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A Project report entitled

"ANALYSIS OF FATIGUE AND DYNAMIC LOAD IN BENT BAR FLEXIBLE COUPLING"

A Project report submitted
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Under the Guidance of

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ABSTRACT

Mechanisms that transfer rotary motion from an input shaft to an output shaft normally require gear lobes, couplings, associated with each shaft end, consequently, include the disadvantages associated with the use of gears and couplings in general. Such disadvantages include small contact ratio and impact load in gears and there is a substantial amount of energy loss due to friction in coupling. Accordingly, there is a need for an improved mechanism for transmitting rotary motion between two intersecting (but angular offset) shafts all without the employment of gears or the reliance upon friction to transfer rotational movement from the input shaft to the output shaft. The present invention satisfies the aforenoted needs by providing a gearless transmission that operates using the mechanism of rotary, sliding and kinematic chain principle.

This paper is part of a study investigating the Gearless power transmission for intersecting shafts. Gearless Transmission which is compact and portable equipment, which is skillful and is having something practice in the transmitting power between intersecting shafts without any gears being used. This type of coupling would be used to transmit a drive between intersecting, but angular offset shafts. Couplings offer large shaft misalignment capabilities and constant angular velocity combined with smoother operation. The acting forces within the coupling can be precisely calculated, assuring a sound coupling design which is especially important for heavy-duty applications.