

類 科：輪機技術

科 目：輔機

考試時間：2 小時

座號：_____

※注意：(一)禁止使用電子計算器。

(二)不必抄題，作答時請將試題題號及答案依照順序寫在試卷上，於本試題上作答者，不予計分。

- 一、請繪圖說明「自力式減壓閥 (Self-reducing valve)」之構造與工作原理。(20 分)
- 二、管路彎製後之失圓程度如何計算？請繪圖說明之。另外，亦請說明管子經彎製完成後之管路的表面處理方式。(20 分)
- 三、請敘述「絞纜機 (Winch)」之基本功能。絞纜機之型式可分為水平式與垂直式，其使用之場合與時機為何？(20 分)
- 四、請說明冷凍系統中「油分離器 (Oil separator)」之裝設位置及目的為何？繪圖說明三種常見油分離器之構造。(20 分)
- 五、請將下列英文譯成中文。(20 分)

To ensure trouble-free operation of water-tube boilers the feed water must be of high quality with a minimal solid content and an absence of dissolved gases. Solids are deposited on the inside surfaces of steam generating tubes, as the water boils off, and the scale so formed causes overheating and failure. Dissolved gases tend to promote corrosion. Distilled water used as boiler feed has a great affinity for gases in the atmosphere. Chemical treatment is aimed at preventing corrosion problems but the boiler closed feed system must play its part in maintaining minimal contact between feed water and air at every stage and in promoting the dissociation and removal of any air or other gases.