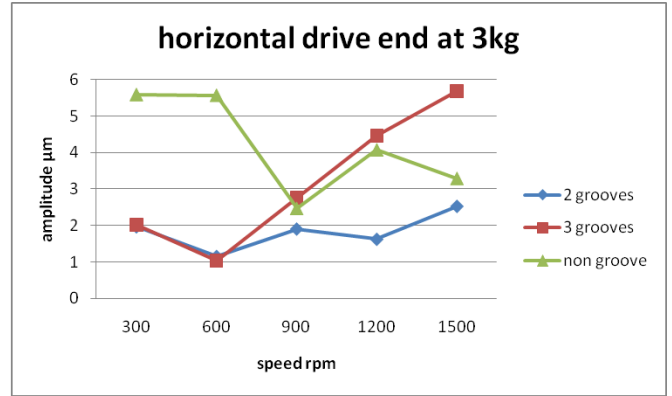
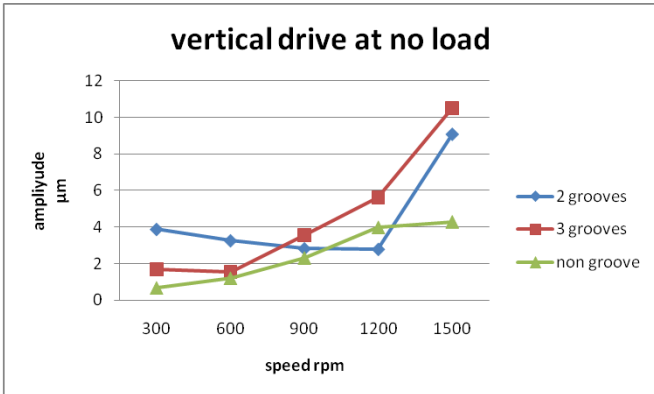


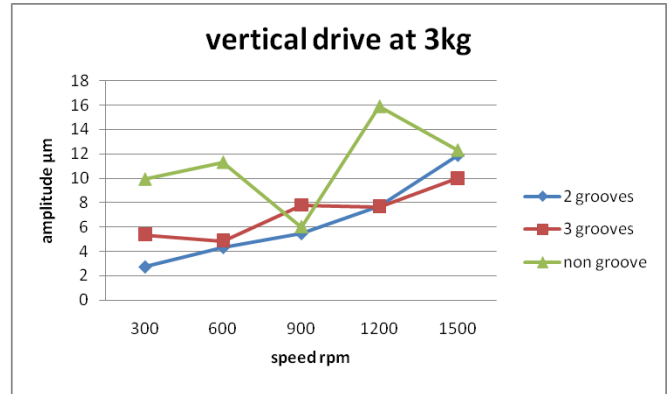
**Figure 4:** horizontal drive end at no load



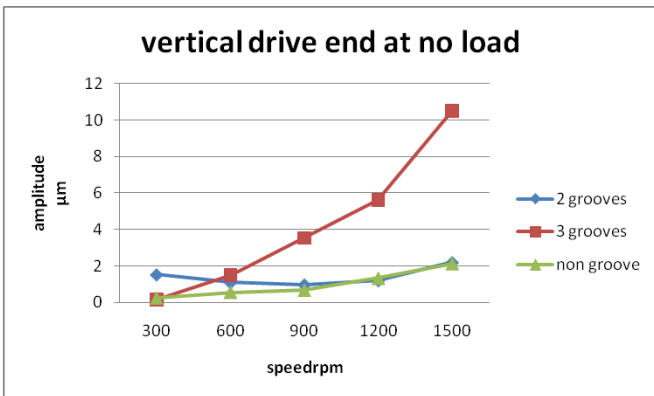
**Figure 8:** horizontal drive end at 3kg load



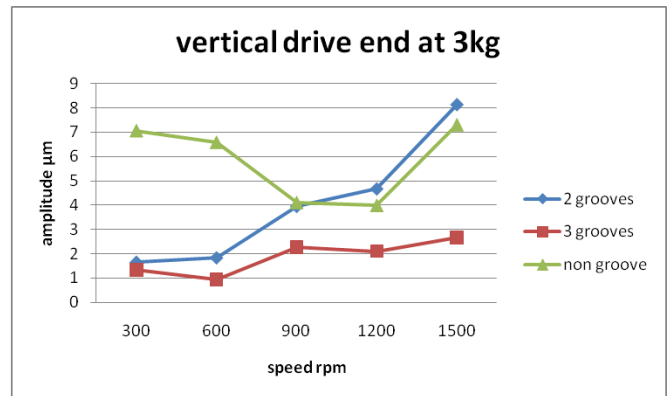
**Figure 5:** vertical drive at no load



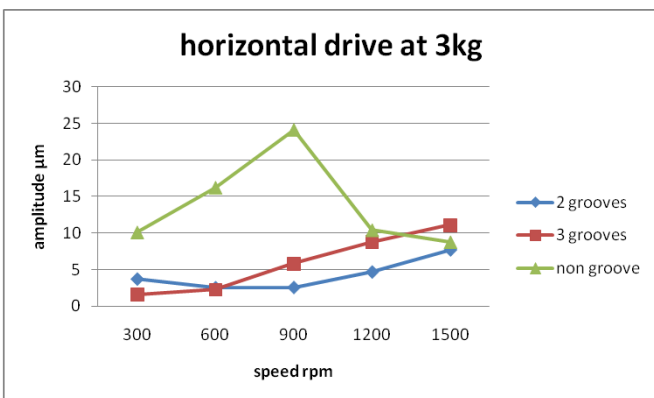
**Figure 9:** vertical drive at 3kg load



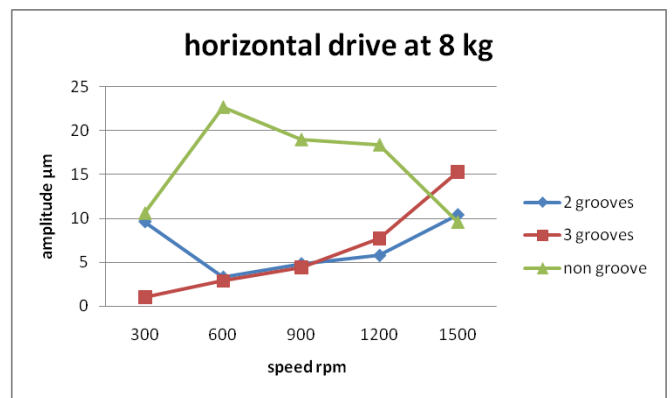
**Figure 6:** vertical drive end at no load



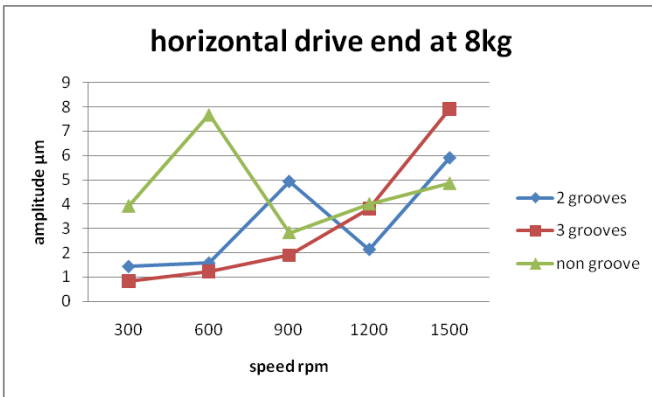
**Figure 10:** vertical drive end at 3kg load



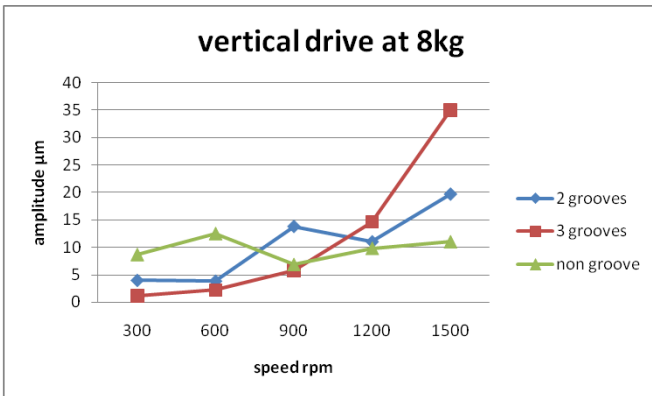
**Figure 7:** horizontal drive at 3kg load



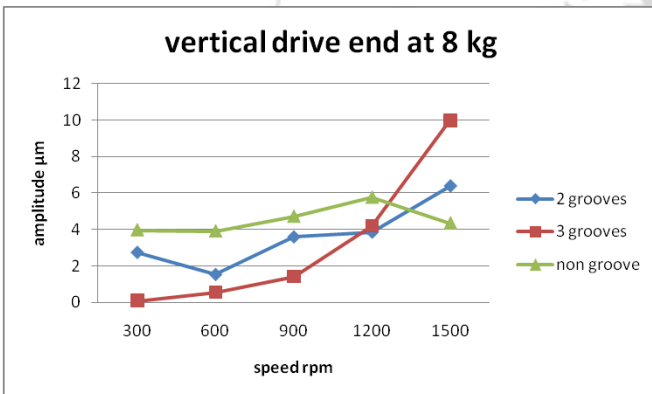
**Figure 11:** horizontal drive at 8kg load



**Figure 12:** horizontal drive end at 8kg load



**Figure 13:** vertical drive end at 8kg load



**Figure 14:** vertical drive end at 8kg load

- Initially both two helical groove and three helical groove journal bearing shows less amplitude of vibration for no load, 3kg and 8kg loading but for higher speed i.e. speed above 900 rpm they shows higher amplitude of vibration than non groove journal bearing.

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## 5. Conclusions

- At no load condition for lower speed non groove i.e. plain journal bearing shows higher amplitude of vibration than other two helical groove and three helical groove journal bearings.
- Speed as well as load increase for non groove journal bearing it has less amplitude of vibration than other bearings.
- Also for speed above 1500 rpm at no load condition as well as at loading condition the non groove i.e. plain journal bearing shows less amplitude of vibration.
- At speed up to 1000 rpm two helical groove journal bearing has less amplitude of vibration than other bearings.
- As the load increases and speed up to 1000 rpm the amplitude of vibration for three helical groove journal bearing decreases.