鳳凰人工心臟流場量測

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This project is to study and observe the flow fields of the Pheonix 7 and aide in recent plans to improve. Thrombosis formation is due to the blood flow in the heart cavity being unable to washout the surfaces, thus resulting a stagnation point for thrombosis deposition. The turbulent Reynolds stress contributes to the complications of thrombosis and thromboembobism due to damage of red blood cells and platelets. To study the above flows in detail, flow visualization and a 2-D laser Doppler anemometer were used to observe overall flow field and point to point measurements respectively. The results will revere as basis for future improvements.