

A Project Report on

DESIGN AND DEVELOPMENT OF ZERO RADIUS VEHICLE
(Sponsored by KSCST)

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ABSTRACT

A zero radius vehicle (ZRV) is a vehicle which can rotate about its own axis, or in other words having the radius of turning equal to zero. When manoeuvring around city streets, the ZRV is light, agile and easy to handle. Plus, it has TRUE ZERO RADIUS TURNING. With excellent front and rear visibility we have a vehicle that ensures stress-free driving even in the most narrow city streets.

A zero radius turning vehicle can be scaled to any size and can be used in any field of need, industrial, domestic or military.

Various steering mechanisms have been listed and pros and cons of each have been discussed. Among the existing steering mechanisms, it was found that differential steering is most suitable for ZRV. Design characteristics and fabrication methodology has been finalised.

Design and development of a new vehicle having zero radius of turning will be presented.