

# 免調質鋼棒的新選擇—KNM-1 鋼棒

A New Selection of No-Quenching and Tempering Steel Bars—KNM-1 Steel Bars

省製程！節能！更快交期！

Process Saving! Energy Saving! Quickly Delivery!

KNM-1 鋼棒具備高強度與良好切削性，可直接切削加工製成零件，不須再作調質(硬化)處哩，免除後續精加工、矯正等製程，可維持零件的精密度，達到省製程、節能及縮短交期的優點。

KNM-1 steel bars have high strength and good machinability, and can be directly machining into parts without further quenching and tempering (hardening), eliminating the need for subsequent finishing, straightening and other processes, maintaining the precision of parts, achieving advantages of process saving、energy saving and shortened lead time.

Chemical Composition(%) C : 0.40 ~ 0.48、Mn : 1.35 ~ 1.65、P : max 0.030、S : 0.23 ~ 0.33

機械性質：

硬度	30HRC 以上
抗拉強度	99kg/mm <sup>2</sup> 以上
降伏強度	88kg/mm <sup>2</sup> 以上
伸長率	6% 以上

Mechanical Properties :

Hardness	min 30HRC
Tensile Strength	min 99kg/mm <sup>2</sup>
Yield Strength	min 88kg/mm <sup>2</sup>
Elongation	min 6%



Fig.1(a)KNM-1



Fig.1(b)1215



Fig.1(c)S45C

Fig.1 (a)~(c)各鋼種切削屑形狀比較，(a)KNM-1 與(b)1215 為佳；(c)S45C 切屑會纏繞車刀。  
(a)~(c)Comparison of chip shapes of various steels, shapes of (a)KNM-1 & (b)1215 are good; (c) Chips can wrap around the knife.

Tensile strength of CD Bars & KNM-1

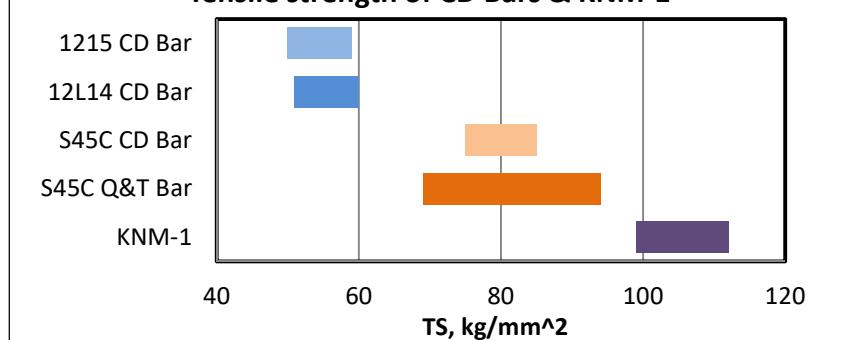


Fig.2 KNM-1 與冷抽鋼棒之抗拉強度比較  
Comparison of tensile strength of CD bars & KNM-1