

8.Conclusion

By performing thermal analysis and calculating COP accordingly for the intercooler made up of different materials, result is as follows:

S.No.	Intercooler	Outlet Temperature(°C)	COP
1.	Without Intercooler	63.33	4.69
2.	Stainless Steel Intercooler	62.16	4.84
3.	Brass Intercooler	60.76	5.04
4.	Aluminum Intercooler	58.52	5.38
5.	Copper Intercooler	54.20	6.15

Table 8.1: Comparision Of COP

Coefficient of Performance of Copper intercooler is high when compared with all the above materials. So, by using Copper Intercooler in an air conditioning system efficiency can be improved.