

TECHNICAL SHEET

1 Comparison Standards

W.Nr	DIN	JIS equivalent	AISI/SAE	AFNOR	BS	UNI
			Patented			

2 Chemical Composition

C	Si	Mn	P (max)	S (max)	Ni	Cr	Mo	W	V	Supply Condition	Supply Hardness (HB)
				Patented						Annealed	240

3 Main Characteristics and Applications

QCM8 is a premium cold work die steel that offers an exceptional balance of high hardness and toughness. Compared to traditional cold work die steels like SKD11, QCM8 demonstrates superior performance in terms of hardness, toughness, fatigue strength and wear resistance. Its microstructure is carefully controlled to achieve these exceptional properties, resulting in significantly extended die life.

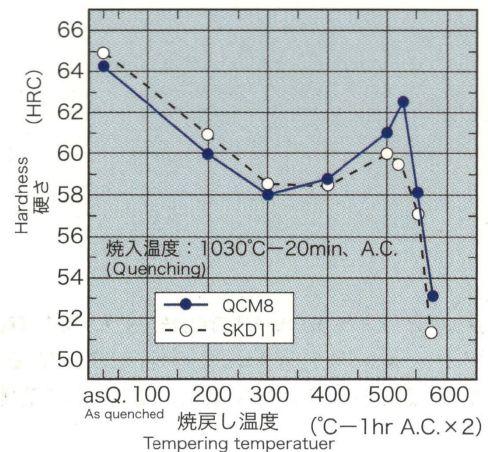
Applications:

- Blanking and Fine Blanking
- Forming and Powder pressing
- Thread rolling and Coining
- Drawing and deep drawing
- Cold forging and Cold extrusion
- Shearing

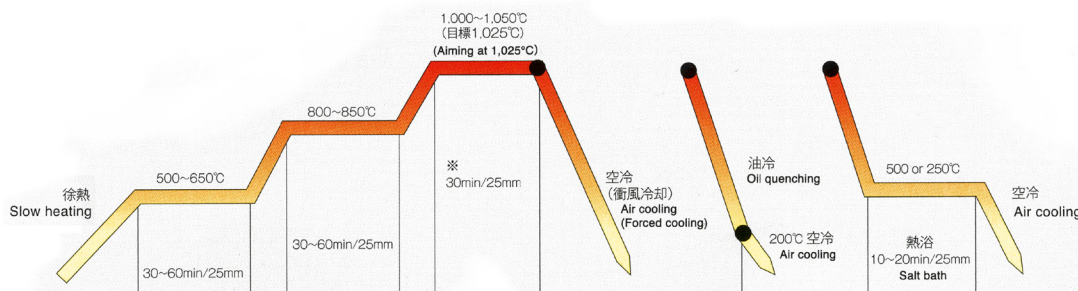
6 Heat Treatment

4 Production Route

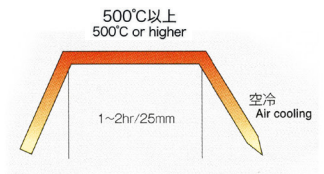
- EAF - LF - VD - Forging / Rolling + Annealing
 • Machining if Required



Quenching



Tempering



■ 耐摩耗性重視 Supreme wear resistance
500~530°C (60~63HRC)

■ 韌性重視 Supreme toughness
540~560°C (55~60HRC)

※: 加熱保持時間 (Holding time)

雰囲気炉 (Atmosphere-controlled furnace)30min/25mm
 ソルトバス (Salt bath)30min/25mm (浸漬時間 Immersion)
 真空炉 (Vacuum furnace)40~60min/mm

