第七章 結論

1. 對稱造型之 Y 型和 T 型分歧管，配合出口處為無壓差(P1=P2)的邊界條件，在我們的計算後，其結果顯示在大部分情況下流場會呈現完全對稱。但是在擴張比較大（即下游流道寬度較大）之 Y 型分歧管中，於較高雷諾數時，依然會有不對稱的現象發生。
2. 無論是 Y 型或 T 型分歧管，雷諾數越大，其主迴流的長度 X1 就越長；但是在較高擴張比（即下游流道寬度較大）時，於較高雷諾數的條件下，其主迴流的長度 X1 反而會隨著雷諾數的增加而縮短。
3. 無論是Y型或T型分歧管，下游流道寬度d_{out}的增大，會增加該流場的複雜性，進而出現第二，甚至第三迴流。此外，隨著流道寬度d_{out}的增加，也會使得出現第二、第三迴流時的雷諾數降低。此外，下游流道寬度d_{out}的增大，也會使得主迴流長度與雷諾數之間的線性關係逐漸被破壞。
4. 無論是Y型或T型分歧管，具有任一下游流道寬度d_{out}時，壓力差對Y型和T型分歧管之影響，會使得原先無壓力差時所呈現之對稱或近乎對稱之流場，出現不對稱的現象。此外，出口壓力差越大，上下方流道間之主迴流長度的差距會越大。
5. 無論是Y型或T型分歧管，隨著雷諾數的增加，其出口流量比的差距$\Delta R=R_{upper}-R_{lower}$會增加，且在Y型分歧管中流量比落差的幅度較T型分歧管來得大。
6. 無論在Y型或T型分歧管中，壓力差的增加和下游流道寬度d_{out}的增大都會造成上下方流道出口流量比的差距增大，而且在Y型分歧管中流量比落差的幅度都比T型分歧管來得大。

7. 無論在 Y 型或 T 型分歧管中，擴張比越大，流場越複雜，對稱性越差；且本研究中的 Y 型管的流場比起 T 型管流場而言，其流場對稱性更低。

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