貫孔插門周圍流場切面圖
(a)貫孔前 (b)貫孔後

圖 78、圓形貫孔插門周圍流場切面圖
(a)貫孔前 (b)貫孔後

圖 79、菱形貫孔插門周圍流場切面圖
(a)貫孔前 (b)貫孔後



註：以上切面是平行貫孔軸向之面

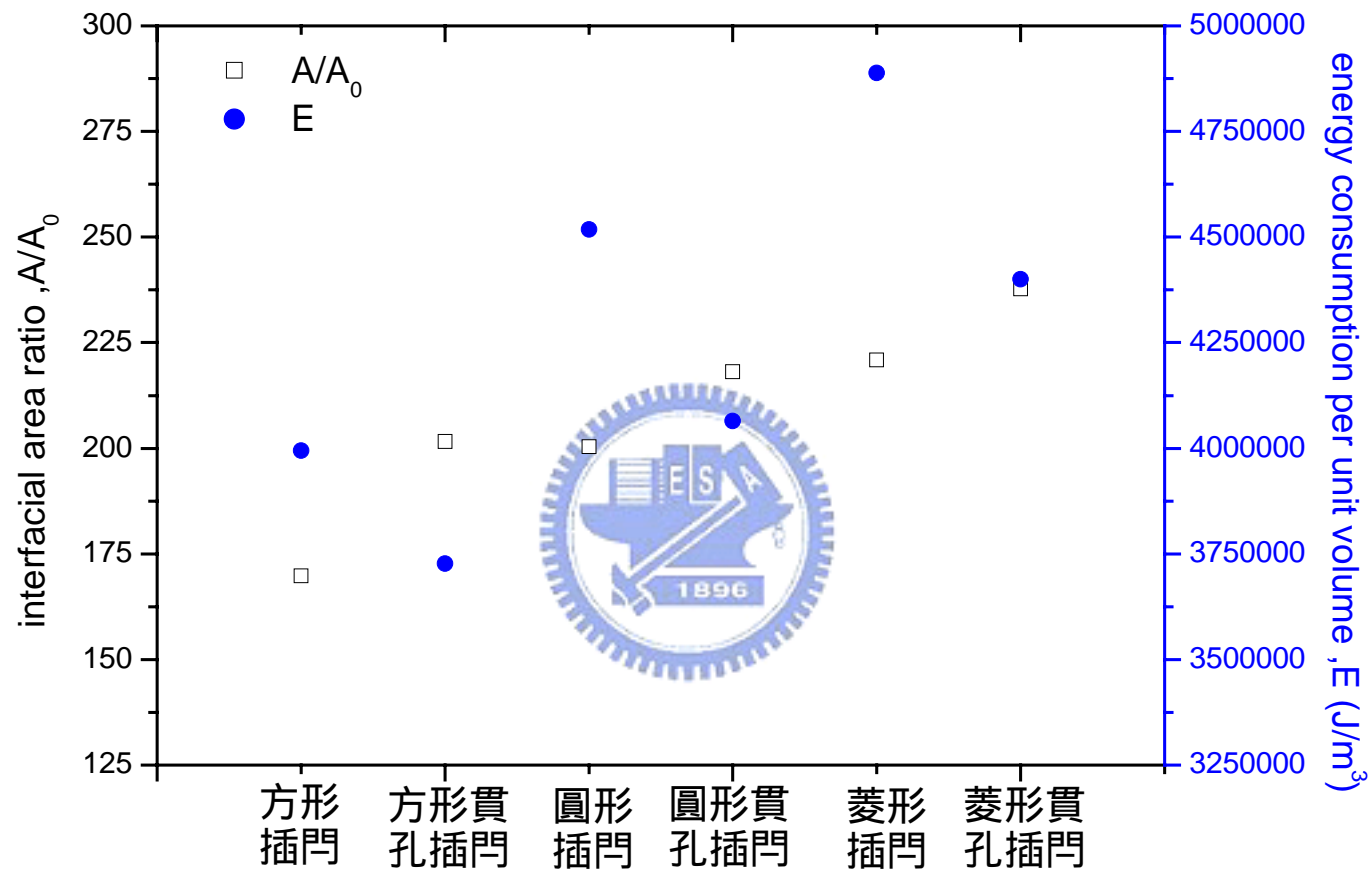
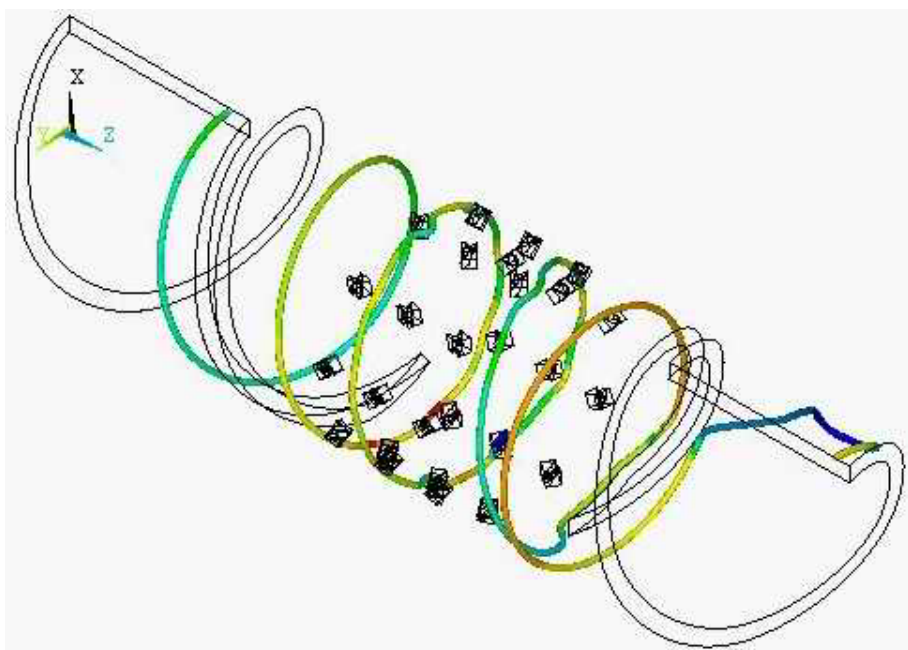
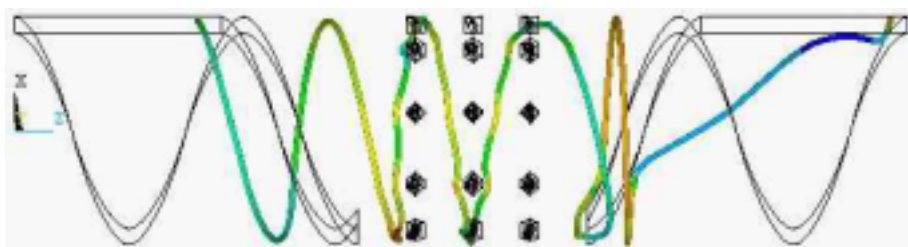


圖 80、不同構形插門之界面面積比和能量消耗比較圖



(a)



(b)



圖 81、最佳化設計混合元件之溝道流線圖
(a)俯視圖(b)側視圖

註：最佳設計點：菱形貫孔插門、橫截面九支插門和軸向間距 $1/4 D$

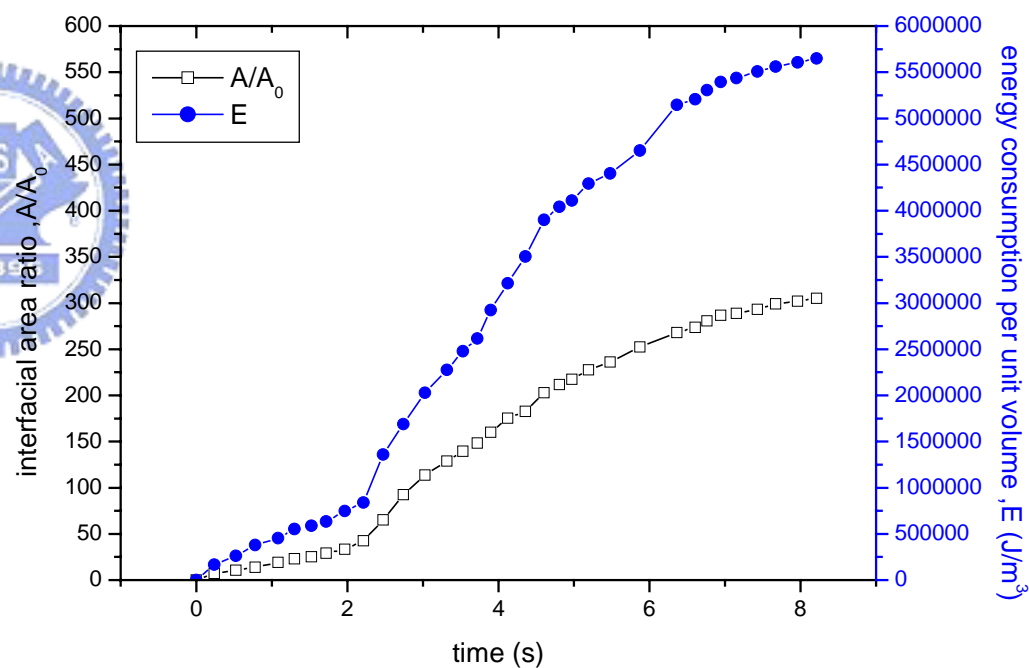


圖 82、最佳化設計混合元件之流線沿流動時間界面面積比增加和能量消耗圖

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