

KES

Method of Measuring Case
Depth of Steel Hardened by
Flame or Induction Hardening
Process

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1. Scope of Application

This standard determines the Method of Measuring Case Depth of Steel Hardened by Flame or Induction Hardening Process (Case Depth from now on).

2. Test Instruments

- Beaker’s Hardness Tester
- Lockwell Hardness Tester

3. Terminology

Terms used for this standard mean as follow.

(1) Effective Case Depth

The distance of quenched case as it is or quenched and tempered case from the surface to the limit hardness regulated on table 1

The limit hardness can be set according to its usage other than ones on table 1.

Table 1

Amount of C in steel(1) (%)	Beaker’s hardness (Hv)	Lockwell Hardness (HgC)
More than 0.23 less than 0.33	350	36
More than 0.33 less than 0.43	400	41
More than 0.43 less than 0.53	450	45
More than 0.53	500	49

Note (¹) The amount of C in steel shall be regulated by steel to be measured. It shall be the center value.

(2) Total Case Depth

The vertical distance from the surface of case to the point where physical or chemical characteristic cannot be distinguished between the case and micro