

## Disc Brake Minimum Thickness

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For part numbers/make & models: DSKs

Every Apec disc manufactured is produced in line with the original disc parameters. The Minimum Thickness of a Brake Disc is determined by a Motor Vehicle Manufacturer during the design of each particular vehicle and it defines the thickness at which a Brake disc must be replaced because it can no longer deliver the braking performance required of it. When the manufacturer designs the brake disc other factors are taken into consideration such as heat dissipation and calliper and pad retention. As the thickness of a disc is reduced, so does the capacity to absorb and dissipate heat, and if the pads are also worn to a minimum thickness the calliper can over extend thus giving the potential of a lack of support and brake drag or lock, which then builds up heat in the system, which in turn could cause brake fluid evaporation and ultimately brake failure.

The Brake Disc Minimum thickness is vitally important to road safety, as indeed is the minimum tyre tread depth, exceeding either of these limits can negate the benefit of good brakes, a braking system which is not operating at its optimum can render useless a vehicle's other active safety systems.

### **The minimum thickness is the prescribed wear limit for replacement of a disc.**

Discs below this limit are prone to:-

- 1) Steering wheel wobble
- 2) Brake fade
- 3) Long brake pedal travel due to thermal and/or mechanical overload
- 4) Brake disc anneals
- 5) Structural transformation
- 6) Friction ring can break away from the hub

