Design and Analysis of the Silent Chains for Engine Timing Systems

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ABSTRACT

In recent years, the silent chain is used extensivly in motive force is transmitted, especially use it in car engine. It has produced the noise and reduced much more compared with the sub roller chain of traditional rolling, so there is this name. This paper with roller chain and sprocket to have in year when the engine department, design one period of festival from 8mm chain slice , initiative sprocket (Crankshaft Sprocket) and passive sprocket (Camshaft Sprocket) in the contact-type quite chain. Utilizing differential geometry , coordinate system method, kinematics , dynamics , and conjugating surfaces meshing theory principle is created into a sprocket outline, write the computer procedure . Is it change matrix and meshing equation preface is it appear with chain crop rotation chain outline of slice , conjugation of sport to create to utilize and then. Utilize above-mentioned methods to design the outline appearances of the sprocket and chain scene. Later made the sprocket and one scene of meshing analysis of chain. In order to find out about its sport situation. Analyse finally that scene receives strength situation in the chain.

Keywords : silent chain,meshing

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