

CFD Analysis Report for Lotte PJT in Russia

SAC Engineering Division

LG

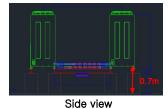
Electronics



Drawing Design









Top view

wall height 3m

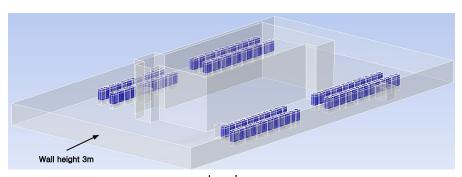




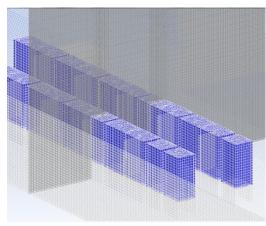


CFD 3D modeling





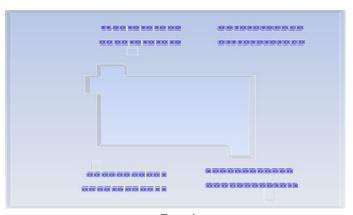
Iso view



Mesh

CFD Analysis Condition

- ✓ Product : Multi III ✓ Operation ratio : 100% ✓ Air temp. : 33℃ ✓ Roof wall height : 3m
- ✓ Support height : 0.7m
 ✓ CFD Analysis Program : FLUENT 13.0.0, GAMBIT 2.4.6
- ✓ Viscous model : k-e standard model
 ✓ Mesh : 6,791,555 hexahedral mesh

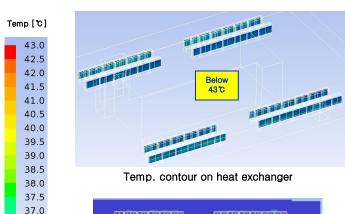


Top view

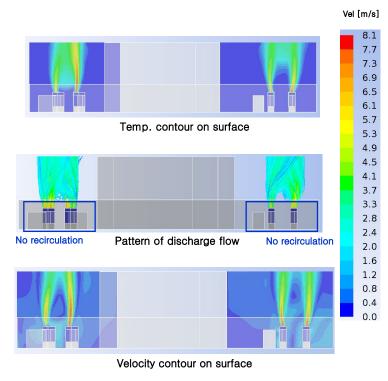
CFD Result



It is shown that avg. Temp. of heat exchanger is distributed from 34°C to 49°C It seems that normal operation of AC product could be possible in these conditions.



Temp. contour on surface (h=1.5m)



Air temp. 33℃

36.5

36.0

35.5

35.0 34.5

34.0

33.5 33.0

