

Figure 7: Temperature Variation in 6 Semi-Circular Fin Circumscribing the Pipe

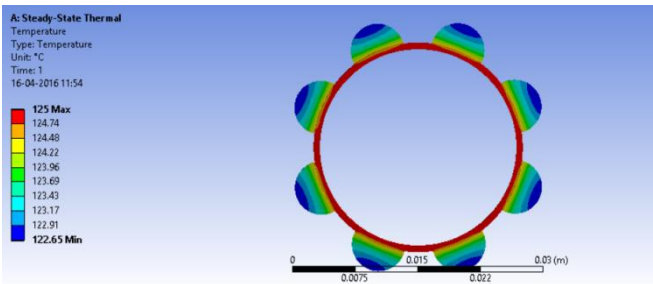


Figure 8: Temperature Variation in 8 Semi-Circular Fin Circumscribing the Pipe

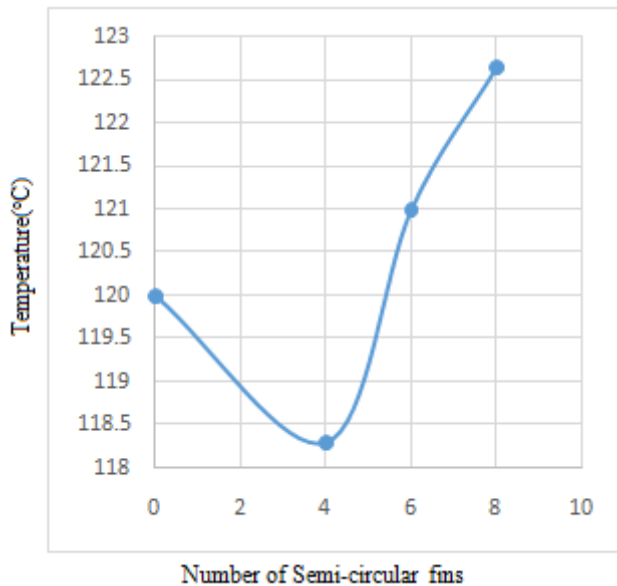


Figure 9: Comparatively study between the number of semi-circular fins and circular fins

5. Conclusion

After summarizing all the results previously obtained, we can conclude that fin must be designed in such a way that the temperature difference between the tip of fin and base of fin must be as low as possible. If outer fin temperature affects the heat transfer from fin tip to surrounding air and hence the objective of the work favours the increment in outlet temperature of incoming air, which is subjected to convection.

The number of semi-circular fins affects the heat transfer, as the fins increases the surface area will also increase, it can be analysed by comparing the result obtained.

References

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