TYPICAL OVERALL HEAT TRANSFER COEFFICIENTS (U - VALUES) $U [W/m^2C]$ Air Cooled Exchangers **Process Fluid** Water 300 - 450 300 - 700 Light organics Heavy organics 50 - 150Gases 50 - 300 Condensing hydrocarbons 300 - 600 U [W/m²C] Coil **Pool** 500 - 1000 Steam Dilute aqueouos solutions Steam 200 - 300 Light oils Steam Heavy oils 70 - 150 Water 200 - 500 Aqueouos solutions

Water

Water

Water

Vessel

Light organics

Light organics

Light oils

Heavy oils

Dilute aqueouos solutions

Dilute aqueouos solutions

Dilute aqueouos solutions

100 - 150

800 - 1500

300 - 500

200 - 400

400 - 700 200 - 300

500 - 700

250 - 500

200 - 500

200 - 300

U [W/m²C]

Light oils

Light oils

Jacket

Steam

Steam

Water

Water

Aqueouos solutions

Steam

Steam Steam

Immersed coils **Natural circulation**

Agitated

Jacketed vessels