Development of Long Life Fan

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1. Introduction

Even though the capacity of the fan is widely used as a measure of cooling capacity in various equipment, the life expectancy of a fan is, in general, only some 3 to 4 years. When the equipment in which the fan is installed, has an anticipated life longer than that of the fan, the equipment will require periodic replacement of the fan as part of a program of ongoing maintenance. Therefore, it follows that the development of a fan with a longer life expectancy will assist in reducing the overall maintenance burden.

To respond to the above requirements, a fan has been developed with a life expectancy of some 2.5 to 5 times longer than that of conventional fans currently in use.

This newly developed product has a longer life expectancy, while at the same time, maintaining the same size, cooling capacity and noise characteristics as a conventional fan. This report describes the features and other characteristics of this Long Life Fan.

- 2. Background of Development
- **3**. Features of Long Life Fan
- 4. Outline of Development of
 - Long Life Fan
 - 4.1 Decrease in Temperature Rise of Motor Bearings
 - 4.2 Decrease in Bearing Loads
 - 4.3 Improvement of Grease
 - 4.4 Improvements in Bearings
- 5. Structure of Long Life Fan
- 6. L₁₀ Life of Long Life Fan
- 7. Conclusion



Long Life Fan

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