

## عنوان مقاله:

Investigation and analysis of rupture stresses of timing belts made of CR material in Pride and Xu7 engines with different numbers of tensile members

## محل انتشار:

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## خلاصه مقاله:

In cars with internal combustion engines, timing belt connects the crankshaft to the camshaft. In internal combustion engines, by connecting the crank shaft to the cam, the timing belt is responsible for synchronizing their rotation. As a result, the poppet valves are opened and closed once at the right time in each complete crank shaft rotation cycle. The belt is made of rubber, and there are fiber strands in it that make it stronger. Also, the belt is covered with teeth to prevent it from slipping. The timing belt will wear out over time. If the timing belt fails, the valves and pistons move irregularly and collide. These collisions can bend the valves, damage the cylinder head or cam, and also, damage the piston and the cylinder wall. In this paper, we investigate the rupture stresses of timing belts made of CR rubber .determined by simulation and finite element analysis using the Abaqus software, and the results are presented

## کلمات کلیدی:

timing belt, CR rubber, tensile element, finite element, simulation with Abaqus

## لینک ثابت مقاله در پایگاه سیویلیکا:

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