



**7th International Conference
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***Dynamic Behavior Analysis of Grass
Trimmer Using Finite Element Method***

Presented by
K. Sampath Kumar



Under the guidance of
Dr. Mohit Lal

Department of Industrial Design
National Institute of Technology Rourkela
Odisha, India-769008

Hand Arm Vibration (HAV) Syndrome



Figure 1 Effects of HAV



Figure 2 Prevention of HAV

Design of Grass Trimmer

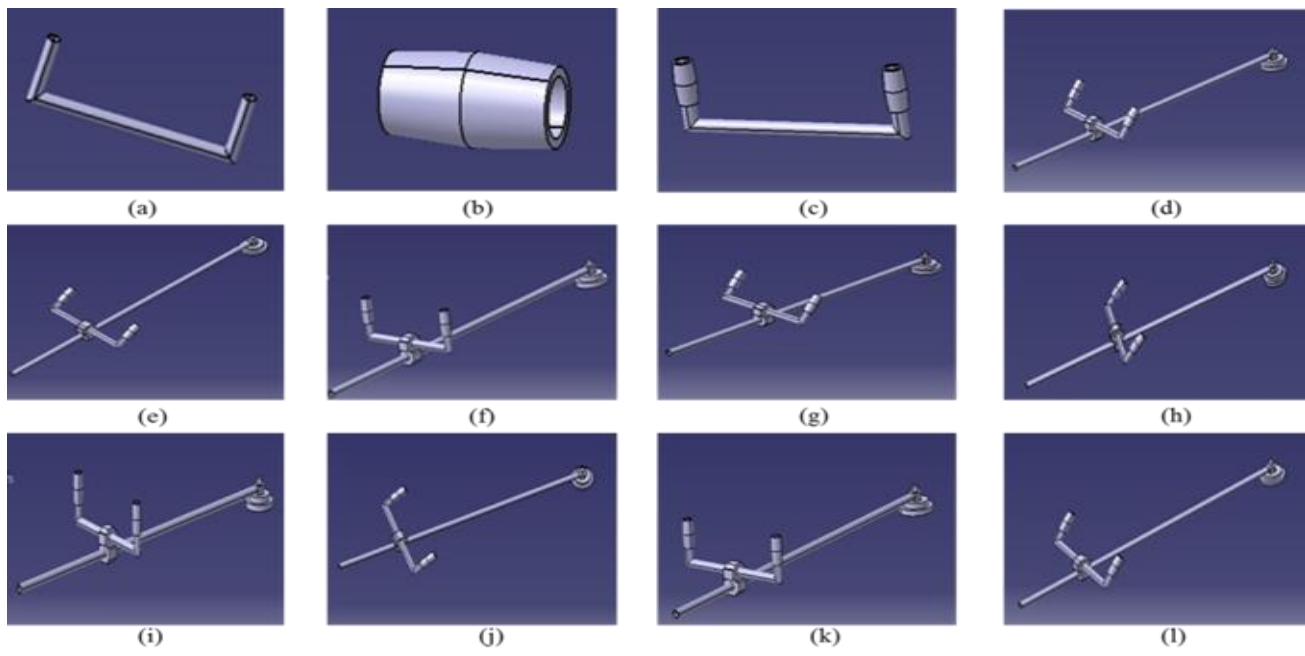


Figure. 3. Ergonomic design of existing grass trimmer models (a) Handle pipe, (b) Cap of the handle, (c) Assembly of handle, (d) No.1, (e) No.2, (f) No.3, (g) No.4, (h) No.5, (i) No.6, (j) No.7, (k) No.8, (l) No.9

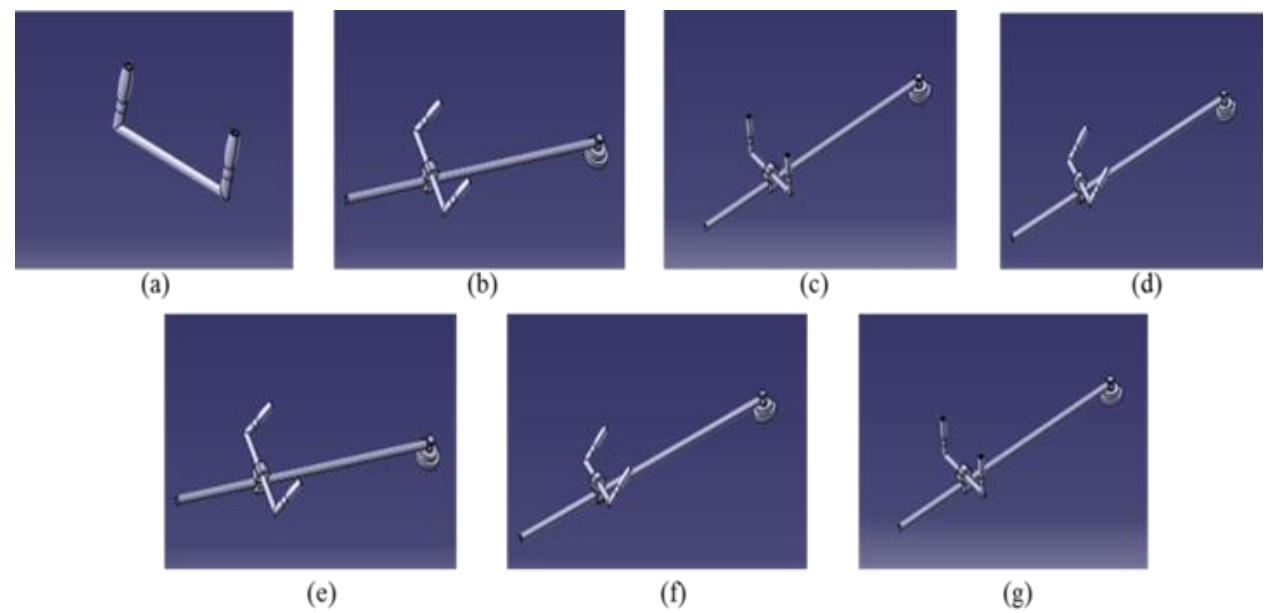


Figure 4. Ergonomically Design of 2nd type of grass trimmer model (a) Assembly of handle, (b) No.10, (c) No.11, (d) No.12, (e) No.13, (f) No.14 (g) No.15

Dynamic analysis of Grass Trimmer

Modal analysis

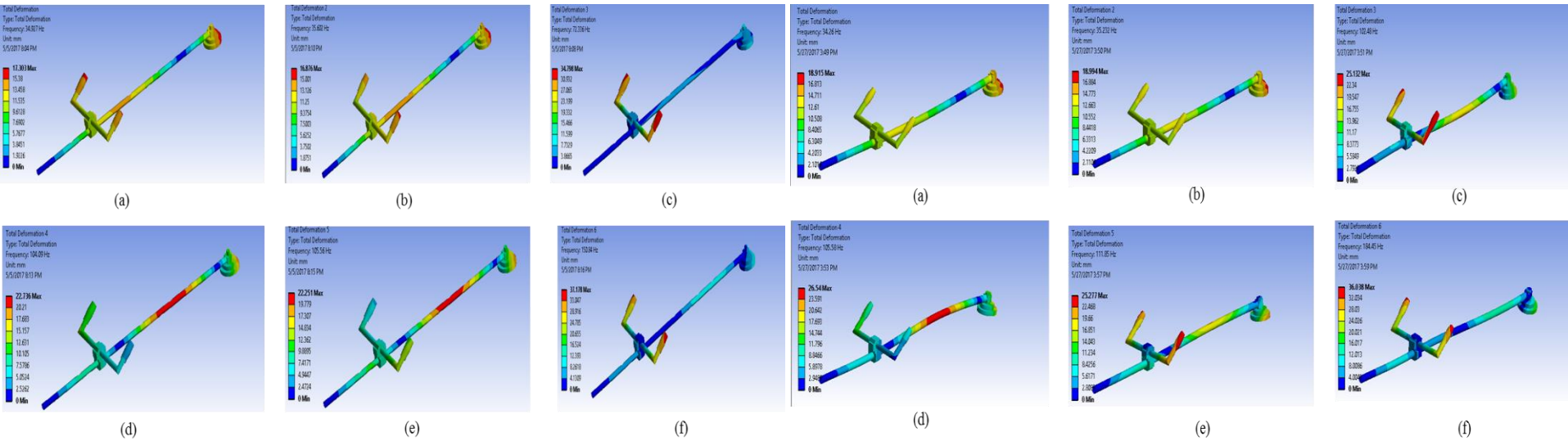


Figure 5 Model No. 5

Figure 6 Model No. 14

Harmonic analysis

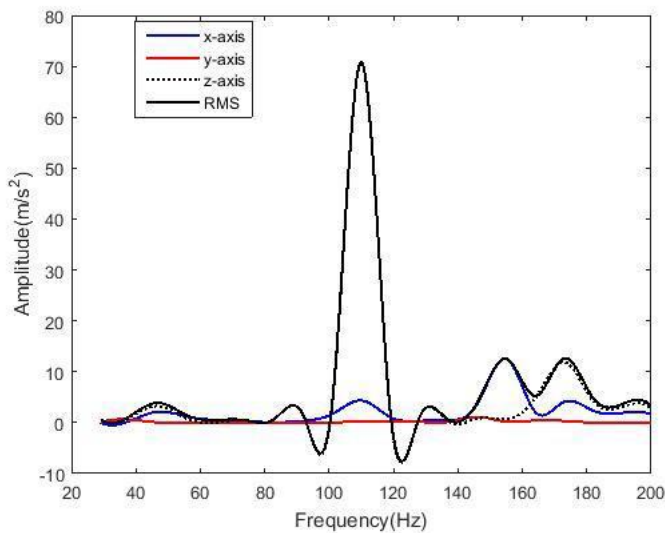


Figure 7 Model No. 5

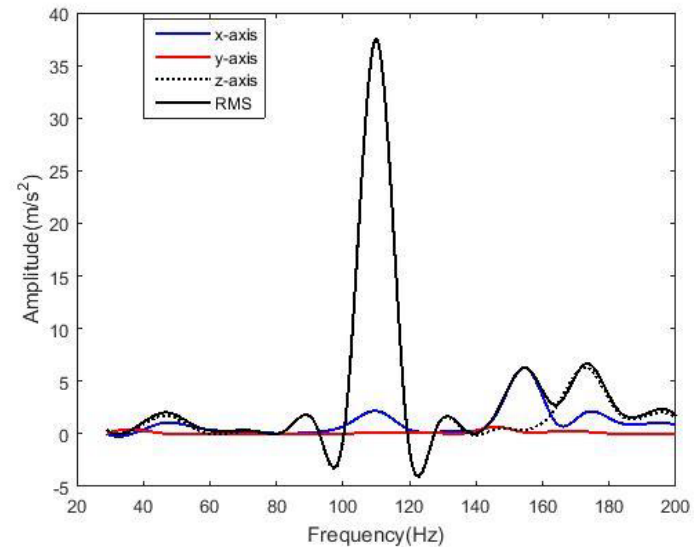


Figure 8 Model No. 14

Thank you

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