ECO SERVICE

OHŘÍVAČ TERMÁLNÍHO OLEJE MODEL TH/500

Technické parametry

Technické parametry TH 500		
Výkon	kcal /h kW	500.000 582
Účinnost	%	87
Vstupní teplota oleje	°C	240
Výstupní teplota oleje	°C	280
Obsah oleje	litry	114
Teplosměnná plocha	m^2	14,7
Teplota spalin	°C	340
Objem topeniště	m^3	0,284
Ztráta tlaku na straně oleje	m oil	23
Průměr kotle	mm	480
Celková délka kotle	mm	1.570
Počet spirálních trubkovnic		2
Průměr trubkovnic	mm	42,2
Tloušťka stěny	mm	3,56
Jmenovitý výkon čerpadla	m^3/hod	25,0
Výtlačná výška	m	40
Vstup oleje		DN 65 PN16
Výstup oleje		DN 65 PN16

EUROBOILERS

GARIONI NAVAL

INDUSTRIAL AND MARINE HEATING SYSTEMS

STEAM BOILERS AND THERMAL OIL HEATERS

KARTA KVALITY JAKOSTI

KOTLE NA OHŘEV TERMOOLEJE

(ISO 9001)

Druh zařízení:	TH 500	Sériové číslo:	460.12
Rok výroby:	2013	Objednávka číslo:	12000460

TĚLESO	PRACOVNÍ TLAK	PRACOVNÍ TEPLOTA	TEKUTINA		OBJEM
	(bar)	(°C)	Druh	*	(litry)
hlavní část	10	300	OLEJ	L	114

* fyzikální stav: L= tekutina; V= pára; G= plyn

Výhřevná plocha	m2	14,7
Jmenovitý výkon	kW	581

KONTROLA PROVEDENÍ

PŘEDBĚŽNÁ KONTROLA

Druh kontroly	Výsledek
visuální	OK
kontrola certifikátu materiálů	OK
kontrola rentgenem	neprovedena
kontrola ultrazvukem	neprovedena

Datum
02. 01. 2013

TLAKOVÁ ZKOUŠKA

TĚLESO	ZKUŠEBNÍ TLAK (bar)	VÝSLEDEK	TENZOMETR	KAPILÁRNÍ METODA	MÍSTO
hlavní část	19,1	OK	neprovedena	neprovedena	Castelmella

Datum
07. 01. 2013

Zařízení musí podstoupit před uvedením do provozu všechny kontroly požadované dle místních předpisů v zemi instalace.

Technical Data Sheet

Shell **Heat Transfer Oil *S2***

High Performance Heat transfer fluid

- *RELIABLE PERFORMANCE*

Shell Heat Transfer Oil S2 is based on carefully selected, highly refined mineral oils chosen for their ability to provide superior performance in indirect closed fluid heat transfer systems.

Applications

- ***Enclosed circulated heat transfer systems***
  for industrial applications such as process industry, chemical plants, textile producers etc. and in household equipment such as oil filled radiators.
  Shell Heat Transfer Oil S2 can be used in high temperature continuous heat transfer equipment with the following application limits:

Shell Heat Transfer Oil S2	
Max. film temperature	340°C
Max. bulk temperature	320°C

Performance Features and Benefits

- ***Extended maintenance intervals***
  Shell Heat Transfer Oil S2 is based on carefully selected highly refined mineral oils and resists oil cracking, oxidation and thickening. This provides extended oil life, provided efficient fluid heating and good pump circulation is ensured, such that film temperatures on the heater surface do not exceed the limits above.
- ***System efficiency***
  Low viscosity enables excellent fluidity and heat transfer over a wide temperature range.
  Shell Heat Transfer Oil S2 also has a low vapour pressure so resists cracking. This minimises the formation of volatile decomposition products; these would require recovery via expansion chamber and condensate collector
- ***Wear protection***
  Shell Heat Transfer Oil S2 is non-corrosive and has high solvency – this reduces deposit formation by holding oxidation products in solution and keeping internal surfaces of heat exchangers clean.

Specification and Approvals

Classified as ISO 6743-12 Family Q
Meets typically DIN 51522 requirements

Advice

The life of Shell Heat Transfer Oil S2 depends on the design and usage of the system. If the system is well designed and not subjected to abnormal workloads, the life can be for many years.

It is important to monitor oil condition regularly as rates of change in physical characteristics are more significant than actual values. The properties that should be monitored are viscosity, acidity, flash point (open and closed) and insolubles content.

Advice on applications not covered in this leaflet may be obtained from your Shell representative.

Health and Safety

Guidance on Health and Safety is available on the appropriate Material Safety Data Sheet which can be obtained from your Shell representative.

Protect the environment

Take used oil to an authorised collection point. Do not discharge into drains, soil or water.

Typical Physical Characteristics

Density at 15 °C	kg/m3	ISO 12185	866
Flash Point PMCC	°C	ISO 2719	210
Flash Point COC	°C	ISO 2592	220
Fire Point COC	°C	ISO 2592	255
Pour Point	°C	ISO 3016	-12
Kinematic Viscosity		ISO 3104	
at 0 °C	mm2/s		223
at 40 °C	mm2/s		25
at 100 °C	mm2/s		4.7
at 200 °C	mm2/s		1.1
Initial Boiling Point	°C	ASTM D 2887	355
Autoignition Temperature	°C	DIN 51794	360
Neutralisation Value	mgKOH/g	ASTM D974	< 0.05
Ash (Oxid)	%m/m	ISO 6245	< 0.01
Carbon Residue (Conradson)	%m/m	ISO 10370	0.02
Copper Corrosion (3h/100°C)		ISO 2160	class 1

These characteristics are typical of current production. Whilst future production will conform to Shell's specification, variations in these characteristics may occur.

Typical Design Data

Temperature	°C		0	20	40	100	150	200	250	300	340
Density	kg/m3		876	863	850	811	778	746	713	681	655
Specific Heat Capacity	kJ/kg*K		1.809	1.882	1.954	2.173	2.355	2.538	2.72	2.902	3.048
Thermal Conductivity	W/m*K		0.136	0.134	0.133	0.128	0.125	0.121	0.118	0.114	0.111
Prandtl No.			3375	919	375	69	32	20	14	11	9