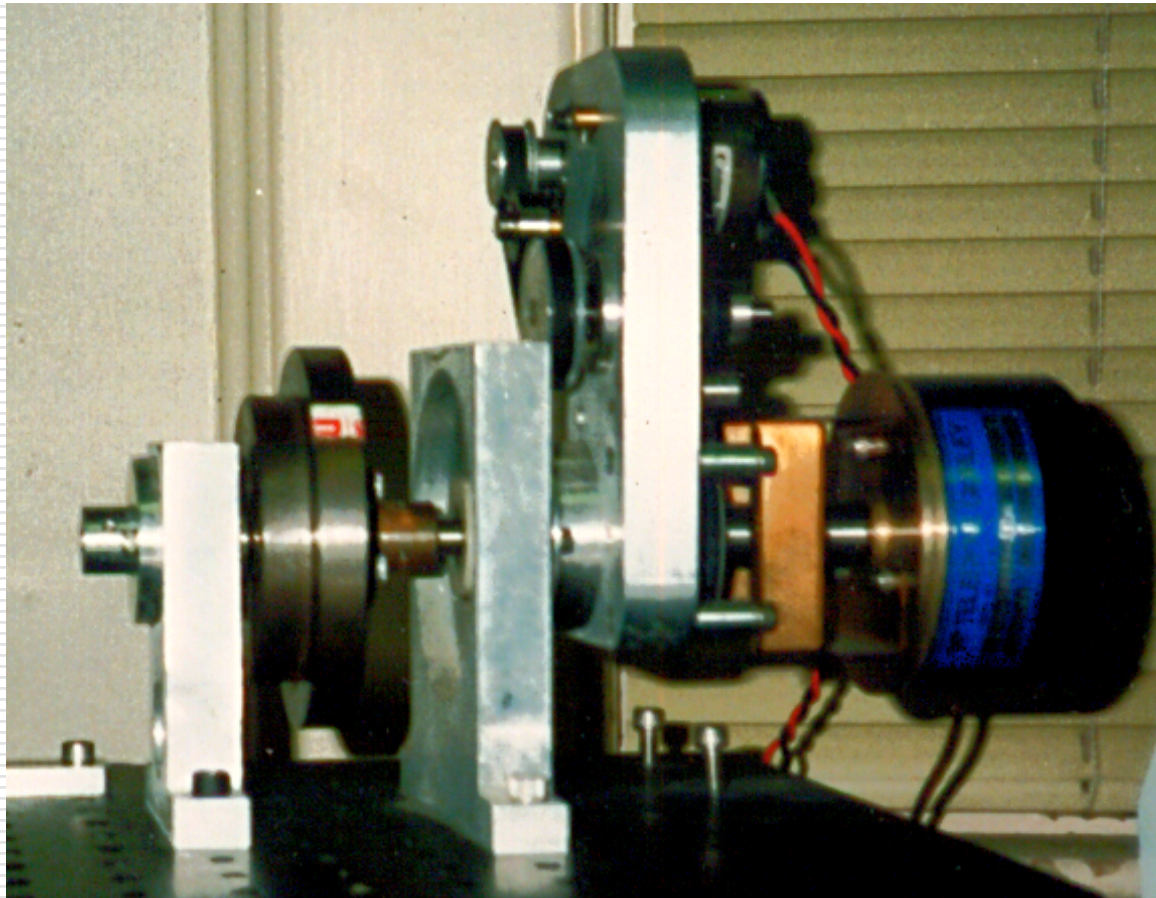
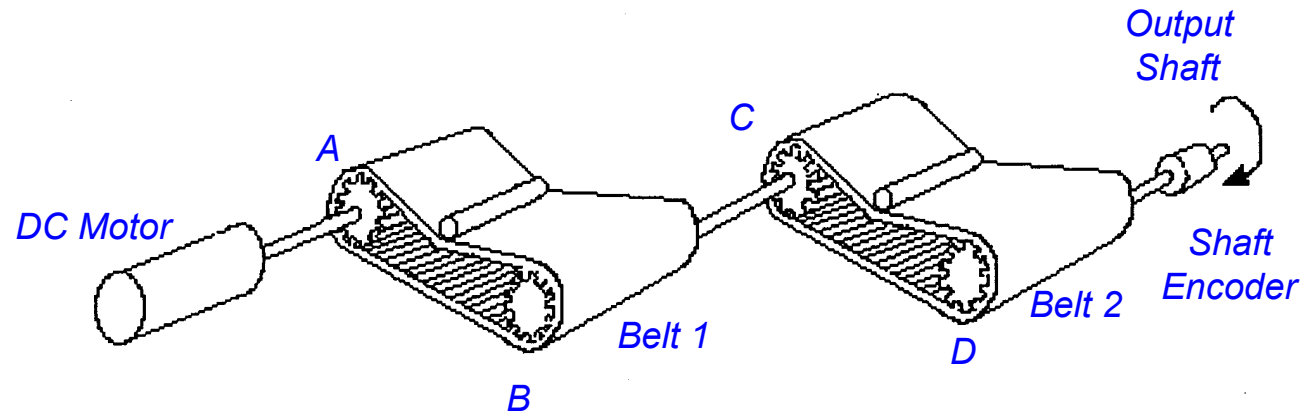


# Constant Velocity Double Reduction Time Belt Drive System, Copy Machine

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# TIMING BELT SERVO HARDWARE CONFIGURATION



Periodic errors at

Once around of input shaft, idler shaft, output shaft, and harmonics  
due to axis misalignment and machining inaccuracies

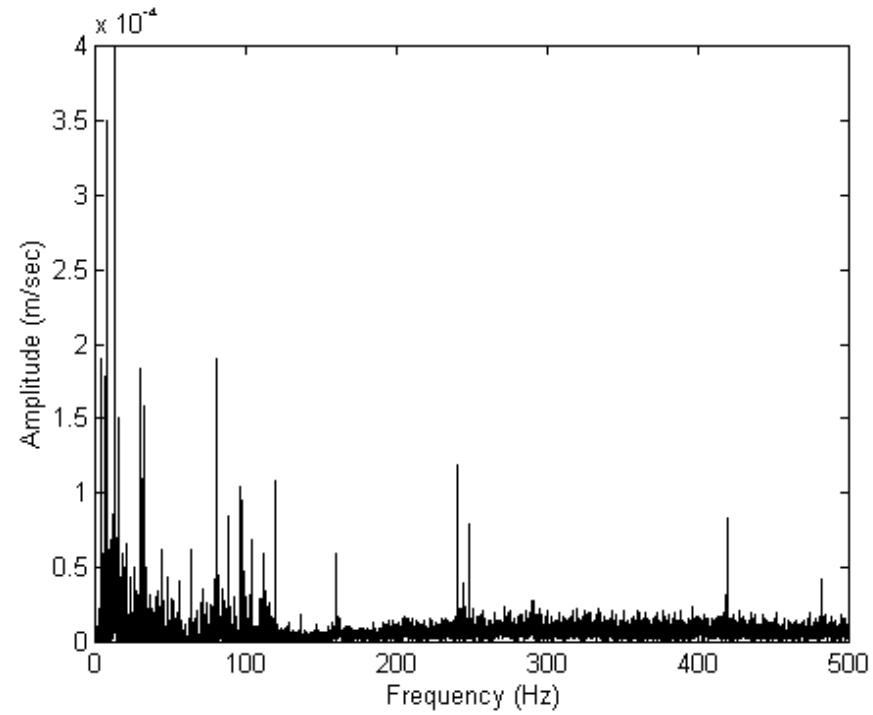
Once around of the input belt, output belt and harmonics

Including tooth meshing frequencies

References 24,25,26

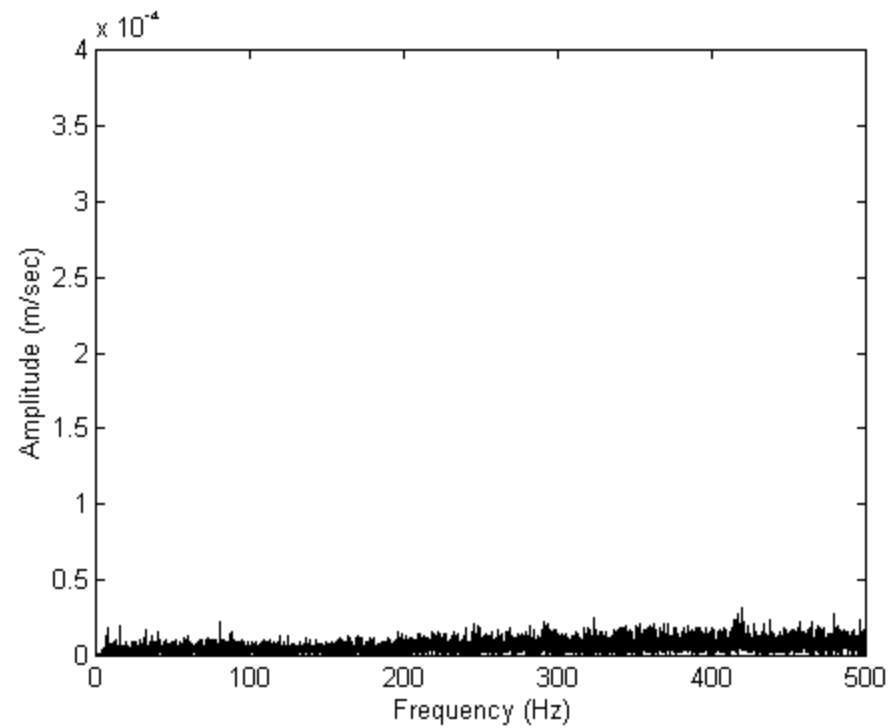
# **FREQUENCY SPECTRUM OF OUTPUT VELOCITY ERRORS**

## **Timing belt drive system**



**References 24,25,26**

**FREQUENCY SPECTRUM OF VELOCITY ERRORS**  
**Repetition 50**  
**Repetitive control law: Batch update phase cancellation RC**



**Reference 1,25**