

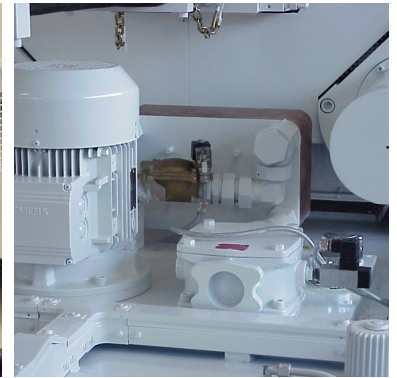
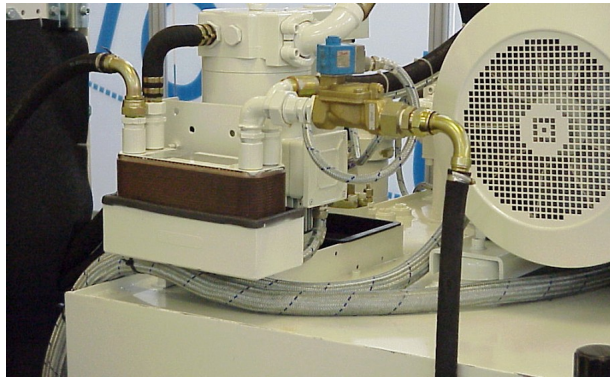
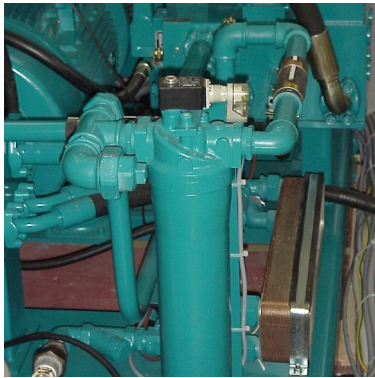
## Scambiatori di calore a piastre

# T PLATE B OIL

Scambiatori di calore a piastre saldobrasati per applicazioni oleodinamiche



## Scambiatori acqua olio



### T-PLATE B OIL

Le performance e l'affidabilità dello scambiatore di raffreddamento sono strategiche per il corretto funzionamento dei vostri macchinari, questa è la garanzia che danno gli scambiatori a piastre saldobrasate TEMPCO, espressamente progettati per le applicazioni oleodinamiche:

impianti di lubrificazione  
centraline oleodinamiche  
scambio olio/acqua

- Essenti da manutenzione in quanto senza guarnizioni
- Semplicità di installazione con ampia gamma di connessioni disponibili, SAE, filettate femmina, filettate maschio
- Possibilità di montaggio con prigionieri o piedi di supporto
- Resistenza ad alte pressione e temperatura, -200+300°C, f.v. +50 bar
- Design compatto e leggerezza
- Certificazioni, CE-PED, ASME U UM stamp, CSA, GOST R, KIWA, Lloyd's Register, UDT, SVGW, CSI

### T-PLATE B OIL

It is vital that the performance and reliability of a hydraulic oil cooler contribute to maximising the operating time of your equipment.

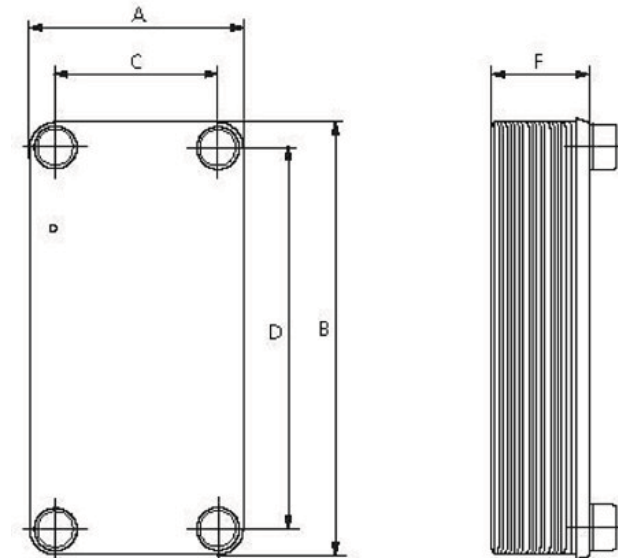
Brazed plate heat exchanger TEMPCO are studied specifically for Hydraulic and Lubricatin applications:  
hydraulic units  
lubricating systems  
water-oil thermal exchange

- Practically maintenance-free, due to lack of gaskets
- Simple assembly with individual connector design, SAE, Male/Female threat
- Highest operational reliability thanks to comprehensive quality assurance testing
- High resistance to pressure and temperature, -200+300°C, f.v. +50 bar
- Compact design combined with low weight
- Certifications, CE-PED, ASME U UM stamp, CSA, GOST R, KIWA, Lloyd's Register, UDT, SVGW, CSI

## BPHE Dimensions

Tempco Model	B (mm)	D (mm)	A (mm)	C (mm)	Weight (kg)	H1 Thickness (mm)	Heat Transfer Area (m <sup>2</sup> )/plate	Total Heat Transfer Area (m <sup>2</sup> )	Volume (liter/channel)	Total Volume (liter)
100	205	172	73	42	0.81+0.04x(N-1)	8+2.27x(N-1)	0.0120	(N-2)x0.0120	0.025	(N-1)x0.025
300	194	154	80	40	0.8+0.05N	10+2.25N	0.0117	(N-2)x0.0117	0.025	(N-1)x0.025
500	311	278	73	40	0.84+0.07N	10+2.3N	0.01946	(N-2)x0.01946	0.040	(N-1)x0.040
800	306	250	106	50	1.5+0.135N	10+2.4N	0.0255	(N-2)x0.0255	0.055	(N-1)x0.055
900	304	250	124	70	1.6+0.15N	10+2.4N	0.0300	(N-2)x0.0300	0.065	(N-1)x0.065
1500	522	466	106	50	3.1+0.22N	10+2.4N	0.0475	(N-2)x0.0475	0.095	(N-1)x0.095
1700	504	444	124	64	3.5+0.24N	10+2.4N	0.0533	(N-2)x0.0533	0.107	(N-1)x0.107
2100	613	519	186	92	7.12+0.41N	14+2.4N	0.09446	(N-2)x0.09446	0.206	(N-1)x0.206
2500	528	456	246	174	7.2+0.52N	11.5+2.4N	0.1099	(N-2)x0.10993	0.232	(N-1)x0.232
2700	527	430	245	148	8.5+0.49N	11.5+2.85N	0.1036	(N-2)x0.1036	0.289	(N-1)x0.289
2600	529	449	247	167	7.2+0.52N	13+2.4N	0.1103	(N-2)x0.1103	0.220	(N-1)x0.220

M, N = number of plates





## Standard connections

Tempco Model	Threaded Connections															Solder Connections										H2 Height (mm)	
	PT/NPT/GB Male							PT/NPT/GB Female								Ø 6.6 mm	Ø 9.73 mm	Ø 12.9 mm	16.15 mm	19.25 mm	Ø 22.36 mm	Ø 25.6 mm	Ø 28.8 mm	Ø 35.25 mm	Ø 41.5 mm		Ø 54.3 mm
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	3"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	2 1/2"	1/4"	3/8"	1/2"	5/8"	6/8"	7/8"	1"	1 1/8"	1 3/8"	1 5/8"		2 1/8"
100	•							•							•	•	•	•	•							20	
300	•	•						•	•						•	•	•	•	•	•						20	
500	•	•						•	•						•	•	•	•	•							20	
800	•	•	•					•	•	•					•	•	•	•	•	•	•	•				27	
900	•	•	•	•	•			•	•	•					•	•	•	•	•	•	•	•	•	•		27	
1500	•	•	•					•	•	•					•	•	•	•	•	•	•	•	•	•		27	
1700	•	•	•	•	•			•	•	•	•				•	•	•	•	•	•	•	•	•	•		27	
2100			•	•	•	•	•	•		•	•	•					•	•	•	•		•	•	•	•	27/42/54	
2500			•	•	•	•		•		•	•	•					•	•	•	•		•	•	•	•	27/42/54	
2700					•	•	•	•		•			•	•	•					•		•	•	•	•	27/42	
2600					•	•	•	•		•							•	•	•	•		•	•	•	•	27/42/54	

• Flange, SAE Connections are available

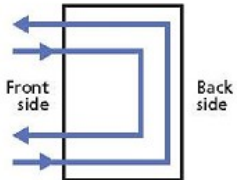
## Specification

Brazing material	Cu	Cu+	Nickel	Nickel+
Max. Test pressure (bar)	43	65	15	43
Max. Operation pressure (bar)	30	45	10	30
Operation Temp	- 195 ~ 200°C			

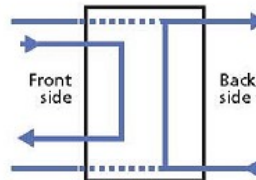
Material of plates	100	300	500	800	900	1500	1700	2500	2700	2600
SUS316 (Standard)	•	•	•	•	•	•	•	•	•	•
SUS304 (Optional)	•	•	•	•	•	•	•	•	•	•
SMO254 (Optional)				•		•		•		

Scambiatori di calore a piastre

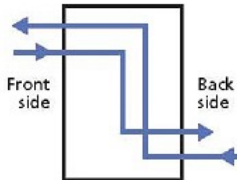
# T PLATE B OIL



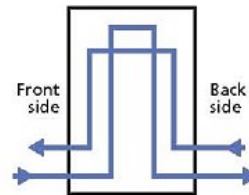
**Standard design model**  
 All standard applications  
 Flow control – Standard



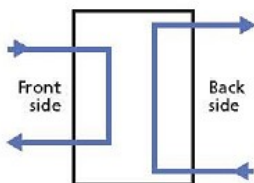
**Double-U Plus F3/F4 design**  
 Preferred variant for heat pumps with sensor connections  
 Flow control – Double-U



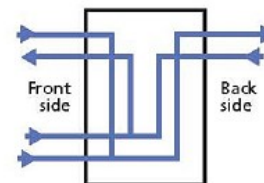
**Z circuit design**  
 Rearside connectors for easier installation  
 Flow control – Z circuit



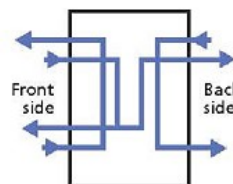
**Multi-Pass design**  
 Applications requiring higher thermal lengths  
 Flow control – Multi-path



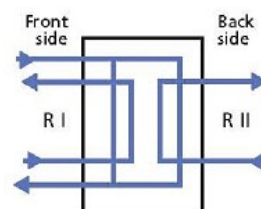
**Double-U design**  
 Rearside connectors for easier installation  
 Flow control – Double-U



**Two-Stage design**  
 Variant for two-stage heating of hot service water  
 Flow control – Two-stage service water heater



**Combination plate heat exchanger**  
 Variant for combined heating and service water heating  
 Flow control – combined heating and service water heating



**Two-circuit plate heat exchanger**  
 Variant for connecting two refrigerating circuits to improve partial load behaviour  
 Flow control – Twin-circuit  
 Refrigeration evaporator type I

# T PLATE B OIL

scambiatori di calore a piastre saldobrasati per olio  
schede tecniche di selezione rapida



## T PLATE B OIL

Tabelle dei fattori di correzione

Tabella dei fattori di correzione delle perdite di carico in funzione del tipo di Olio

Tipo di Olio (ISOVG)	22	30	46	68	100	150
Fattore di correzione moltiplicativo	0.38	0.62	1	1.52	2.4	3.4

*I diagrammi si basano su Olio ISO VG46*

*Moltiplicare la perdita di carico riferita all'Olio ISO VG46 per il fattore di correzione moltiplicativo corrispondente al tipo di Olio scelto.*

Tabella dei fattori di correzione della potenzialità resa in funzione del tipo di Olio

Tipo di Olio (ISOVG)	22	32	46	68	100	150
Fattore di correzione moltiplicativo	1.15	1.05	1	0.88	0.78	0.65

*I diagrammi si basano su Olio ISO VG46*

*Moltiplicare la perdita di carico riferita all'Olio ISO VG46 per il fattore di correzione moltiplicativo corrispondente al tipo di Olio scelto.*

Tabella dei fattori di correzione della potenza in funzione del rapporto Olio:Acqua

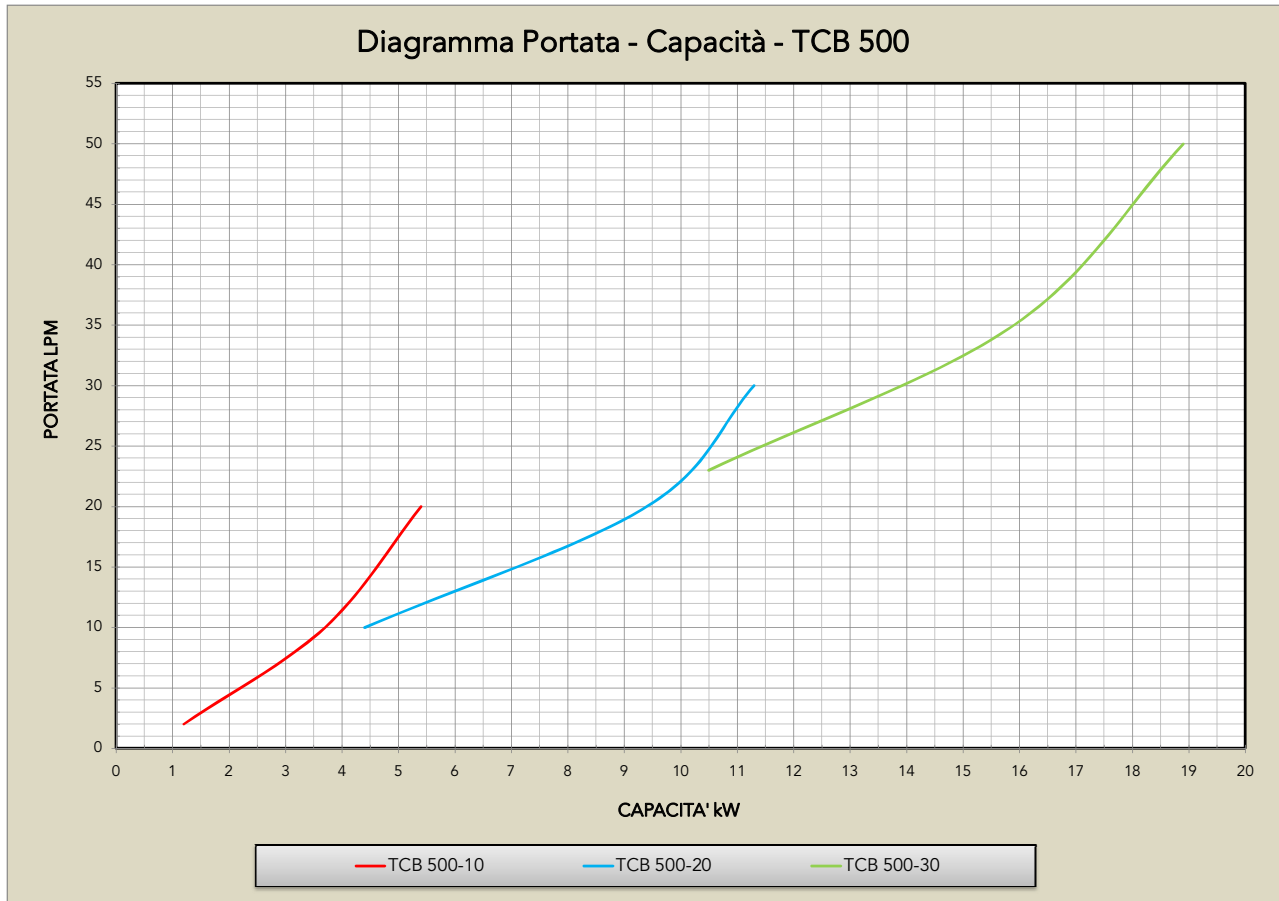
Rapporto Olio:Acqua	2:1	4:1	6:1
Coefficiente moltiplicativo kq	1	0.82	0.65

*I diagrammi si basano su un rapporto 2:1 (Olio:Acqua)*

*Moltiplicare la potenza riferita al rapporto 2:1 per il fattore di correzione moltiplicativo corrispondente al rapporto stabilito. Calcoli effettuati con Temperatura olio in uscita 50°C - acqua in entrata 25°C*

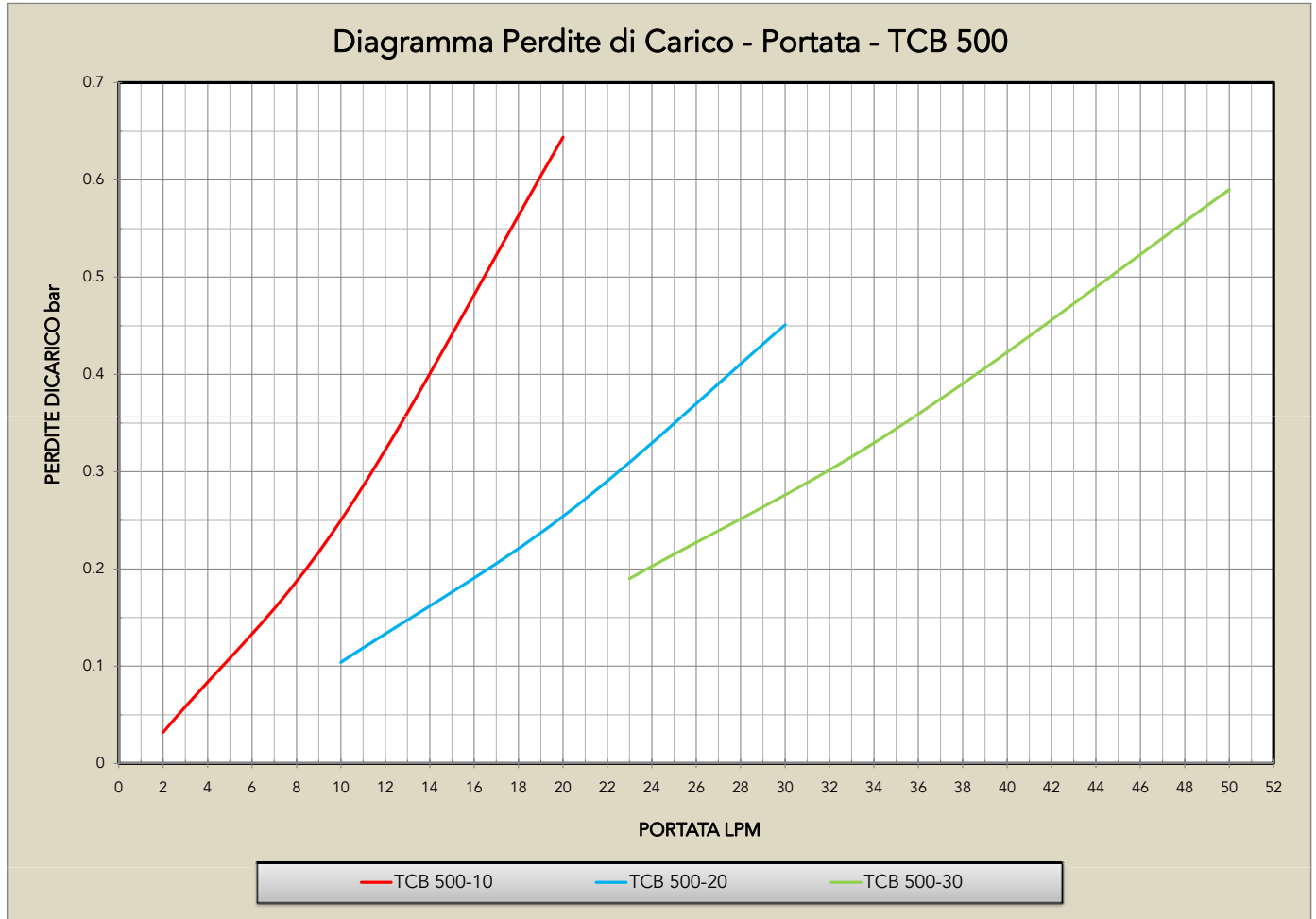
# T PLATE B OIL

Serie TCB 500



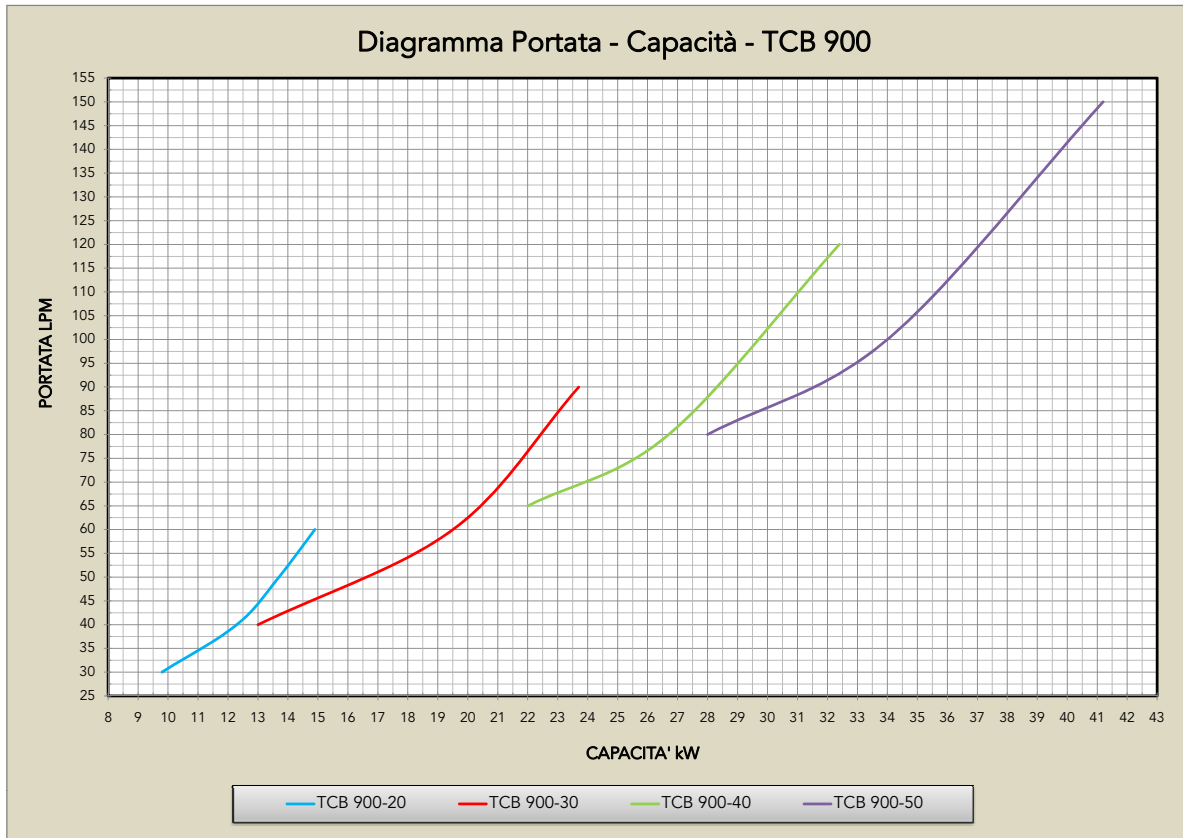
# T PLATE B OIL

Serie TCB 500



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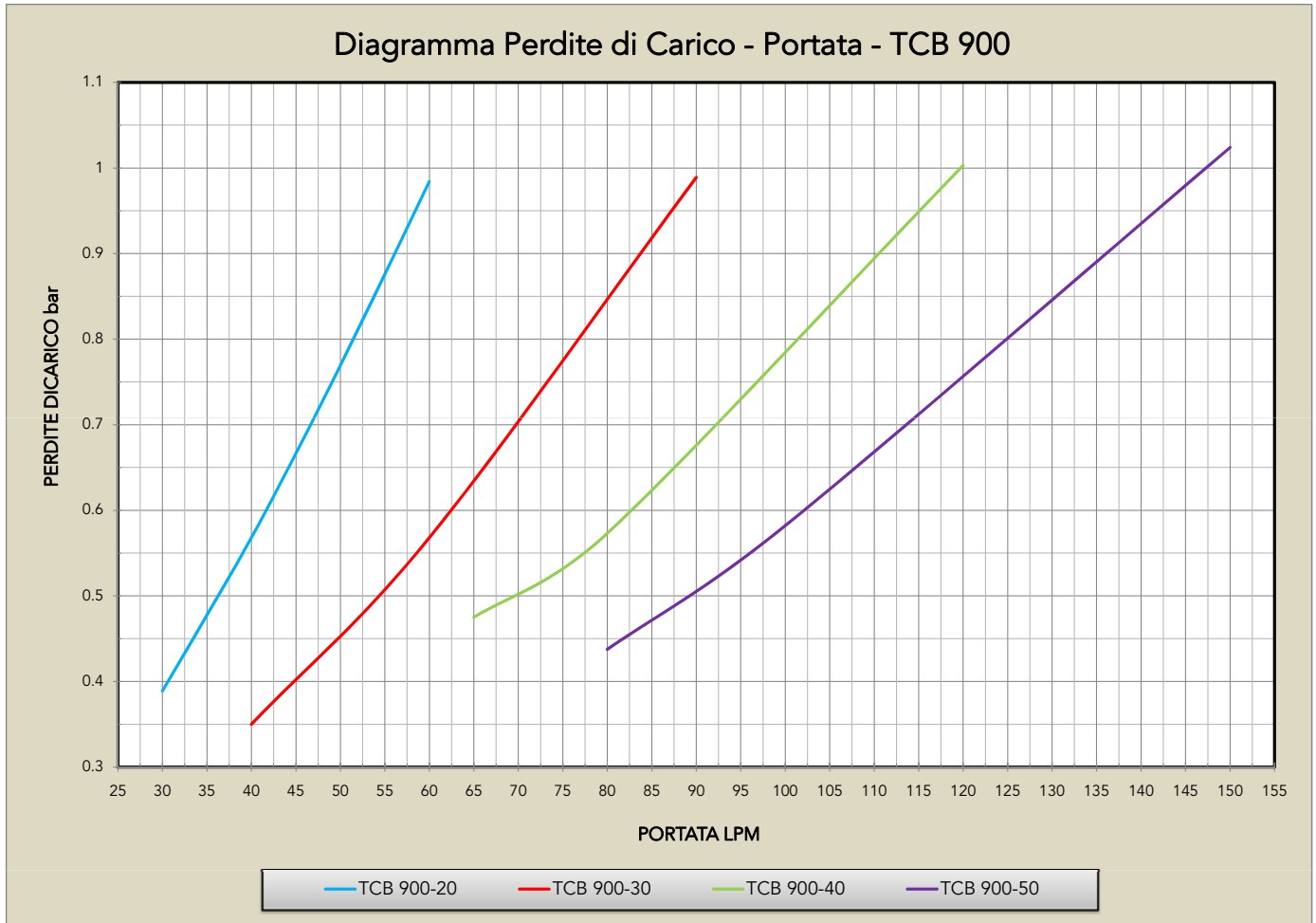
Serie TCB 900





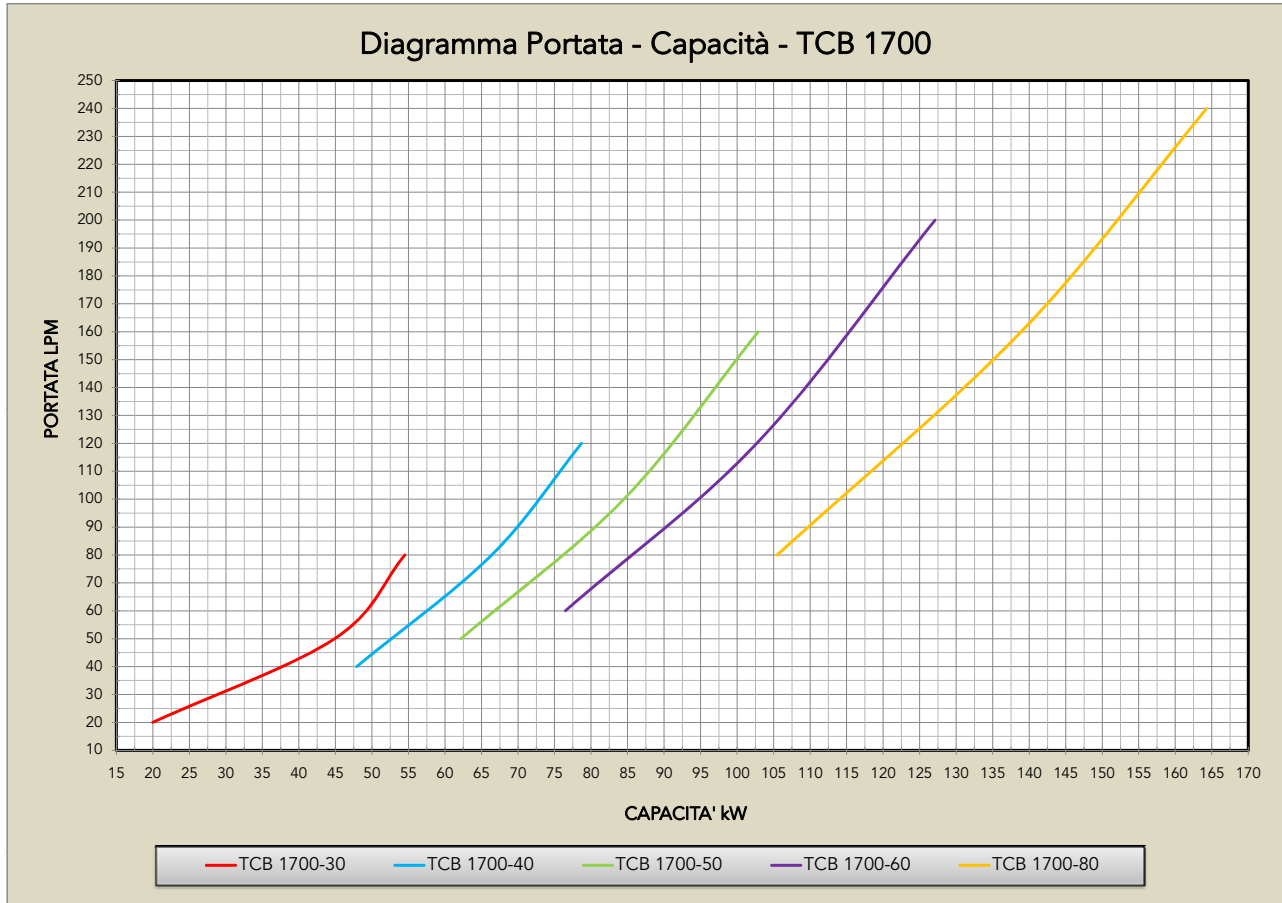
# T PLATE B OIL

Serie TCB 900



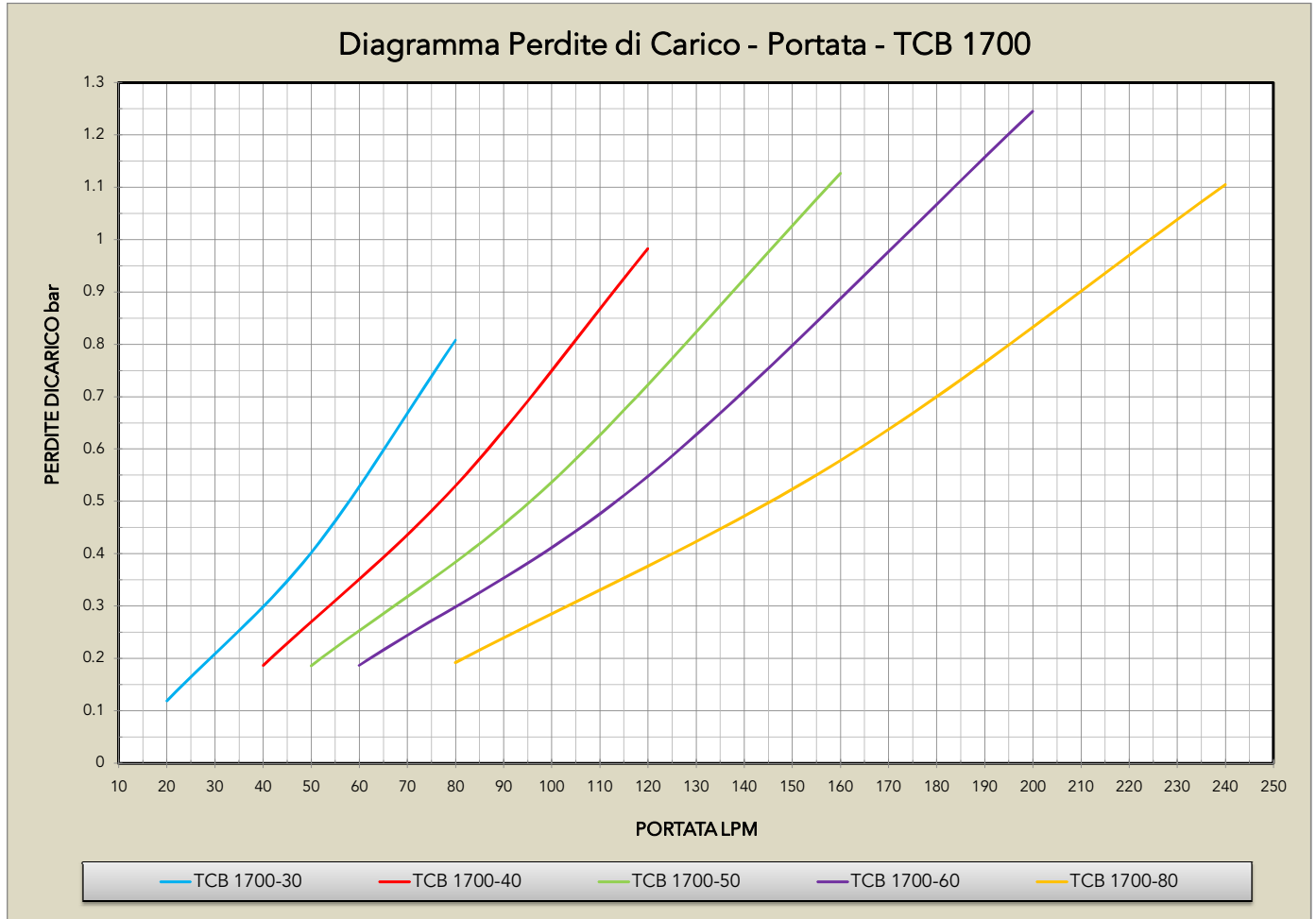
# T PLATE B OIL

Serie TCB 1700



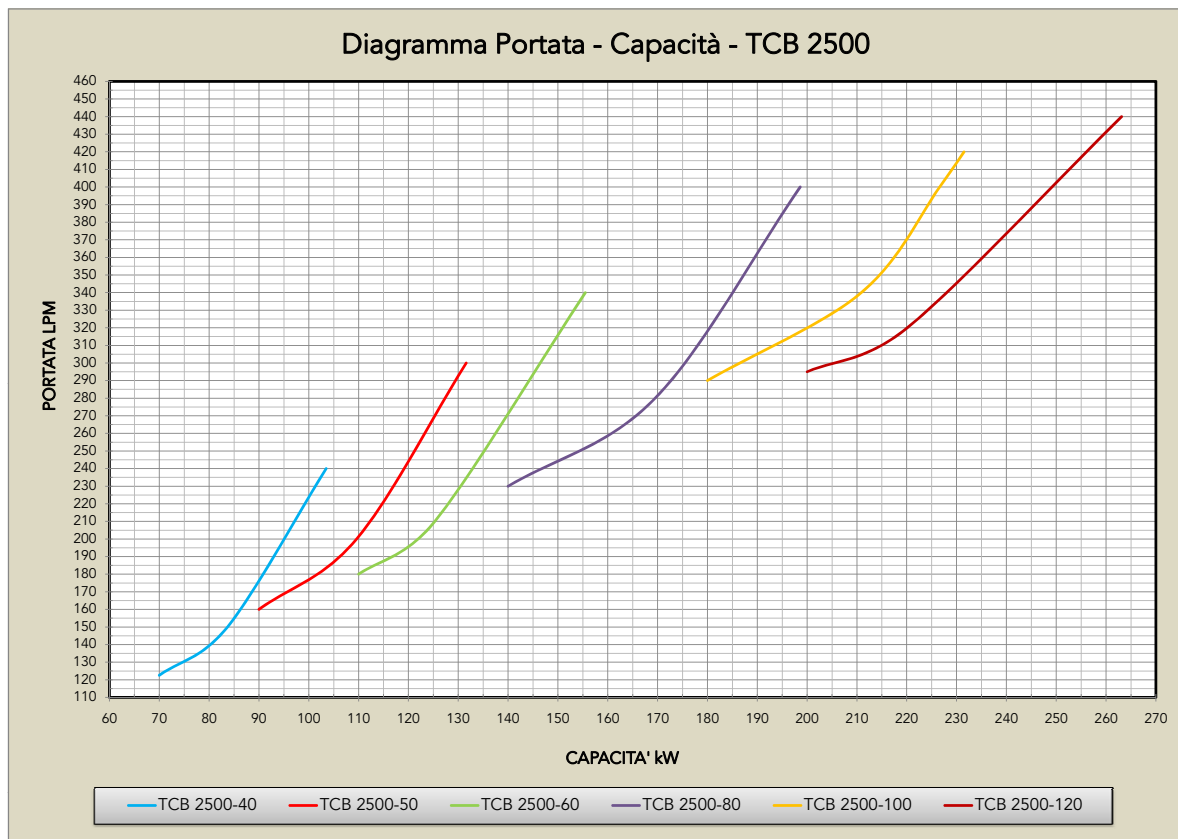
# T PLATE B OIL

Serie TCB 1700



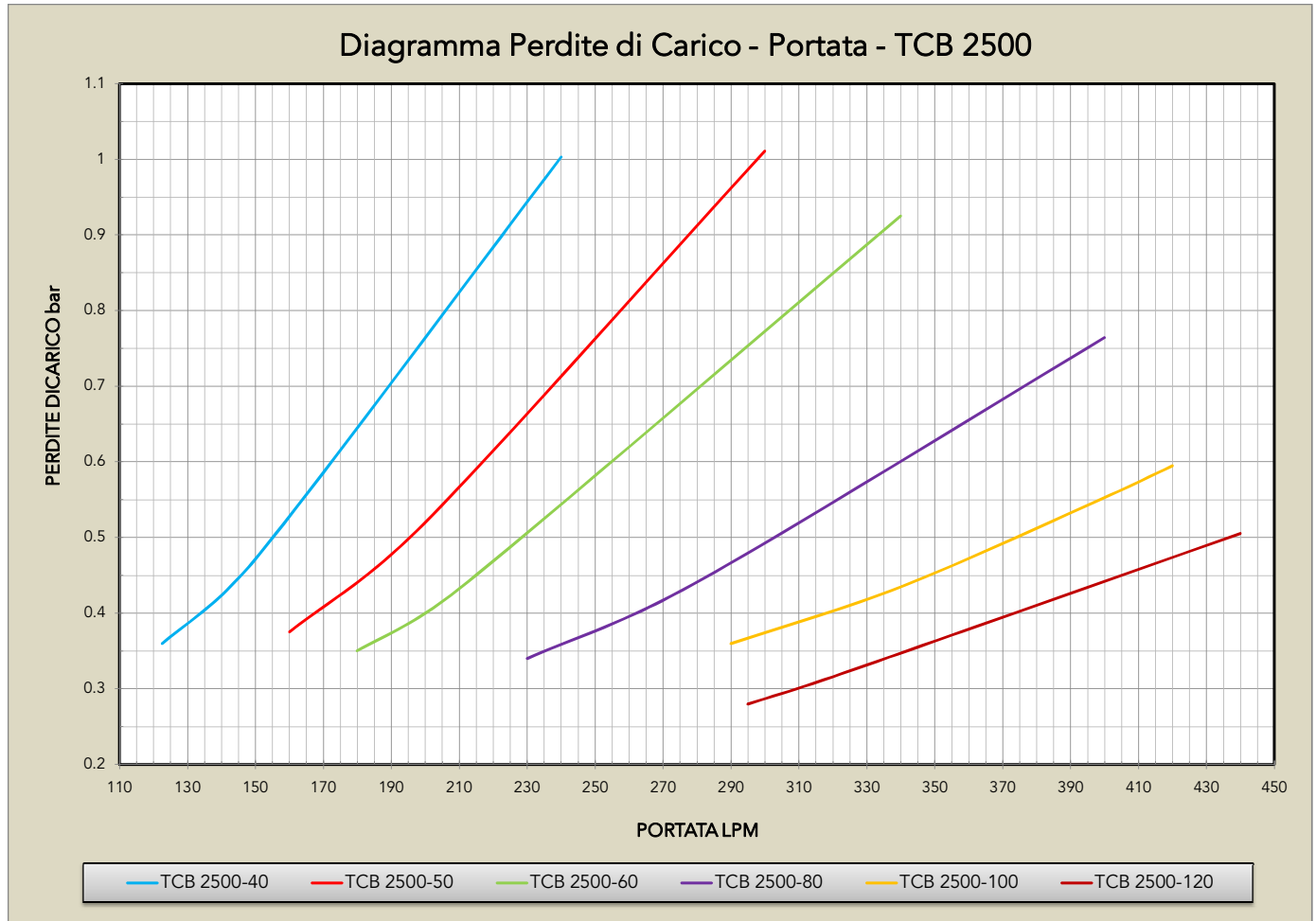
# T PLATE B OIL

Serie TCB 2500



# T PLATE B OIL

Serie TCB 2500





# T PLATE B OIL

Brazed Plate Heat Exchangers for Oil  
Quick Selection Data Sheets

## T PLATE B OIL

Tables of correction factors

Schedule of correction factors for pressure drop depending on the type of oil						
Type of Oil (ISOVG)	22	30	46	68	100	150
Correction factor multiplicative	0.38	0.62	1	1.52	2.4	3.4

*Diagrams are based on oil ISO VG46.*

*Multiply the pressure drop reported to Olio ISO VG46 for the correction factor multiplicative corresponding to the type of oil you choose.*

Schedule of correction factors for potentiality depending on the type of oil						
Type of Oil (ISOVG)	22	32	46	68	100	150
Correction factor multiplicative	1.15	1.05	1	0.88	0.78	0.65

*Diagrams are based on oil ISO VG46.*

*Multiply the pressure drop reported to Olio ISO VG46 for the correction factor multiplicative corresponding to the type of oil you choose.*

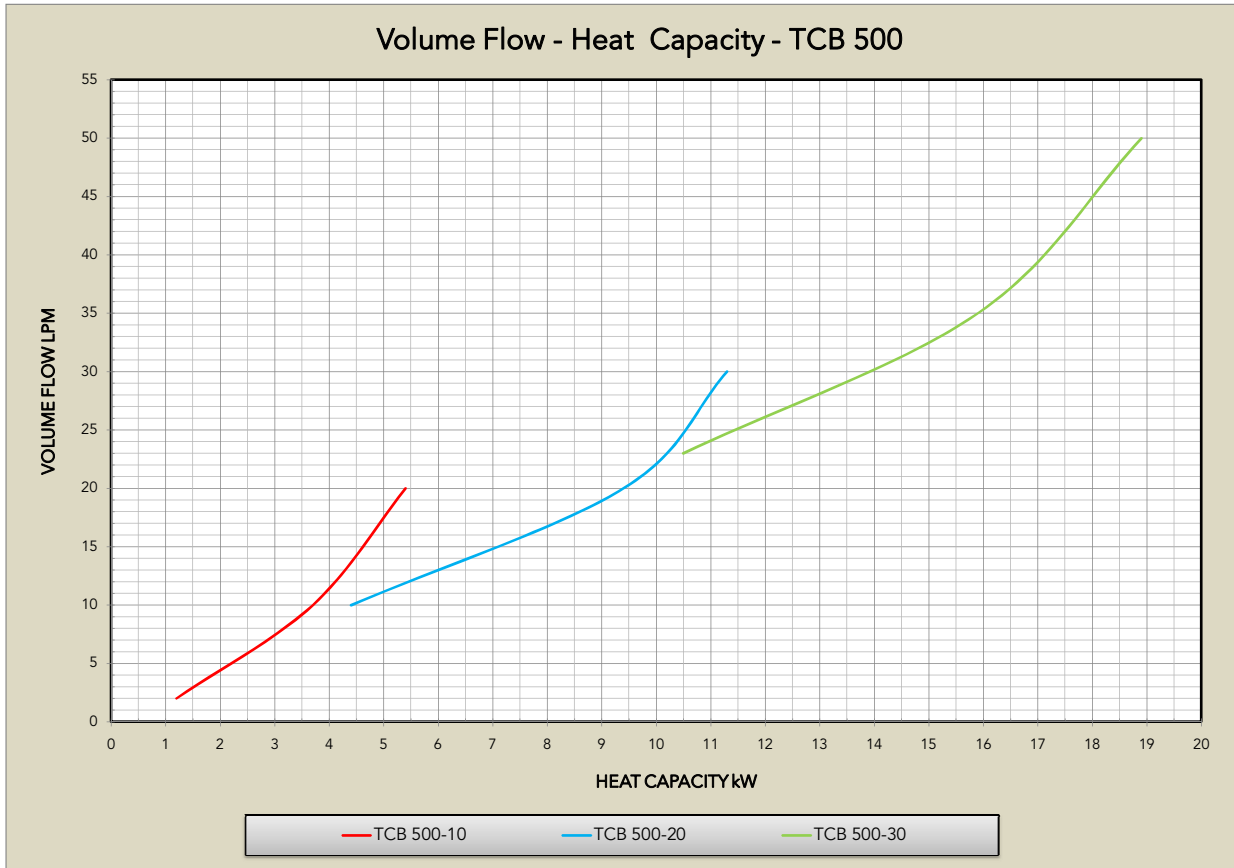
Schedule of correction factors for power according to the ratio Oil: Water			
Ratio Oli:Water	2:1	4:1	6:1
Coefficient multiplicative kq	1	0.82	0.65

*Diagrams are based on ratio 2:1 (Oil:Water).*

*Multiply the power refers to the ratio 2:1 for the correction factor multiplicative corresponding to the ratio established. Calculation take oil temp. outlet 50°C - Water inlet 25°C.*

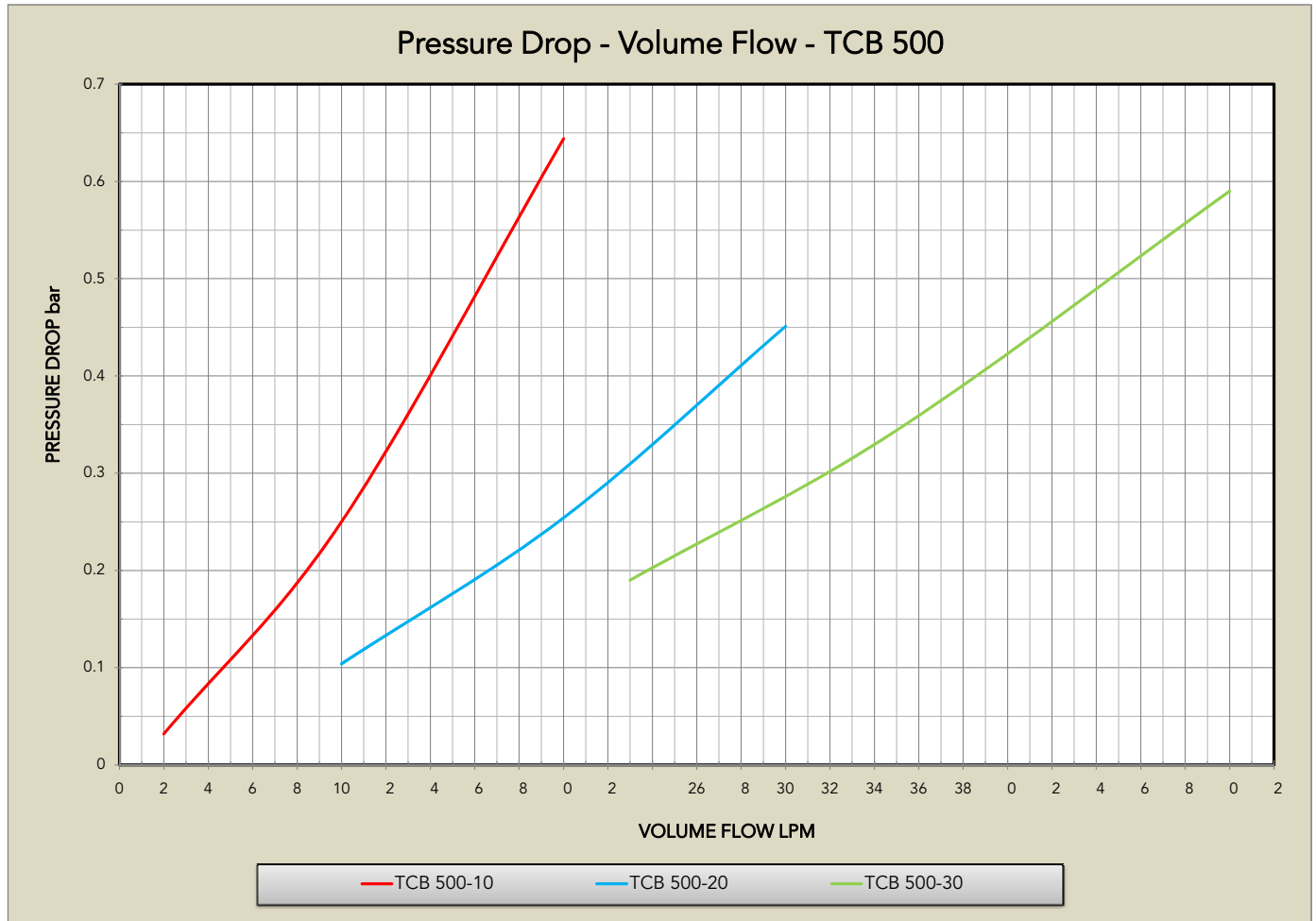
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Series TCB 500



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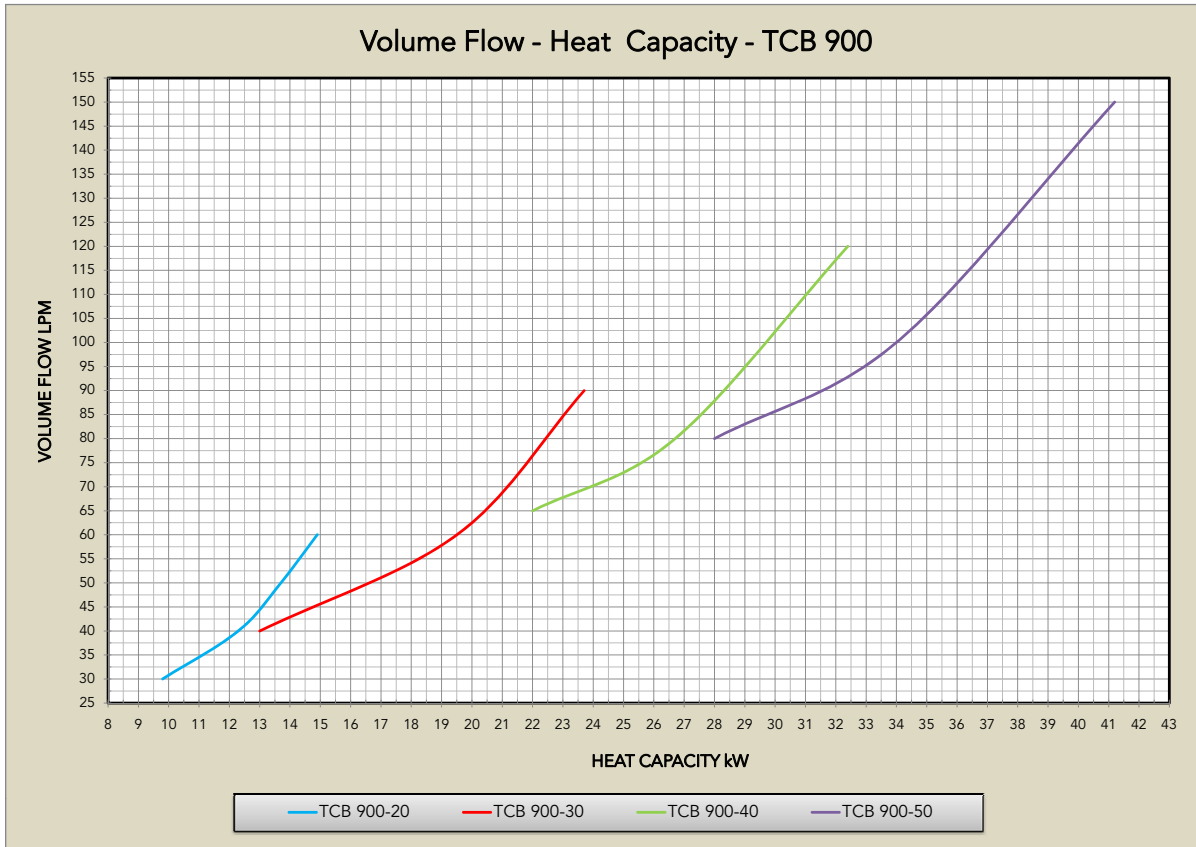
Series TCB 500





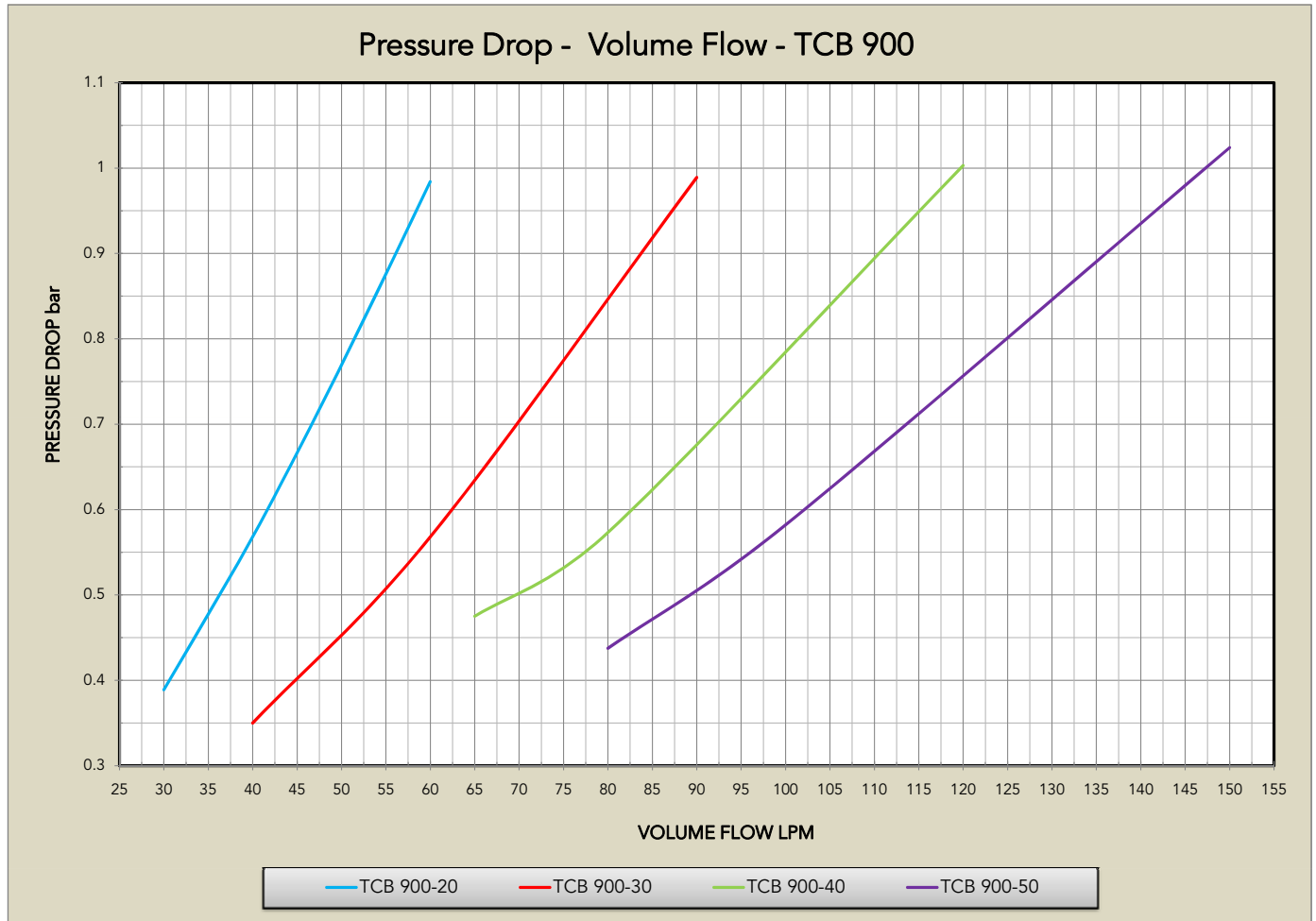
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Series TCB 900



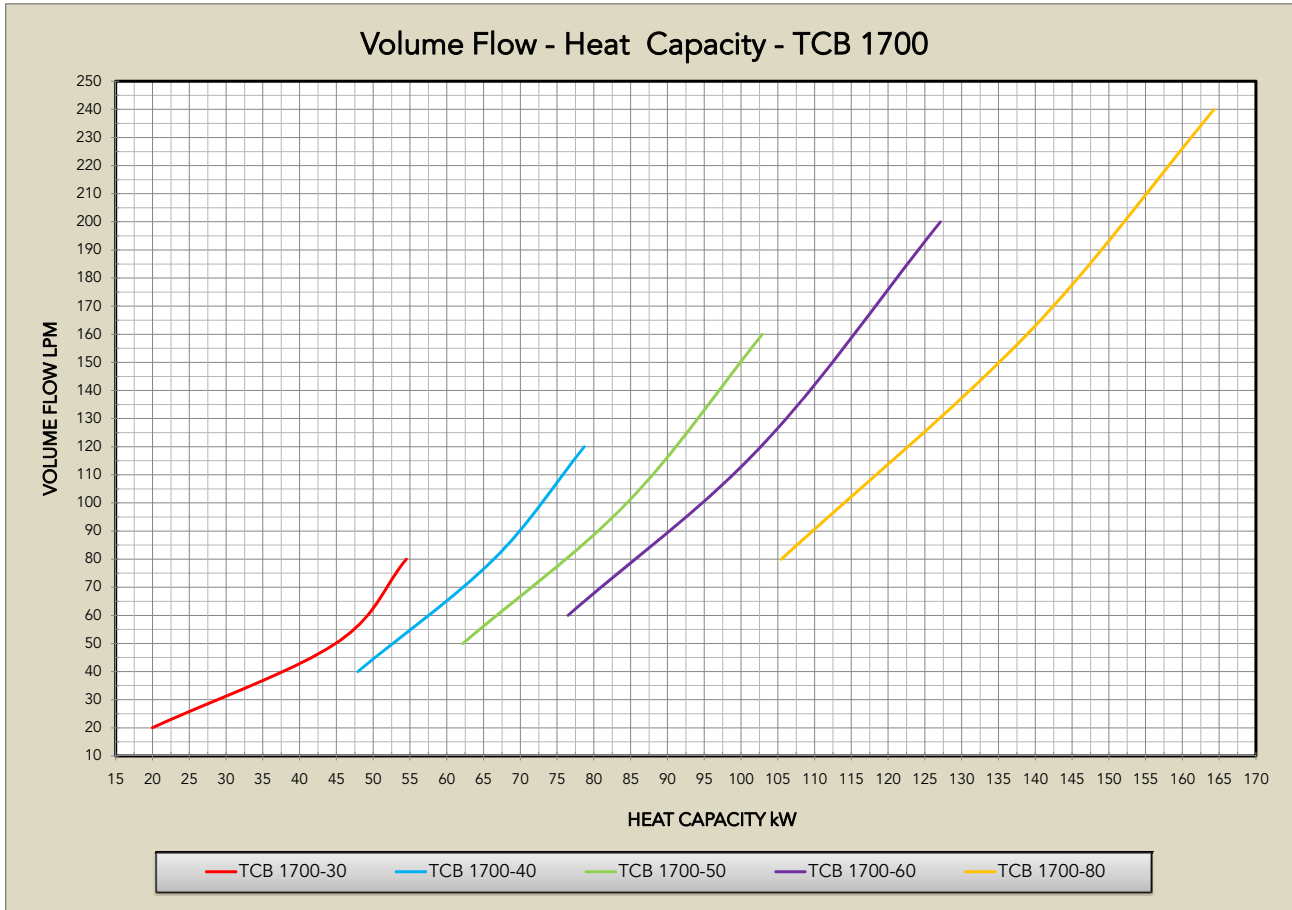
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Series TCB 900



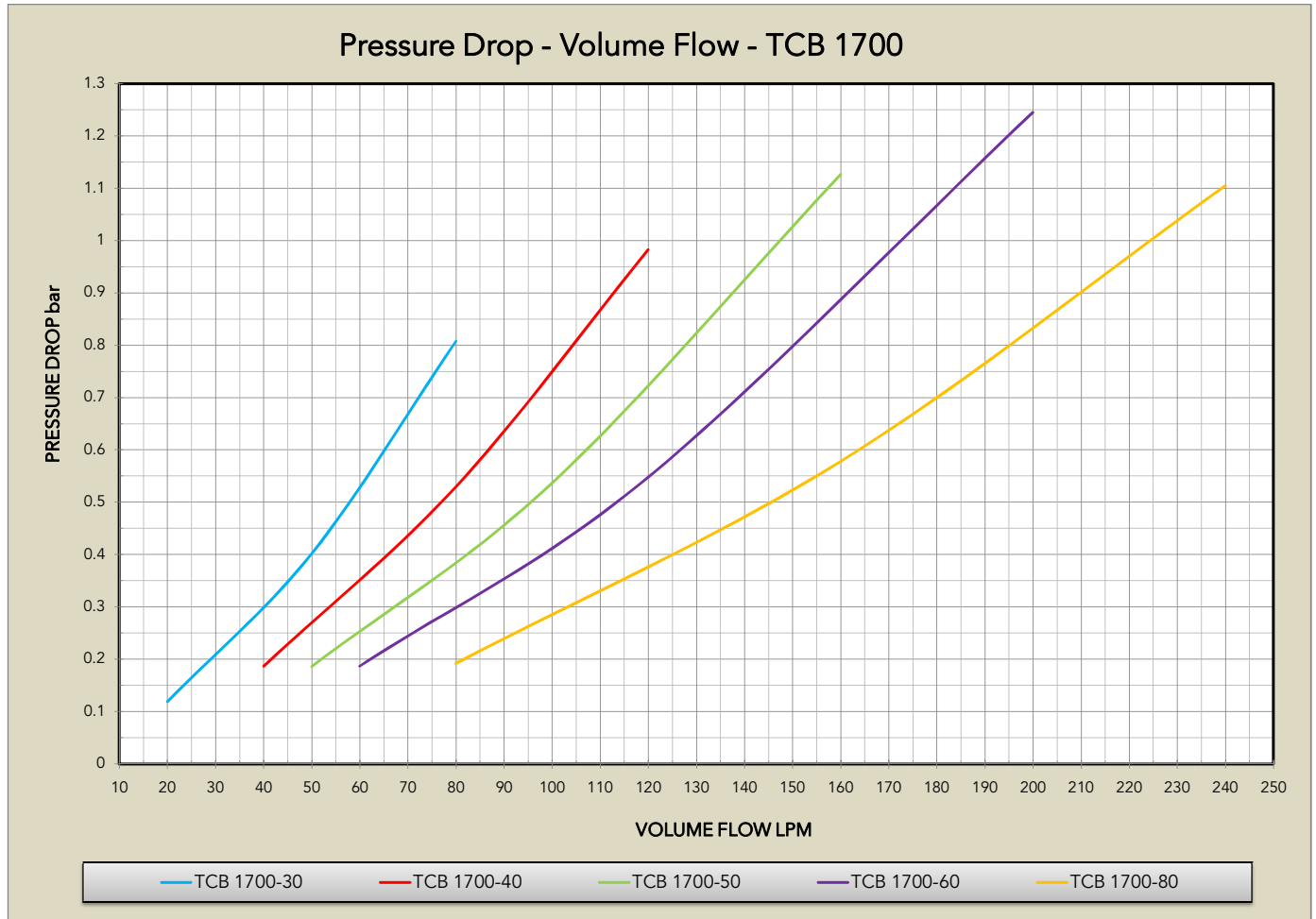
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Series TCB 1700



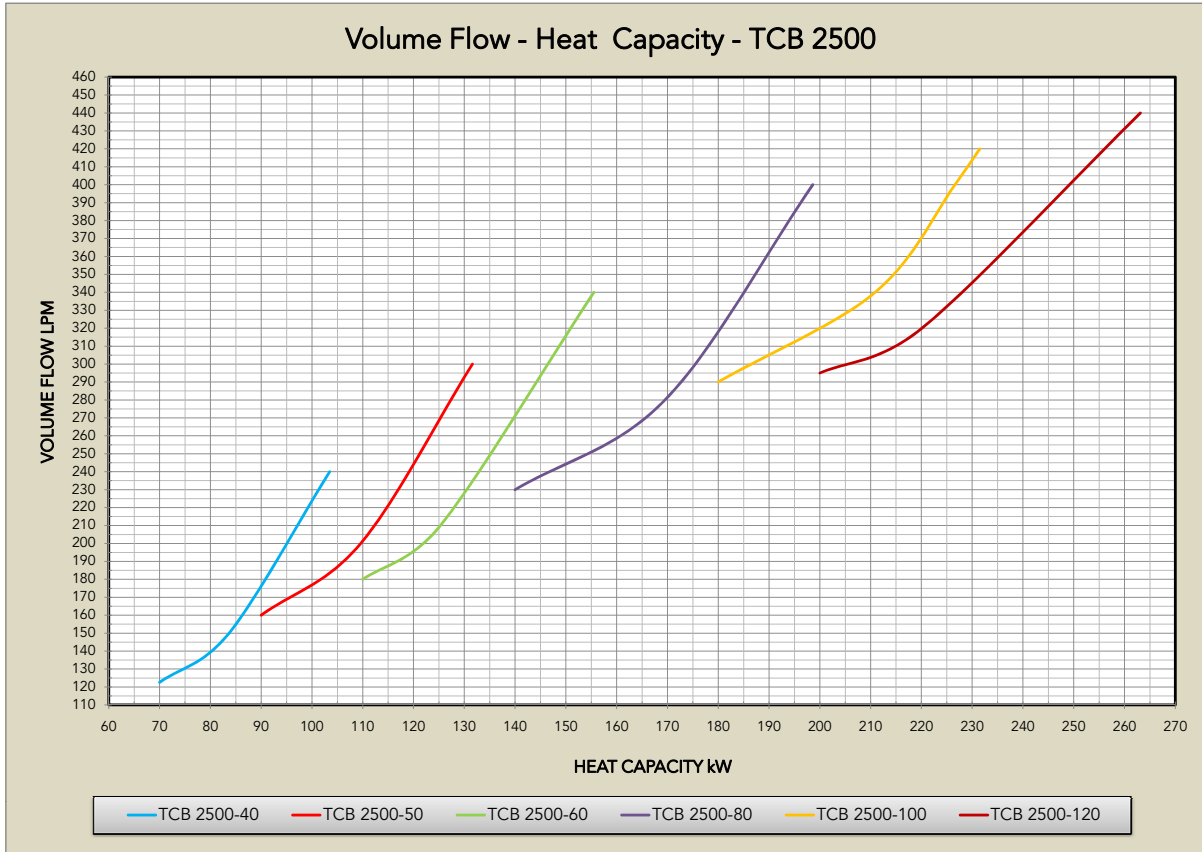
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Series TCB 1700



# T PLATE B OIL

Series TCB 2500



# T PLATE B OIL

Series TCB 2500

