

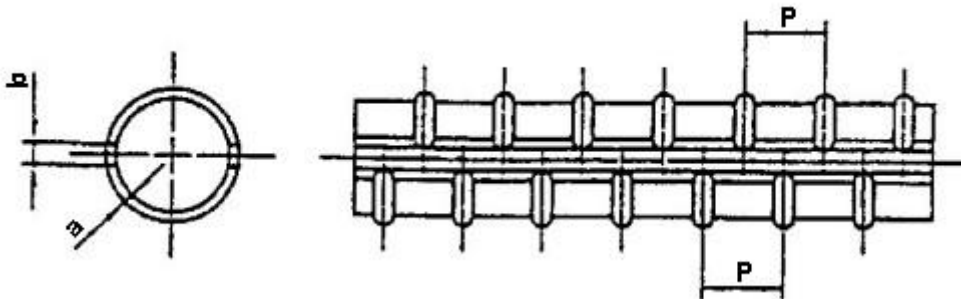
鋼筋 Rebar

[可產製尺寸 Available Sizes](#) [可產製鋼種 Available Grades](#) [化學成份 Chemical Requirements](#)

[機械性質 Mechanical Requirements](#) [產品用途 Products Use](#)

可產製尺寸 Available Sizes

	光面鋼筋 Round Bar		竹節鋼筋 Deformed Bar	
	直棒 Straight Form	捲狀 Coil Form	直棒 Straight Form	捲狀 Coil Form
尺寸 Size	9-100mm	13-42mm	D10-D57	D13-D36
盤元內徑 Inner Diameter	-	950mm	-	950mm
盤元外徑 Outer Diameter	-	1,250mm	-	1,250mm
直棒長度 Length	4-18m	-	4-18m	-
盤捲方向 Coiling Direction	-	順時針方向 Clockwise	-	順時針方向 Clockwise



可產製鋼種 Available Grades

分類 Division	規格. Spec.	鋼種記號 Symbol
光面鋼筋 Round Bar	CNS 560	SR240,SR300
	JIS G3112	SR235,SR295
竹節鋼筋 Deformed Bar	CNS 560	SD280,SD280W,SD420,SD420W,SD490
	JIS G3112	SD295A,SD295B,SD345,SD390,SD490
	ASTM A615	Gr.40,Gr.60,Gr.75
	ASTM A706	Gr.60

化學成份 Chemical Requirements

分類 Spec.	鋼種記號 Symbol	化學成份 Chemical Composition (%)					
		C	Mn	P	S	Si	C.E.
ASTM A615	GR.40	-	-	0.060max	-	-	-
	GR.60	-	-	0.060max	-	-	-
	GR.75	-	-	0.060max	-	-	-
ASTM A706	GR.60	0.30max	1.50max	0.035max	0.045max	0.50max	0.55max
CNS 560	SR240	-	-	0.060max	0.060max	-	-
	SR300	-	-	0.060max	0.060max	-	-
	SD280	-	-	0.060max	0.060max	-	-
	SD420	0.32max	1.80max	0.050max	0.050max	0.50max	0.57max
	SD490	0.32max	1.80max	0.050max	0.050max	0.50max	0.57max
	SD280W (熱軋 Hot Rolled)	0.30max	1.50max	0.040max	0.040max	0.50max	0.55max
	SD420W (熱軋 Hot Rolled)	0.30max	1.50max	0.040max	0.040max	0.50max	0.55max
	SD280W (熱處理 Heat Treatment)	0.22max	1.60max	0.040max	0.040max	0.60max	0.50max
SD420W (熱處理 Heat Treatment)	0.22max	1.60max	0.040max	0.040max	0.60max	0.50max	
JIS G3112	SR235	-	-	0.050max	0.050max	-	-
	SR295	-	-	0.050max	0.050max	-	-
	SD295A	-	-	0.050max	0.050max	-	-
	SD295B	0.27max	1.50max	0.040max	0.040max	0.55max	-
	SD345	0.27max	1.60max	0.040max	0.040max	0.55max	0.50max
	SD390	0.29max	1.80max	0.040max	0.040max	0.55max	0.55max
	SD490	0.32max	1.80max	0.040max	0.040max	0.55max	0.60max

CE 值計算公式 ASTM 及 CNS 為 $CE\%=(C + Mn/6 + Cu/40 + Ni/20 + Cr/10 - Mo/50 - V/10)\%$

JIS 為 $CE\%=(C + Mn/6)\%$

機械性質 Mechanical Requirements

CNS							
鋼種記號 Symbol	降伏強度 Yield Strength (Y.S) N/mm ²	抗拉強度 Tensile Strength (T.S) N/mm ²	抗拉強度 /降伏強度 TS / YS	試片 Test Piece	伸長率 (%) Elongation	彎曲特性 Bend Property	
						角度 Angle	直徑 Diameter
SR240	240min	380min	-	NO.2	20min	180°	3D
				NO.14A	23min		
SR300	300min	480min	-	NO.2	16min	180°	4D
				NO.14A	19min		
SD280	280min	420min	-	NO.2	14min	180°	4D
				NO.14A	17min		
SD280W	280~380	420min	1.25min	NO.2	14min	180°	4D
				NO.14A	17min		
SD420	420~540	620min	-	NO.2	12min	180°	D10-D16 5D Over D16 6D
				NO.14A	13min		
SD420W	420~540	550min	1.25min	NO.2	12min	180°	D10-D16 3D D19-D25 4D Over D25 6D
				NO.14A	13min		
SD490	490~625	620min	-	NO.2	12min	90°	D10-D25 5D Over D25 6D
				NO.14A	13min		

ASTM							
鋼種記號 Symbol	降伏強度(Y.S) Yield Strength (Y.S)psi(kg/mm ²)	抗拉強度 Tensile Strength (T.S)psi (MPa)	抗拉強度 / 降伏強度 TS / YS	稱號 Bar no d	伸長率(%) Elongation g.l.=8in	彎曲特性 Bend Property	
						角度 Angle	直徑 Diameter
A615 GR.40	40,000min (280min)	60,000min (420min)	-	3	11min	180°	3.5 d
				4,5	12min	180°	3.5 d
				6	12min	180°	5 d
A615 GR.60	60,000 (420min)	90,000 (620min)	-	3,4,5	9min	180°	3.5 d
				6	9min	180°	5 d
				7,8	8min	180°	5 d
				9,10,11	7min	180°	7 d
				14,18	7min	90°	9 d

A615 GR.75	75,000 (520min)	100,000 (690min)	-	3,4,5,6,7,8	7min	180°	5 d
				9,10,11	6min	180°	7 d
				14,18	6min	90°	9 d
A706 GR.60	60,000-78,000(420-540)	80,000 (550min)	1.25min	3,4,5	14min	180°	3 d
				6,	14min	180°	4 d
				7,8	12min	180°	4 d
				9,10,11	12min	180°	6 d
				14,18	10min	180°	8 d

產品用途 Products Use

鋼筋：建築構造、隧道工程、橋樑等鋼筋混凝土。

Rebar : use for concrete reinforcement in civil construction, tunnel construction and bridges.