2.新產品介紹 (New product introduction)

2.1 型鋼CNS SM570MB (高強度耐震結構用鋼 Seismic design of high strength structural steel)

CNS 2947已於112年7月新增SM570MB鋼種,為同時具備高強度與耐震性能之高功能結構鋼材,其將一般型SM570融合SN鋼材規格,增訂低磷硫、低碳當量、窄降伏範圍及低降伏比。其降伏強度較SN490B提高29%,且強度規格不隨厚度改變,搭配軋延型鋼節省分切與銲接製程,達到縮短工時之優勢,適用於大樓結構、廠房及車架等用途。

SM570MB has been added in CNS 2947 in July 2023. This highperformance structural steel combines high strength and seismic resistance by integrating general SM570 with SN steel specifications, featuring low phosphorus and sulfur content, low carbon equivalent, narrow yield strength range, and low yield ratio.

Its yield strength is 29% higher than SN490B, and its strength specifications do not change with thickness. Using hot rolled H sections reduces cutting and welding processes can shorten construction time. This product is suitable for building structures, factories, and trailers.

2.2 窄板CNS SM570MB/MC(高強度耐震結構用鋼 Seismic design of high strength structural steel)

CNS 2947 已於 112 年 7 月新增 SM570MB、SM570MC鋼種,以增加一般型SM570之耐震特性,關鍵為融合SN材精神,增訂窄降伏強度、降伏比上限、厚度方向斷面縮減率、超音波檢測,以符合耐震韌性需求,並管制碳當量提升銲接性能。適用於非大入熱量銲接之高強度耐震梁、柱結構。

SM570MB and SM570MC have been added in CNS 2947 in July 2023, to enhance the seismic properties of general SM570. The key is adding specifications for narrow yield strength, upper limit of yield ratio, through-thickness contraction, and ultrasonic testing to meet seismic performance. It also controls the carbon equivalent to improve welding performance. These grades are suitable for highstrength seismic beams and column structures with ordinary heat input welding process.

2.3 型鋼/窄板 CNS 13812 SN490YB/YC (建築結構用鋼 Rolled steel of building structure)

SN490B/C在板厚超過40mm時,降伏強度規格下限減小至295 MPa,而SN490YB/YC 降伏強度則仍維持325~445 MPa,有利於結構設計與減少用鋼量。適用於耐震建築結構。

The yield strength of SN490B/C reduces to 295 MPa with thickness over 40mm, however SN490YB / YC remains at the same level (325 \sim 445 MPa) . It's benificial to simplfy structure design and lower steel amount. This product is suitable for the aseismic building structure.

2.4 軋槽花紋型鋼 (Beveled checkered H-sections)

透過特殊軋延技術於花紋型鋼翼板產生斜角,可節省覆工板組立製造過程所需的開槽時間與成本,並達到部分滲透銲接之強度效益。適用於組立覆工板,並應用於大型開挖工程所需鋪設之施工構台及臨時道路。可搭配CNS SM570鋼種,提升承重能力。近期中龍花紋型鋼通過CNS SN400YB/SN400B、SN490YB/SN490B鋼種之驗證登錄,亦可提供選用。

The beveled flanges of checkered H-sections are manufactured using a specific edge rolling technique. This product not only saves the cost and time of the welding process for steel decks but also enhances the bonding strength of the weldment. It is used to assemble steel decks for temporary pathways in open excavation projects. The load-bearing capacity of these steel decks can be enhanced by choosing CNS SM570 steel grades. Recently, DSC has passed the product certification registration for SN400YB/SN400B and SN490YB/SN490B steel grades of checkered H-sections, which are now available for selection.

2.5 型鋼新開發尺寸(New developing size of H-sections)

建議加入 950X300系列、850X300系列、700X350系列 詳細尺寸資訊請參照第50頁。