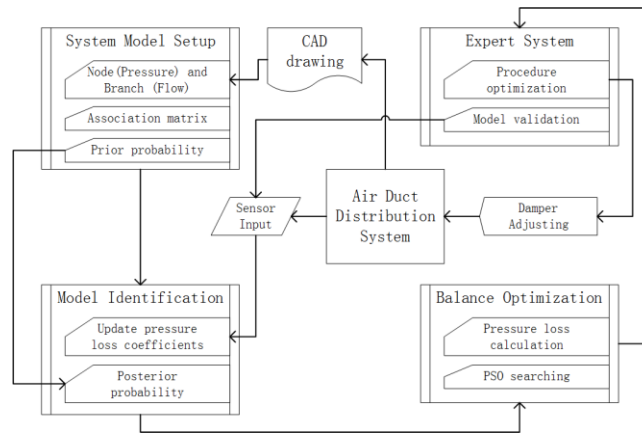


Air distribution and balance in ACMV system

Deliver the exact of air through duct to the air-conditioned space is very important for ACMV systems in term of both energy saving and indoor environment quality. During system commissioning, TAB (Testing, Adjusting and Balancing) must be performed to satisfy the air distribution requirements. Current TAB is costly and time-consuming due to its iterative procedure. In this project, a non-iterative air TAB approach will be developed. New technologies will be integrated to solve the air balancing problems, including data mining, machine learning, optimal control and etc. The new TAB method can achieve air balancing automatically with the optimal control to minimize the fan power. The air balancing is also dynamic in responding to the changing air flow demand.



Scheme of Air distribution and balance in ACMV system