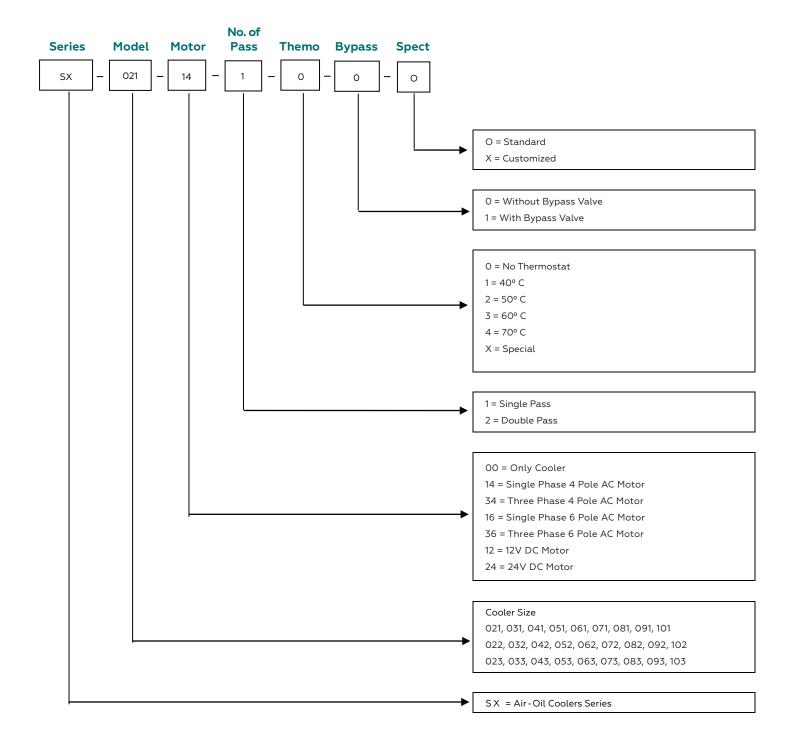




HOW TO ORDER



1

Cataloging Considerations

- 1. Entering temperature differences (ETD) 40° C
- 2. Oil ISO VG 32
- 3. Operating pressure of 17 or 25bar, depending upon model

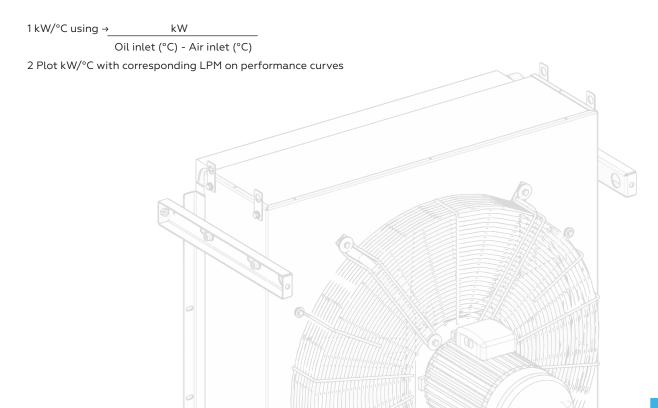
Pressure Drop Correction Factor (Multiplying) for Other Grades of Oils

Viscosity in cSt	10	15	20	32	46	50	60
Factor	0.47	0.61	0.74	1	1.27	1.34	1.5
Viscosity in cSt	60	68	80	90	100	200	320
Factor	1.5	1.63	1.81	1.96	2.1	3.29	4.47

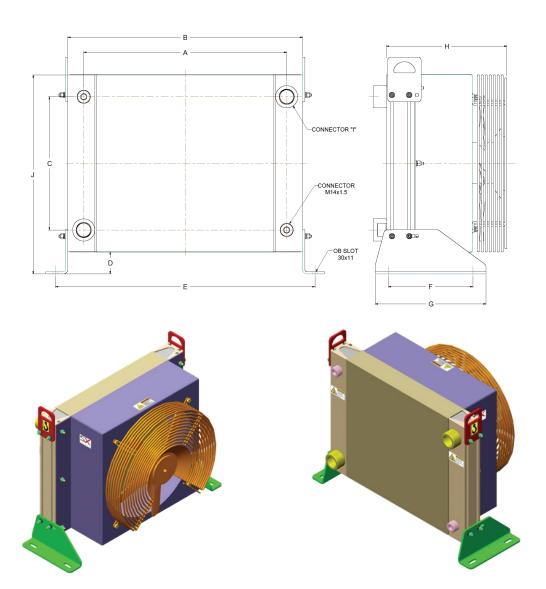
For selection of oil cooler the system information needed is:

- 1 Heat load capacity (kW)
- 2 Oil inlet & outlet temperature (°C)
- 3 Air inlet temperature (Ambient temperature) (°C)
- 4 Oil flow (LPM)

Calculate

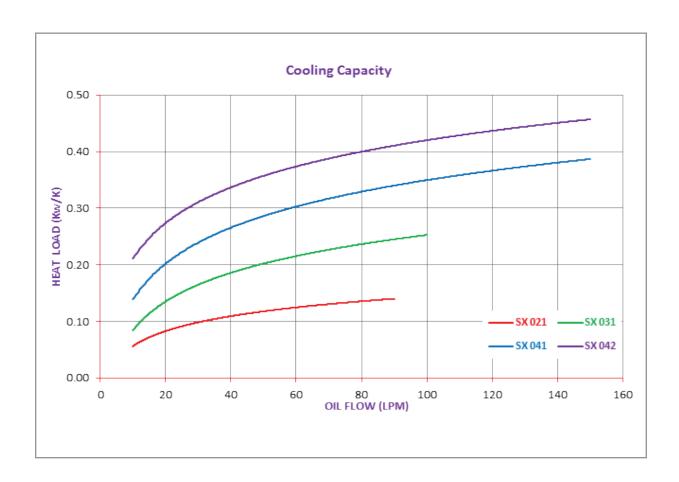


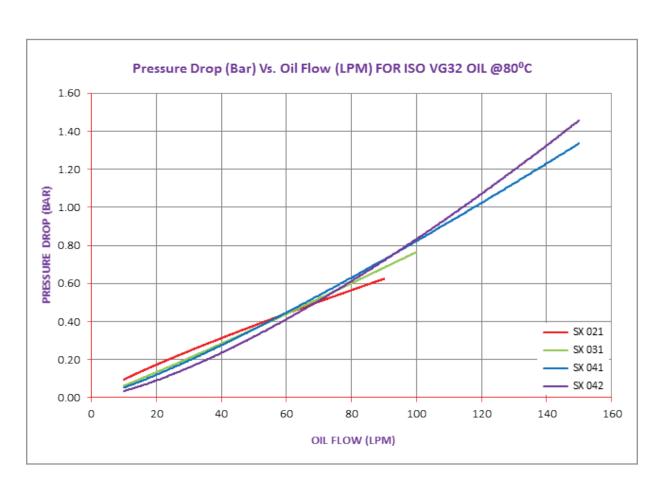
SX 021 to SX 042



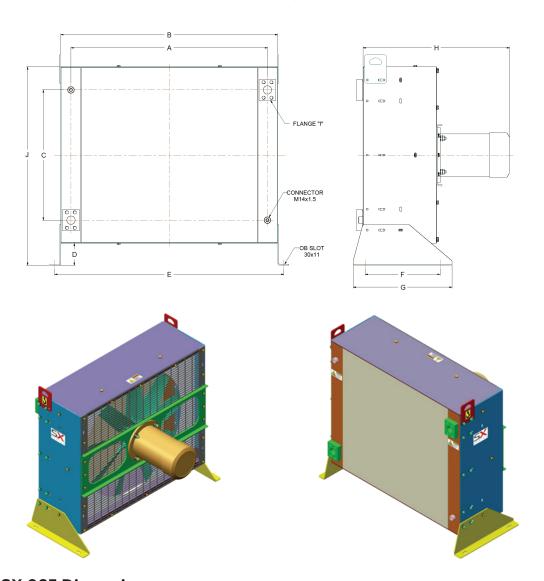
SX 021 to SX 042 Dimensions

Model/Dim	SX 021	SX 031	SX 041	SX 042
Α	280	358	458	458
В	330	430	530	530
С	160	205	300	300
D	40	50	50	50
Е	366	486	586	586
F	90	191	191	191
G	140	250	250	250
н	160	215	272	302
CONNECTOR "I"	1/2"	3/4"	1"	1"
J	259	353	448	448



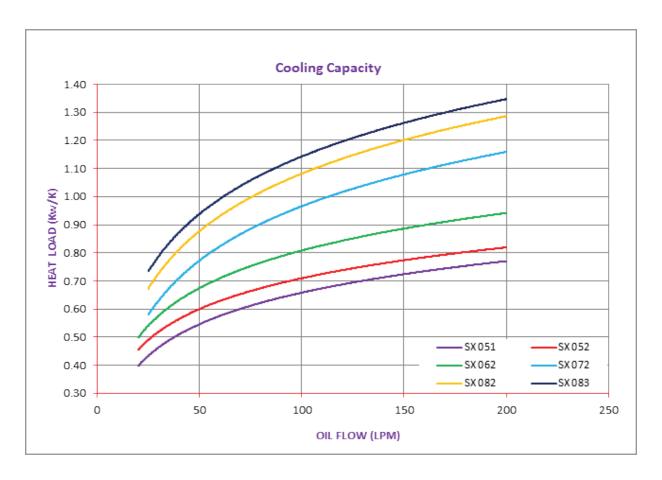


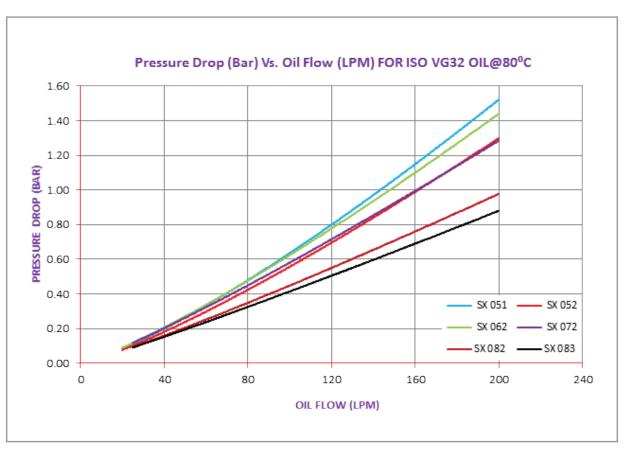
SX 051 to SX 083



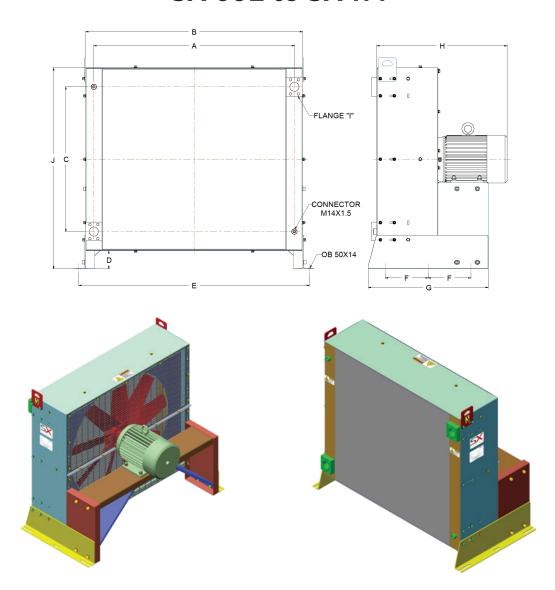
SX 051 to SX 083 Dimensions

Model/Dim	SX 051	SX 052	SX 062	SX 072	SX 082	SX 083
Α	593	593	689	793	893	893
В	630	686	786	886	986	986
С	376	376	461	496	591	591
D	100	100	100	100	100	100
Е	742	742	842	942	1042	1042
F	240	240	240	340	340	340
G	350	350	350	450	450	450
н	460	475	511	666	666	666
Flange "I"	1"	1½"	1½"	1½"	1½"	1½"
J	616	616	711	806	901	901



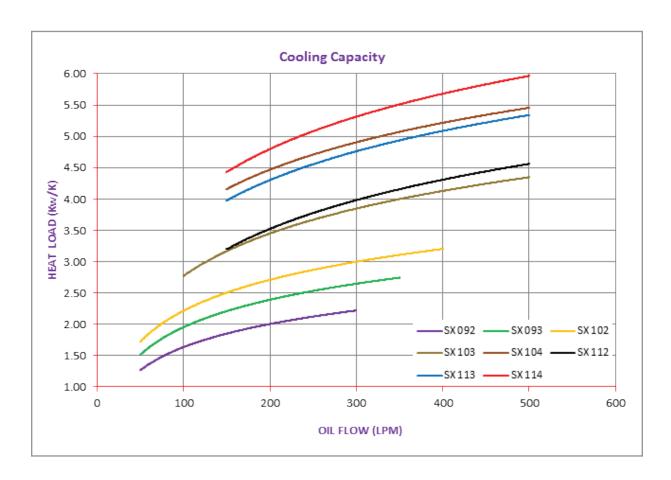


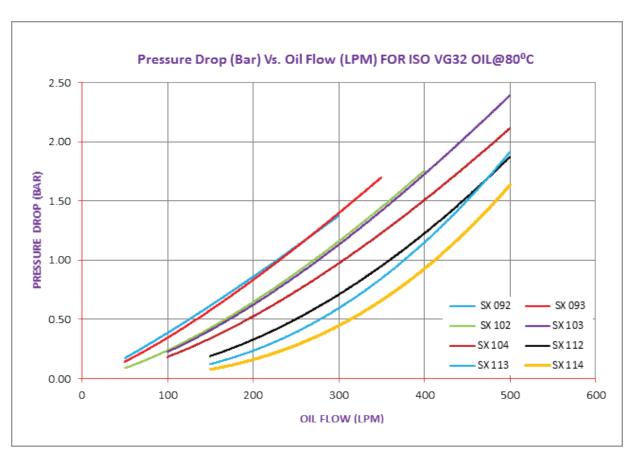
SX 092 to SX 114



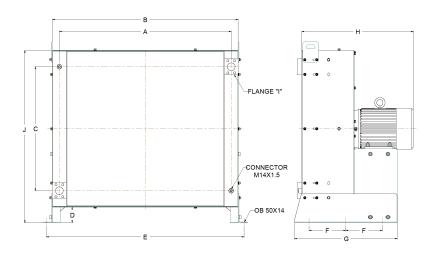
SX 092 to SX 114 Dimensions

Model/Dim	SX 092	SX 093	SX 102	SX 103	SX 104	SX 112	SX 113	SX 114
Α	997	997	1097	1097	1100	1190	1210	1200
В	1086	1086	1186	1186	1206	1286	1326	1306
С	700	700	794	794	794	903	903	903
D	100	100	100	100	100	100	100	100
Е	1162	1162	1262	1262	1262	1342	1382	1362
F	272	272	272	272	272	272	272	272
G	654	654	654	654	654	654	654	654
н	668	668	712	712	757	764	784	807
Flange "I"	2"	2"	2"	2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
J	1010	1010	1104	1104	1104	1213	1213	1213





SX 123 to SX 144

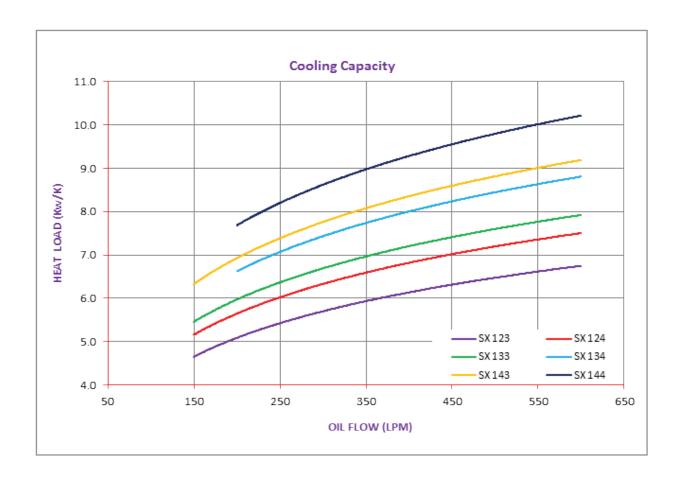


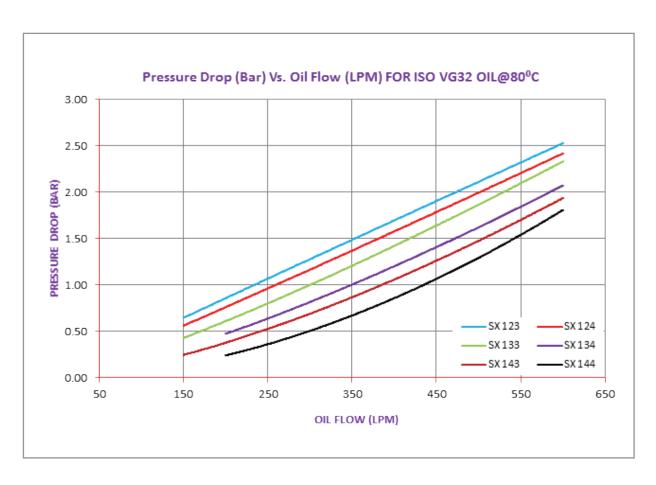
SX123 to SX144

Model/Dim	SX 123	SX 124	SX 133	SX 134	SX 143	SX 144
Α	1310	1300	1410	1400	1510	1500
В	1426	1406	1526	1506	1626	1606
С	998	998	1106	1106	1201	1201
D	100	100	100	100	100	100
E	1482	1462	1582	1562	1682	1662
F	272	272	272	272	272	272
G	654	654	654	654	654	654
Н	874	897	874	897	874	897
Flange "I"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"	2 1/2"
J	1308	1308	1416	1416	1511	1511

FAN / MOTOR SPECIFICATIONS

Calle	Sr. No. Product	Fan Dia		Cooler Data				
Sr. No.			Power (KW)	Power (HP)	RPM	Voltage (V)	Current (A)	Noise Level dB(A)
1	SX 123	ø1000	7.5	10.0	1440	415	13.8	< 90
2	SX 124	ø1000	7.5	10.0	1440	415	13.8	< 90
3	SX 133	ø1000	9.3	12.5	1440	415	17.6	< 90
4	SX 134	ø1000	11.0	15.0	1440	415	20.4	< 90
5	SX 143	ø1000	9.3	12.5	1440	415	17.6	< 90
6	SX 144	ø1000	11.0	15.0	1440	415	20.4	< 90





FAN / MOTOR SPECIFICATIONS SX 021 To SX 114

SX 021 To SX 042 DATA

Sr. No.	Product	Fan Dia		Moto	r Data		Cooler Data
31. No.	rioduct	ran bia	Power (W)	AC/DC	Voltage (V)	Current (A)	Noise Level dB(A)
1	SX 021	ø200	56	DC	12/24	12.2/2.3	< 65
2	SX 021	ø200	68	AC	230/400	0.29/0.17	< 65
3	SX 031	ø250		DC	12/24		< 65
4	SX 031	ø250	100	AC	230/400	0.34/0.2	< 65
5	SX 041	ø350		DC	12/24		< 65
6	SX 041	ø350	135	AC	230/400	0.73/0.42	< 65
7	SX 042	ø350		DC	12/24		< 65
8	SX 042	ø350	135	AC	230/400	0.73/0.42	< 65

SX 051 To SX 083 DATA

Sr. No.	Product			Cooler Data				
Sr. No.	Si. No.	Fan Dia	Power (KW)	Power (HP)	RPM	Voltage (V)	Current (A)	Noise Level dB(A)
1	SX 051	ø450	0.37	0.5	1440	415	1.0	< 80
2	SX 052	ø450	0.37	0.5	1440	415	1.0	< 80
3	SX 062	ø560	1.1	1.5	1440	415	2.7	< 80
4	SX 072	ø630	2.2	3.0	1440	415	4.6	< 85
5	SX 082	ø750	2.2	3.0	1440	415	4.6	< 90
6	SX 083	ø750	2.2	3.0	1440	415	4.6	< 90

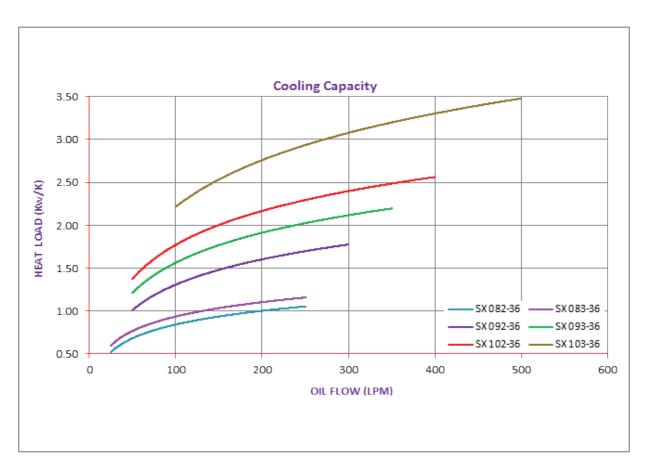
SX 092 To SX 114 DATA

Sr. No.	Product	Fan Dia			Cooler Data			
31. NO.	Floudet	ran Dia	Power (KW)	Power (HP)	RPM	Voltage (V)	Current (A)	Noise Level dB(A)
1	SX 092	ø800	3.7	5.0	1440	415	7.4	< 90
2	SX 093	ø800	3.7	5.0	1440	415	7.4	< 90
3	SX 102	ø900	5.5	7.5	1440	415	10.3	< 90
4	SX 103	ø900	5.5	7.5	1440	415	10.3	< 90
5	SX 104	ø900	5.5	7.5	1440	415	10.3	< 90
6	SX 112	ø1000	7.5	10.0	1440	415	13.8	< 90
7	SX 113	ø1000	7.5	10.0	1440	415	13.8	< 90
8	SX 114	ø1000	7.5	10.0	1440	415	13.8	< 90

LOW NOISE COOLERS

FAN / MOTOR SPECIFICATIONS

Sr. No.	Product	Fan Dia		Motor Data					
			Power (KW)	Power (HP)	RPM	Voltage (V)	Current (A)	Noise Level dB(A)	
1	SX 082-36	ø750	2.2	3.0	960	415	5.2	< 85	
2	SX 083-36	ø750	2.2	3.0	960	415	5.2	< 85	
3	SX 092-36	ø750	2.2	3.0	960	415	5.2	< 85	
4	SX 93-36	ø750	2.2	3.0	960	415	5.2	< 85	
5	SX 102-36	ø750	3.7	3.0	960	415	8.3	< 85	
6	SX 103-36	ø750	3.7	3.0	960	415	8.3	< 85	



Notes:

Refer to the "Pressure Vs Oil flow curves from SX 082 to SX 114" for the pressure drop values. Refer to the dimensional values of "SX 082 to SX 114" for dimensions.

Recommended Practices:

- 1. When determining the heat exchanger requirements of a hydraulic system, consider how much heat the system generates and what temperatures the oil and system components can tolerate. Determining hydraulic cooling needs can be confusing because heat generation may vary as a machine progresses through different cycles, also ambient temperature may shift or heat generation may increase over time.
- 2. Remember that selection of oil and its operating temperature play a great role as its Viscosity decides the pressure drop. The highly viscous oil generates high pressure drops. Also the Viscosity of oil is high at low temperatures.
- 3. The pressure drop is directly proportional to oil flow. Ensure that the flow remains constant. The use of proper sizes of inlet and outlet lines help in maintaining low pressure drops.
- 4. To reduce oil cooler exposure to high pressure, it should be installed on the tank return line. A bypass valve protects them from high pressure surges, such as those commonly experienced during cold starts. Bypass valves also can be specified based on fluid temperature. In this manner, fluid bypasses the heat exchanger until it reaches a predetermined temperature, which closes the bypass valve and routes fluid through the heat exchanger.
- 5. The use of bypass valve takes care of over pressure but not pressure peaks and spikes. If pressure peaks and spikes are unavoidable, alternate piping method using a separate circuit from the reservoir, with a small pump to drive the oil through the heat exchanger should be considered. Filters are often incorporated into these side circuits, called kidney loops.
- 6. Mounting of an oil cooler in mobile application must be critically analyzed for factors such as vibrations, access for cleaning, shocks and external damages.

Notes			

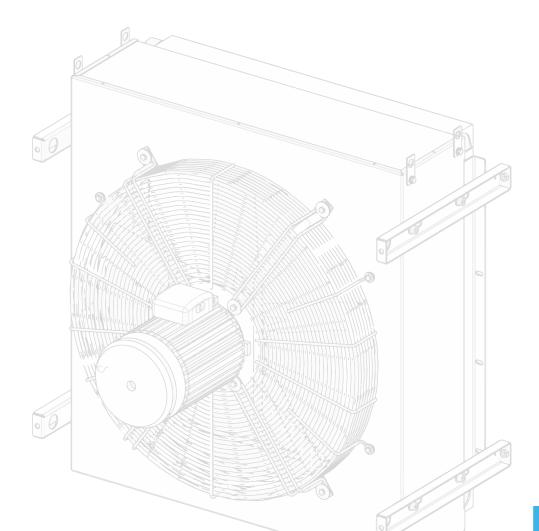
STANHEX Customized Solutions

At STANHEX we go the extra mile to support you with your oil cooling needs. We support clients from project inception, through product engineering and design, prototype development, validation and serial production.

Apart from having an exhaustive offering of products, our cores and configurations provide the modules and templates upon which customized solutions can be developed. When your cooling needs are unique, a 'one size fits all' solution will not do. STANHEX strives to offer industry-leading customization and flexibility on oil coolers, with quick turn-around times.

STANHEX Customized Solutions have helped deliver:

- Higher heat dissipation through single, large cooling units (up to 1500mm × 1500mm frontal area)
- Operational reliability in high pressure applications
- Integrated systems comprising of circulation pumps, filters, flow meters, gauges, etc.
- Systems as configuration of multiple coolers
- Maintenance-free operation in dusty and fiber-laden environments
- Dimensional fit where boundary conditions are a constraint





STANHEX, the industrial product line of Standard Radiators Pvt. Ltd., offers customised cooling solutions that integrate robust aluminium bar & plate technologies and other system peripherals to cater to performance-critical industries such as Locomotive, Renewable Energy and many others.

With expertise in design, testing, product validation, and tooling, STANHEX provides its client-partners with seamless product-integration and superior customer service.

The SX Series by STANHEX is a catalogue oil-cooler range that finds application in hydraulic, lubricating and transmission oil cooling. We are the choice of global OEMs in the machine tool, hydraulic power pack, wind, and special purpose machinery industries, amongst others. We pride ourselves in offering industry leading customization options. Get in touch to find out how we can help you.



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