

COMPARISON OF THE CONTINUOUSLY VARIABLE TRANSMISSION SYSTEMS for VEHICLES

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There, are various types of transmission systems used in machines to obtain the speed ratios. But these systems could provide single or limited speed ratios. In continuously variable transmission systems (CVTS) large number of ratios are obtained or continuous variation of ratios from one value to the other is available. The CVT can be used in industrial devices, machines, automobiles, agricultural machineries, material handling equipment's etc. The advantages of CVTS are fuel economy, continuous variation of speed, simple construction and less manufacturing cost etc. The various types of CVTS are Torque Convertors, Friction drives, and Belt drives. The paper discusses the comparative evaluation of these CVTS. The belt type CVT is found to be suitable and various design factors are discussed. The limitation of flat belt CVT and research areas for further development are discussed. It concludes that CVTS are suitable in comparison to manual transmissions.