



Oil Cooler & Heat Exchanger



DAVEY HEAT EXCHANGERS

Daeheung is Aiming at the First in the World

대흥은 세계 초 일류를 지향합니다.

Daeheung Cooler
Ceaselessly Endeavor Research & Developpe for
Promising Future

대흥쿨러는 희망찬 미래를 위하여
끊임없이 연구·개발하고 노력합니다.



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We'll serve our customer with better quality products through continued research and development

끊임없는 연구개발을 통해 더 좋은 제품으로
고객에게 봉사하겠습니다.

(주)대흥쿨러 창립 이후 세계수준의 열교환기 제작업체로 성장하기까지는 우수한 기술진과 피나는 연구 노력만이 최고의 열교환기를 생산할 수 있다는 일념으로 노력한 결과라 믿습니다. 현재 저희 대흥쿨러의 열교환기는 국내는 물론 일본, 대만, 중국, 러시아, 동남아시아 등 국외의 여러 산업분야에서 품질의 우수성을 인정받고 있으며 명실공히 동업계의 선두주자라 자부하고 있습니다.

30년간 외길을 걸어 온 고집이 헛되지 않고 이렇게 성장하게 된 것은 고객 여러분들의 힘이라 생각하며 진심으로 감사드립니다.

앞으로도 첨단 기술력과 노하우로 새로운 제품의 개발 및 신소재 연구에 부단한 노력을 함은 물론 엄격한 품질관리 및 사후관리를 통해 최고의 제품을 고객 여러분들께 공급할 것이며 세계 속에 한국을 심는데 일익을 담당하고자 합니다.

(주)대흥쿨러 대표이사 장 석 근

Daeheung Cooler Co., Ltd. has grown to a worldwide heat exchanger manufacturer since its establishment. We believe that such a result owes to the effort of our engineers with the determination that blood, sweat and tears are required to produce the best heat exchangers.

Currently, our Daeheung Cooler's heat exchangers are being recognized with an extremely good quality in various industrial sectors in Korea as well as in Japan, Taiwan, China, Russia and Southeast countries. And we certainly believe that Daeheung Cooler is an advanced runner in this industry in deed as well as in name.

Daeheung Cooler has been walking a single path for the past thirty years and appreciates that such a growth has been possible thanks to only our customers' support.

Now and forever, Daeheung Cooler will continue its effort to develop new products and new materials with advanced technology and know-how as well as to supply to our customers the best products through stringent quality control and after service.

Seok-Keun Jang

Representative Director of Daeheung Cooler Co., Ltd



CERTIFICATE

인증서



ISO 9001
Certi. No. JK-13321



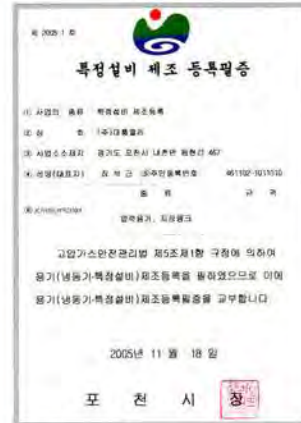
ASME U
Certi. No. 34,953



National Board



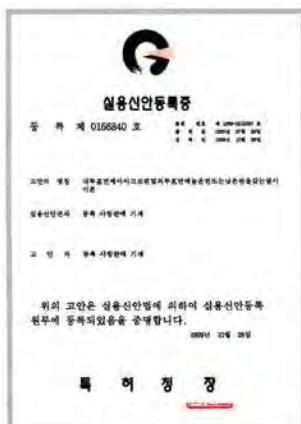
CSEL A2
Certi. No. TS2200844-2013



**KGS 고압가스 특정설비
제2005-1호**



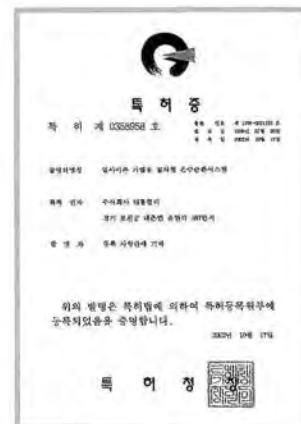
**INNO-BIZ
제R7061-2467호**



**실용신안등록증
제0166840호**



**특허증
제0295067호**



**특허증
제0358958호**



**특허증
제10-0778284호**

1978.

- 05. 대흥오일쿨러 설립
대표 장석근 취임
- 05. Established 'Daeheung Oil Cooler'.
CEO 'Jang, Suk-keun'.

1983.

- 11. 엔진용 열교환기 국산화 개발
- 11. Developed localization of the Engine operated heat exchanger.

1988.

- 03. LOW FIN TUBE 국산화 개발
- 03. Developed localization of the Low fin tube.

1989.

- 01. (주)대흥쿨러로 법인 전환
대표이사 장석근 취임
- 01. Established 'Daeheung Cooler Co., Ltd.'.
CEO 'Jang, Suk-keun'.

1991.

- 10. Q마크 획득
- 10. Acquired the 'Q' mark.

1993.

- 03. 경기도 포천시 내촌면으로
공장 이전 등록
- 03. Moved the factory to Pocheon-si,
Gyeonggi-do.

1994.

- 10. 공장 증축
- 10. Extended the factory.

1995.

- 11. 후생복지관 및 부속건물 증축
- 11. Extended the welfare center and accessory building.

2010.

- 01. 그린에너지 연료전지용 열교환기 국산화 개발
- 01. Developed localization of the heat exchanger for
fuel cell of green energy.

2009.

- 09. 중국 압력용기 제조허가 CSEL 'A2' 자격취득
- 09. Acquired the China special equipment license
CSEL 'A2'.

2007.

- 06. 중소기업 인증서 취득
- 11. '열전소자 냉장고' 특허 등록
- 12. 제2공장 신축
- 06. Acquired the INNO-BIZ certificate.
- 11. Patented the 'Thermoelectric element refrigerator'.
- 12. Built the new second factory.

COMPANY HISTORY

World Best Dae heung

1997.

- 05. 열교환기 자동화 설계 프로그램 산학연 공동개발
- 05. Joint developed the Automatic design program of heat exchanger with industry-university-institute.

1998.

- 03. 에너지 절감형 열교환기 산학연 공동개발
- 03. Joint developed the Energy saving heat exchanger with industry-university-institute.

1999.

- 07. 품질시스템 'ISO 9001' 인증 획득
- 10. '열사이폰' 실용신안 등록
- 07. Acquired the Quality system 'ISO 9001'.
- 10. Patented a new device of the 'Heat syphon'.

2006.

- 06. 한국가스안전공사 '고압가스 특정설비 제조 허가' 취득
- 06. Acquired the KGS high-pressure special equipment license.

2005.

- 02. ASME "U" STAMP 인증 획득
- 07. 중국 특정설비 제조허가 CSEL 'D1, D2' 인증 획득
- 02. Acquired the ASME 'U' stamp.
- 07. Acquired the China special equipment license CSEL 'D1, D2'.

2002.

- 10. '열사이폰 온수순환 시스템' 특허 등록
- 10. Patented the 'Heat syphon hot water recylien system'.

2001.

- 04. '진공파이프' 특허 등록
- 04. Patented the 'Vaccum pipe'

DAEHEUNG COOLER Steps up New Technology

대흥쿨러 신기술 도약

대흥 열교환기

대흥은 30여년 이상 에너지 절약 및 열전도에 대한 문제를 다루어 왔으며 많은 종류의 특별한 열교환기 및 회수시스템을 개발해 왔습니다.

당사의 열전도 제품은 에너지 절약 및 효율적인 시스템운동을 위해 전 세계의 정유, 석유화학, 발전, 식품, 섬유, 조선사업에 사용되었습니다.

최근 고기능의 열전달 장치가 요구되어짐에 따라 저희는 귀하의 요구에 부응할 수 있도록 가일층 노력하겠습니다.

DAEHEUNG HEAT EXCHANGER

Daeheung have been dealing with the problems of energy saving and heat saving and heat transfer for nearly thirty years and have developed many kinds of special heat exchangers and heat recovery system.

Our heat transferring products are used all over the world in industries such as oil refining, petrochemicals, power generation, food stuffs, textiles and marine for efficient system operation and energy saving.

Recently as Daeheung is demanded high-performance heat transfer equipment all around, Daeheung Cooler'll endeavor to comply with the client's request.



Inner fin tube



Low fin tube



Middle fin tube



High fin tube

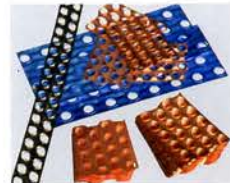


Plate fin



Spiral tube



대흥 기술진이 개발한 여러가지 신소재로 기존의 Bare tube보다 냉각효율이 20~30% 가량 높은 효율을 갖추고 있으므로 냉각효율이 훨씬 좋고 컴팩트한 사이즈로 열교환기로 사용 시 충분한 만족을 드릴 것입니다.

As Daeheung Coolers use various new materials developed by his engineering group, they have an efficiency 20~30% higher than those with existing bare tubes. With these tubes, Daeheung's heat exchangers have excellent cooling efficiency and compact size enough to give sufficient satisfaction.

Water Cooled Oil Cooler

DHPFE Series

Oil Cooler의 Plate Fin Tube를 펌사 자체 개발에 성공하여 이를 제품화하였습니다. 높은 전열 면적과 우수한 열교환 능력으로 종래의 제품보다 40%의 소형화, 35%의 경량화로 Oil Cooler의 첨단을 이룩하였습니다. 모든 부품이 분해 조립할 수 있게 제작되어 청소나 수리가 용이해 경제적입니다. 용도는 사출기, 압출기, 프레스, 선박엔진, 콤프레셔, 유압유닛, 유압작동유 · 윤활유 · 절삭유 · 열교환유의 냉각용으로 사용되고 있습니다.

We have developed by ourselves Plate Fin Tube which are newly designed parts, with bigger surface area of heat transfer and higher performance of heat exchange.

With that technological improvement, our products of oil coolers become smaller in size by 40% and lighter in weight by 35%, comparing to the previous product of same capacity.

Also, our products can be disassembled part by part, when it is necessary, and therefore maintenance and repairing work can be done easily and efficiently.

USES Injection molding machine, Press machine, Marine machine, Air compressor, Hydraulic power unit, etc.

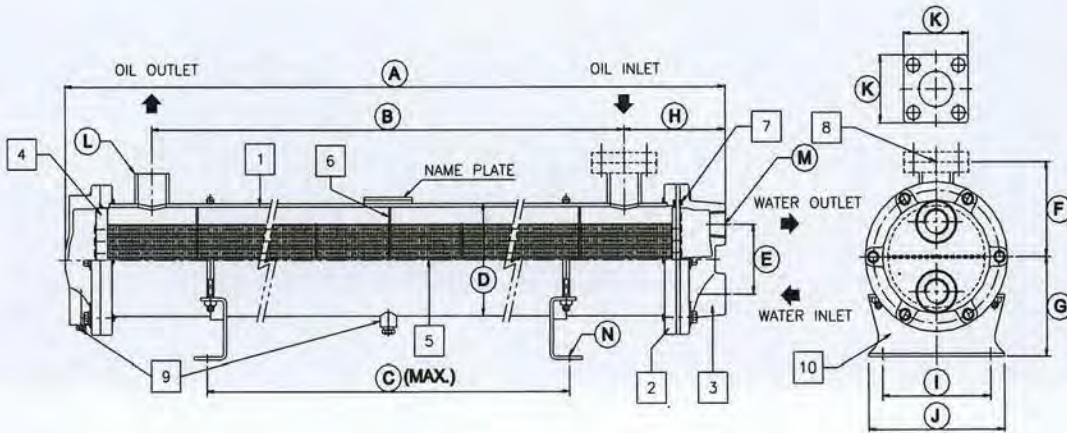


DHPFE-S Series

- ※ 고온, 고압, 진동 맥동 및 부식성이 있는 물질, 그 밖의 특수유체 및 GAS를 냉각하고자 할 때는 당사 기술진과 반드시 협의 바랍니다.
- ※ Consult with us immediately when you operate heat exchanger under high heat, high pressure, vibration and corrosion conditions.



DHPFE-F Series



- 1 SHELL
- 2 SHELL FLANGE
- 3 COVER
- 4 TUBESHEET
- 5 PLATE FIN TUBES
- 6 BAFFLE PLATE
- 7 O-RING
- 8 FLANGE or SOCKET
- 9 DRAIN
- 10 SADDLE

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Heat Transfer Area(m ²)	Exchanged Calory (kcal/hr)	Flow Rate (ℓ /min)	Weight (kg)
	(mm)	(mm)	(mm)	(∅)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(PT)	(PT)	(mm)				
30LT	476	278	215	89.1	52	87	81	107	87	128	70	1"	1/2"	11×22	1.09	3,659	10~30	12
60LT	576	378	315	89.1	52	87	81	107	87	128	70	1"	1/2"	11×22	1.38	4,878	20~40	14
80LT	676	478	415	89.1	52	87	81	107	87	128	70	1"	1/2"	11×22	1.66	6,098	30~50	15
100LT	486	266	195	114.3	68	102	98	118	109	150	80	1.1/4"	3/4"	11×22	1.78	6,572	40~60	19
150LT	586	366	295	114.3	68	102	98	118	109	150	80	1.1/4"	3/4"	11×22	2.25	8,179	50~70	21
200LT	686	466	395	114.3	68	102	98	118	109	150	80	1.1/4"	3/4"	11×22	2.72	9,944	60~80	23
250LT	826	606	535	114.3	68	102	98	118	109	150	80	1.1/4"	3/4"	11×22	3.39	12,187	70~100	25
300LT	703	460	375	139.8	82	117	117	133	138	180	90	1.1/2"	1"	13×26	4.43	16,160	80~130	31
350LT	1003	760	675	139.8	82	117	117	133	138	180	90	1.1/2"	1"	13×26	6.74	24,130	120~180	38
500LT	955	660	560	165.2	102	132	148	160	167	210	100	2"	1.1/4"	13×26	8.44	30,467	180~250	46
600LT	1025	730	630	165.2	102	132	148	160	167	210	100	2"	1.1/4"	13×26	9.17	32,929	230~300	52
700LT	1125	830	730	165.2	102	132	148	160	167	210	100	2"	1.1/4"	13×26	10.22	36,710	280~350	54
800LT	871	520	420	216.3	128	172	216	179	200	300	130	2.1/2"	1.1/2"	18×38	11.95	43,564	300~380	81
900LT	971	620	520	216.3	128	172	216	179	200	300	130	2.1/2"	1.1/2"	18×38	13.74	49,175	340~420	85
1000LT	1071	720	620	216.3	128	172	216	179	200	300	130	2.1/2"	1.1/2"	18×38	15.51	54,882	400~500	90
1200LT	1171	820	720	216.3	128	172	216	179	200	300	130	2.1/2"	1.1/2"	18×38	17.28	60,371	480~550	96
1500LT	1371	1020	920	216.3	128	172	216	179	200	300	130	2.1/2"	1.1/2"	18×38	20.84	73,120	520~600	106

※ 상기 제원은 품질을 개선하기 위하여 예고없이 변경될 수 있습니다.

※ This specifications are subject to change without an advance notice for the improvement of the quality.

Air Cooled Oil Cooler

DHR Series

대흥쿨러는 30년 전 국내 최초 유압기기의 공냉식쿨러를 디자인하였고, 역학적 방법과 충분한 실험을 통해 설계, 제작된 획기적 제품입니다.

신개발된 Slit Fin과 더욱 강하고 얇아진 전열관 사용으로 높은 냉각효율, 제품의 콤팩트화, 견고하고 미려한 외장, 경량화를 실현하였습니다.

다양한 기종과 사양으로 용량, 용도 및 설치 장소에 따라 선택이 가능합니다.

고성능 Motor를 사용함으로써 긴 수명, 저 소음을 실현하였습니다.

사용 전압에 따라 110/220, 380/440, 12V, 24V 및 특수 전압의 선택이 가능하고 중장비 및 고압 Plant에 사용되는 제품은 진동 및 사용압력에 맞추어 견고하게 제작되어 있습니다.

Daeheung is the first manufacturer that designed and produced the Air Cooled Oil Cooler in accordance with the Hydro-Mechanical method 30 years ago in Korea, and we made numerous testing and experiments through the course of development of it.

With the application of the Slit Fin and Corrugated Fin Tube, we could produce the air cooled oil cooler of high cooling efficiency, compact, stability, light-weighted and beautiful appearance.

Various types and specifications are available for different requirements of capacity, use and installation area.

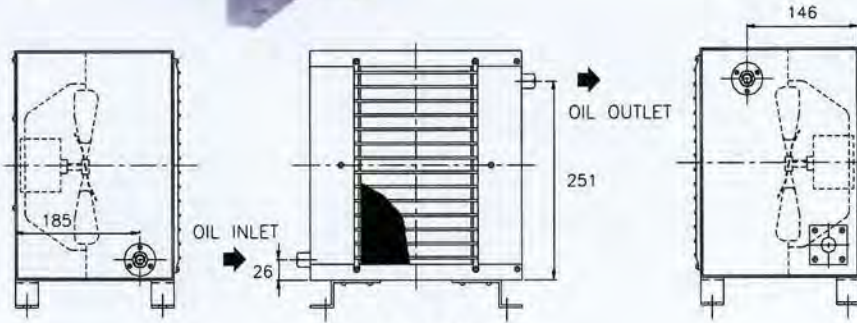
Using of high performance Motor enabled our products to have longer durability and lower noise

Available for electricity of 110V, 220V, 380V, 440V, 12V, 24V and others, and oil coolers used for heavy equipments and high pressure plants are produced to be strong enough to cover the vibration rate and the pressure.



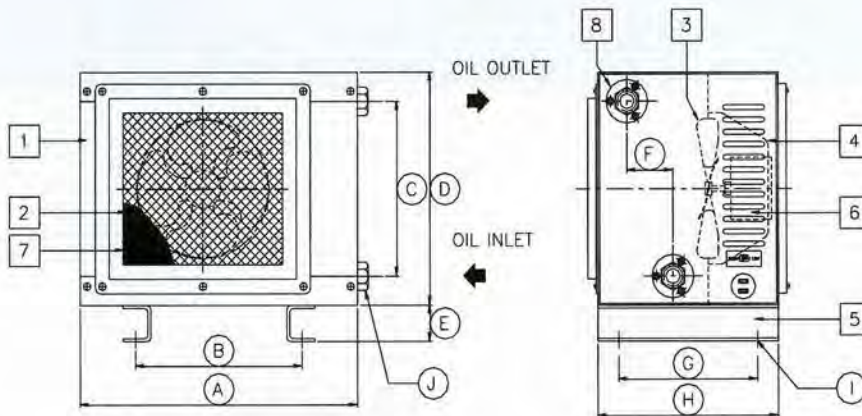
Oil Cooler for Hydraulic Power Unit

- ※ 고온, 고압, 진동 맥동 및 부식성이 있는 물질, 그 밖의 특수유체 및 GAS를 냉각하고자 할 때는 당사 기술진과 반드시 협의 바랍니다.
- ※ Consult with us immediately when you operate heat exchanger under high heat, high pressure, vibration and corrosion conditions.



DHR 10LT

- 1 CASE
- 2 TUBE
- 3 FAN BLADE
- 4 MOTOR COVER
- 5 SADDLE
- 6 MOTOR
- 7 FIN
- 8 NOZZLE



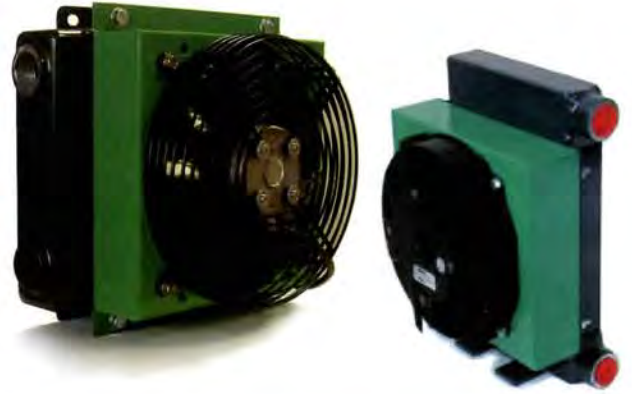
	A	B	C	D	E	F	G	H	I	J	Heat Transfer Area(m ²)	Exchanged Calory (kcal/hr)	Flow Rate (ℓ /min)	Weight (kg)	사용전압 (V)
	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(mm)	(PT)					
DHR-5LT	220	196	178	225	22	0	110	130	4x18(c)	3/8"	0.92	620	2~5	9	단상, 단용 110 or 220
DHR-10LT	280	240	225	295	35	22	180	210	5x22(c)	3/8"	2.2	1,360	5~10	11	단상, 단용 220
DHR-30LT	400	240	240	320	50	64	200	260	13x20	3/4"	5.41	3,350	10~30	13	단상, 단용 220
DHR-60LT	455	240	240	320	50	64	200	260	13x20	3/4"	6.76	4,200	30~40	16	단상, 단용 220
DHR-80LT	550	310	240	320	50	64	200	260	13x20	3/4"	8.3	5,140	40~50	21	단상, 단용 220
DHR-100LT	600	390	330	420	60	71	230	300	13x20	1"	12.4	7,680	50~75	25	단상, 단용 220
DHR-150LT	650	390	330	420	60	61	300	410	38x18	1"	13.6	8,430	75~100	27	단상, 단용 220
DHR-200LT	770	450	430	535	75	65	300	450	38x18	1.1/4"	20.9	12,960	100~125	36	단상, 단용 220~380
DHR-280LT	970	650	430	535	75	65	300	450	38x18	1.1/4"	27.4	16,900	125~150	48	단상, 단용 220~380
DHR-350LT	1165	885	420	535	75	72	300	450	38x18	1.1/2"	33.8	21,000	150~175	58	단상, 단용 220~380
DHR-450LT	1165	885	520	650	75	72	300	450	38x18	1.1/2"	40.6	25,170	175~225	69	단상, 단용 220~380
DHR-550LT	1370	910	500	650	75	82	300	450	38x18	2"	49	30,400	225~275	83	단상, 단용 220~380

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Air Cooled Oil Cooler

DHY Series

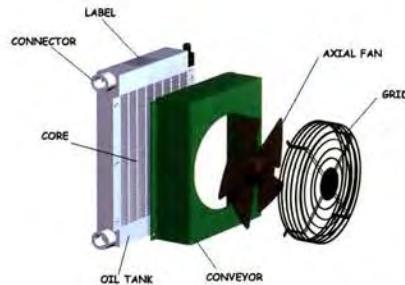


유압작동유, 윤활유, 열교환유, 절삭유 등을 공기로 냉각시키는 방식으로 가볍고 컴팩트한 구조로 이루어져 Power Unit, 전용기, 공작기계, 중장비 등 다양한 분야에 널리 사용되고 있습니다.

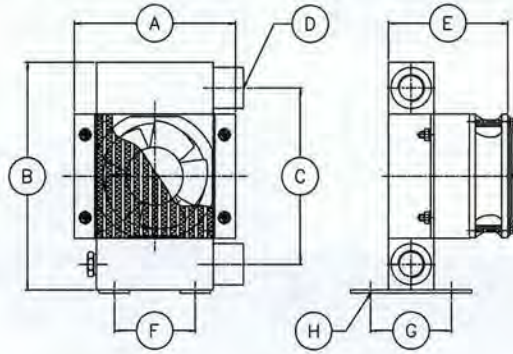
As Daeheung Coolers are light and compact structured owing to the cooling type that hydraulic oil, lubrication oil, heat exchanging oil and cutting oil are cooled with air. For this reason, they are widely used in the diversified fields such as power unit, airplanes, machine tools, heavy equipment and others.

사용조건

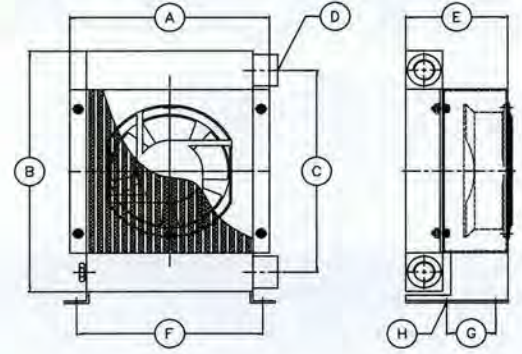
- OIL SIDE
Lubricant Mineral ISO VG32
Inlet temp. of primary flow : 80°C
- AIR SIDE
Inlet cooling flow temp. : 30°C
Inlet cooling flow speed : 2~3m/s



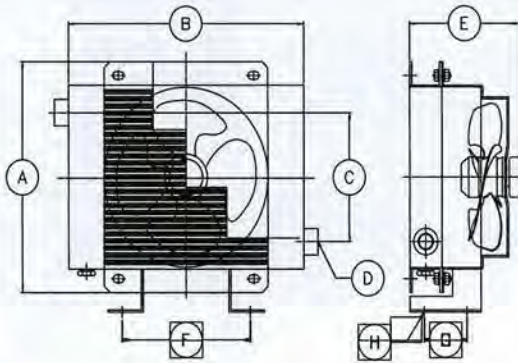
DHY005



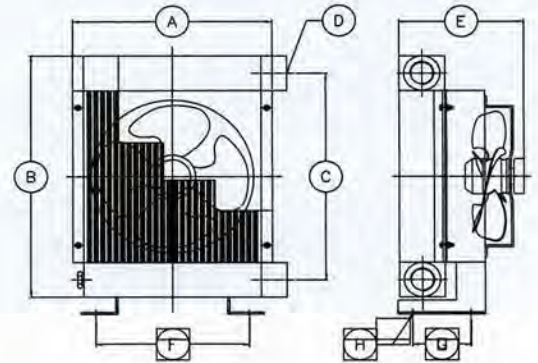
DHY014



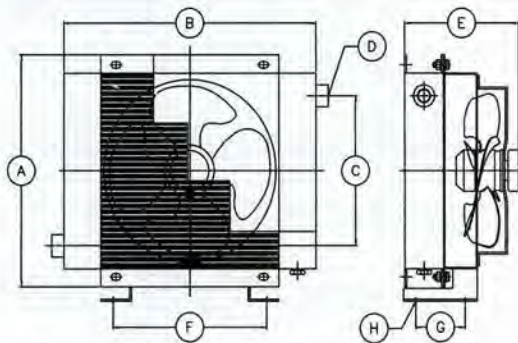
DHY018 / 057



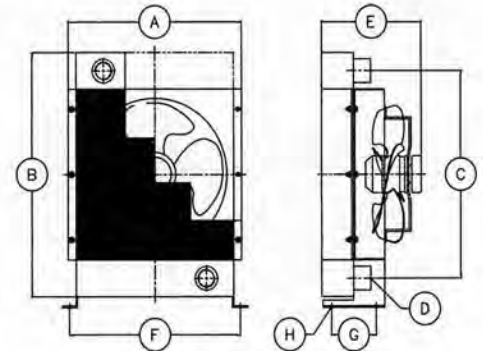
DHY020 / 036 / 037 / 055



DHY024 / 038



DHY115



	A (mm)	B (mm)	C (mm)	D (PT)	E (mm)	F (mm)	G (mm)	H (mm)	Exchanged Calory (kcal/hr)	Flow Rate (ℓ /min)	MOTOR
DHY005	160	220	170	3/4"	118	70	80	∅10	1290	5~10	단상, 110/220V, 60Hz
DHY014	202	310	260	3/4"	125	226	70	∅10	3869	10~30	단상, 110/220V, 60Hz
DHY018	295	330	165	1/2"	172	210	80	13×26	6449	40~50	단상, 110/220V, 60Hz
DHY020	273	350	243	1"	172	210	80	13×26	7739	50~60	단상, 110/220V, 60Hz
DHY024	355	410	230	1/2"	186	250	80	13×26	9028	60~70	단상, 110/220V, 60Hz
DHY036	470	350	300	1"	201	350	80	13×26	10318	70~80	단상, 220V, 60Hz
DHY037	500	475	430	1"	186	350	60	13×26	11608	80~90	단상, 220V, 60Hz
DHY038	410	415	270	1"	204	300	80	13×26	12898	90~100	단상, 220V, 60Hz
DHY055	500	475	430	1"	261	400	110	13×26	14187	100~110	삼상, 220/380V, 60Hz
DHY057	505	515	365	1.1/4"	261	400	110	13×26	19347	110~150	삼상, 220/380V, 60Hz
DHY115	505	670	570	1.1/2"	292	498	130	13×26	27085	150~210	삼상, 220/380V, 60Hz

※ 상기 제원은 품질을 개선하기 위하여 예고없이 변경될 수 있습니다.

※ This specifications are subject to change without an advance notice in order to improve the quality

Oil Conditioner

DHOC Series

국내 최초 GSA(냉매) 냉각방식 도입으로 인한 유온 자동 Controller
The first GSA (refrigerant)-cooling automatic oil temperature controller in Korea

- 안정된 냉각능력에 따른 가공 정밀도 향상
- 조작이 간편하며 완벽한 안전장치 내장
- 냉각수 불필요에 따른 경제성
- 사용온도범위(유온) : 15~45°C
- 용도 : 유압작동유(광유), 윤활유, 열교환유 냉각
- Stable cooling capacity boosts processing precision
- Simple operations with a perfect built-in safety device
- Cost-saving coolant-free design
- Operation temperature (oil temperature) : 15 ~ 45°C
- Intended use : To cool hydraulic oil (mineral oil), lubricants and heat exchanger oil



	DHOC-0.5A	DHOC-1A	DHOC-2A	DHOC-3A
Cooling Cap. (Kcal/h)	1400	2700	5100	8000
Cooling Cap. (kW)	1.6	3.1	5.9	9.3
Electric Power	220V 3Ø 60Hz			
Current Load (Max.)	4A	6A	13A	18A
Compressor (Hp/kW)	1/2/0.4	1/0.75	2/1.5	3/2.2
Condenser	Air Cooled Fin and Tube			
Cooler	Shell and Tube / STS Plate Fin			
Refrigerant	R-22			
Pump Flow (ℓ /min)	15	20	25	30
Pump Type	Trochoid			
Motor (kW)	0.1~0.4		0.2~0.75	0.2~1.1
Temp. Controller	Digital TIC / -99 ~ +99°C Display			
Pipe Conn.	15A	20A		
Lay Out Size (WxHxD)	380×450×670	380×450×820	490×525×940	530×560×1060
Weight (Empt/Opr) (Kg)	35/33	40/44	55/60	70/77

- 냉각능력은 유온, 주위온도, 오일의 동점도 조건에 따라 변화합니다.
- 냉각능력은 표준조건외 냉각능력을 표시합니다. (사용유 ISO VG32)
- 상기 제원은 품질을 개선하기 위하여 예고없이 변경될 수 있습니다.
- 사용조건에 따라 선택 사양이 달라지므로 단가에 차이가 있을 수 있습니다.
- 펌프순환형과 탱크내장형, 탱크삽입형 등 사용 용도에 따라 3종류로 구분됩니다.

- Cooling capacity may vary depending on oil temperatures, ambient temperatures, and kinematic viscosity.
- Cooling capacity represents a cooling capacity under controlled standard conditions (used oil: ISO VG32)
- The above-listed specifications are subject to change without notice.
- The unit prices may vary depending on the optional specifications tailored to various application purposes.
- The products are divided into three types by intended use: a pump circulation type, a built-in tank type, and a tank-embedded type.

Water Chiller

DHWC Series

금형냉각기

Mold cooling machine

- 우수한 냉각능력과 견고한 내구성
 - 조작이 간편하며 완벽한 안전장치 내장
 - 냉각수 불필요에 따른 경제성
 - 사용온도범위(유온) : 5~45°C
 - 냉각수온도범위 : 5~35°C
 - 용도 : 금형의 냉각, 세정장치의 냉각, 도금액의 냉각, 화학장치의 냉각
- Excellent cooling capacity and durability
 - Simple operations and a perfect built-in safety device
 - Cost-saving coolant-free design
 - Operation temperature (oil temperature) : 5 ~ 45°C
 - Coolant temperature : 5 ~ 35°C
 - Intended use : To cool molds, rinsing devices, plating solutions and chemical devices.



	DHWC-1A	DHWC-2A	DHWC-3A	DHWC-5A	DHWC-8A	DHWC-10A	DHWC-15A	DHWC-20A	DHWC-30A	DHWC-40A
Cooling Cap. (Kcal/h)	2750	5500	8170	13500	20120	27500	41280	54000	83000	105000
Cooling Cap. (kW)	3.2	6.4	9.5	15.7	23.4	32.0	48.0	62.8	96.5	122.1
Electric Power	220V 1Ø	220V, 380V, 440V 3Ø 60Hz (Control Power : 110V, 220V 1Ø)								
Current Load (Max.)	8A	10A	14A	20A	30A	40A	60A	75A	105A	120A
Compressor (Hp/kW)	1/0.75	2/1.5	3/2.2	5/3.75	7.5/5.5	10/7.5	15/11	20/15	30/22	40/30
Condenser	Air Cooled Fin and Tube / Water Cooled Shell and Tube									
Condenser Fan Motor (kW)	0.1	0.2	0.2	0.4	0.75	0.4×2	0.4×2	0.75×2	0.75×3	0.75×3
Condenser Fan Dia	200Ø	300Ø	300Ø	400Ø	500Ø	400Ø×2	500Ø×2	550Ø×2	600Ø×3	600Ø×3
Cooler	Shell and Tube / STS Plate Fin									
Pump Flow (l/min)	5~12	10~25	15~35	25~50	30~70	40~80	70~120	100~180	150~250	200~300
Pump Head (MH)	1~3		1~5	1~5	1~5	2~5		2~7		
Pump Motor (kW)	0.1~0.4		0.2~0.75	0.2~1.1	0.4~1.5	0.4~2.2	0.75~3.75	1.1~5.5	1.5~7.5	2.2~11
Water Tank (Litter)	5~300 / N.A									
Temp. Controller	Digital TIC / -99 ~ +99°C Display									
Pipe Conn.	10~15A	10~20A	15~20A	15~25A	20~32A	25~32A	25~40A	25~50A	32~50A	40~65A
Lay Out Size (WxHxD)	480×780×	575×1000×	600×1100×	650×1250×	750×1300×	900×1700×	950×1800×	1100×2000×	1150×2800×	1250×3600×
	900	1100	1100	1150	1450	1550	1650	1800	2000	2200
Weight (Empt/Opr) (Kg)	55/65	80/100	90/115	130/175	175/220	300/375	500/650	800/900	1000/1150	1200/1400

- 냉각능력은 냉각온도 10°C, 주위온도 32°C 일때의 기준입니다.
- 수냉식은 30A부터 가능합니다.
- 상기 제원은 품질을 개선하기 위하여 예고없이 변경될 수 있습니다.
- 사용조건에 따라 선택 사양이 달라지므로 단가에 차이가 있을 수 있습니다.
- The standard cooling capacity was measured when a cooling temperature was 10°C and an ambient temperature was 32°C
- Water cooling types are available from 30A.
- The above-listed specifications are subject to change without notice.
- The unit prices may vary depending on the optional specifications tailored to various application purposes.

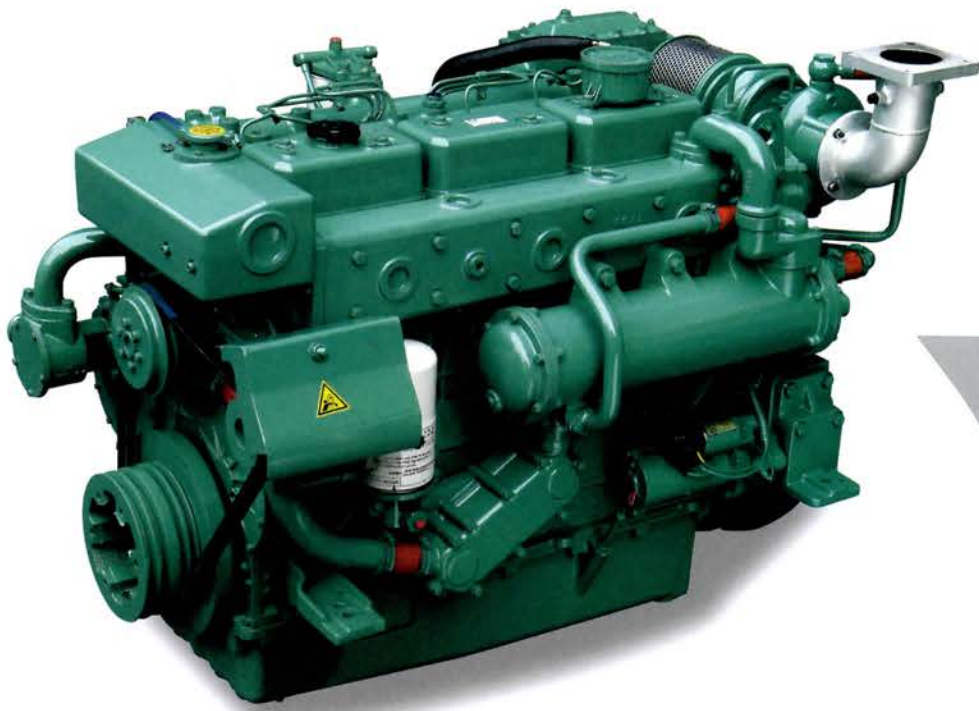
Heat Exchanger

For Marine Engine

선박의 엔진 과열을 막기 위한 장치인 Oil Cooler, Fresh Water Cooler 등의 Heat Exchanger를 자체 연구와 설계 및 실험을 통하여 기술력을 인정받아 유수의 업체에 제작 납품하고 있으며, 엔진 구동 시 최적의 조건을 만들 수 있는 열 교환기를 납품한 수많은 실적을 보유하고 있습니다.

Through research, design and experiments of Daeheung, a numerous customers are recognizing Daeheung's technology in the heat exchangers such as oil coolers and fresh water coolers to prevent the overheat of engines in ships. Daeheung Cooler possesses great accomplishments in supplying successful heat exchangers to supply optimized conditions for engine operation.





Air Cooler

For Generator & Motor

PLATE FIN의 사용으로 성능을 향상시키고 2중관을 사용하여 안전성을 높인 제품입니다.
기술력과 품질을 인정받아 유수의 업체에서 사용하고 있는 모델입니다.

Daeheung Coolers are products the performance is increased using the plate fins and the safety is secured using the duplex tubes. Our models are used for a numerous customers who are recognizing Daeheung's technology and quality.

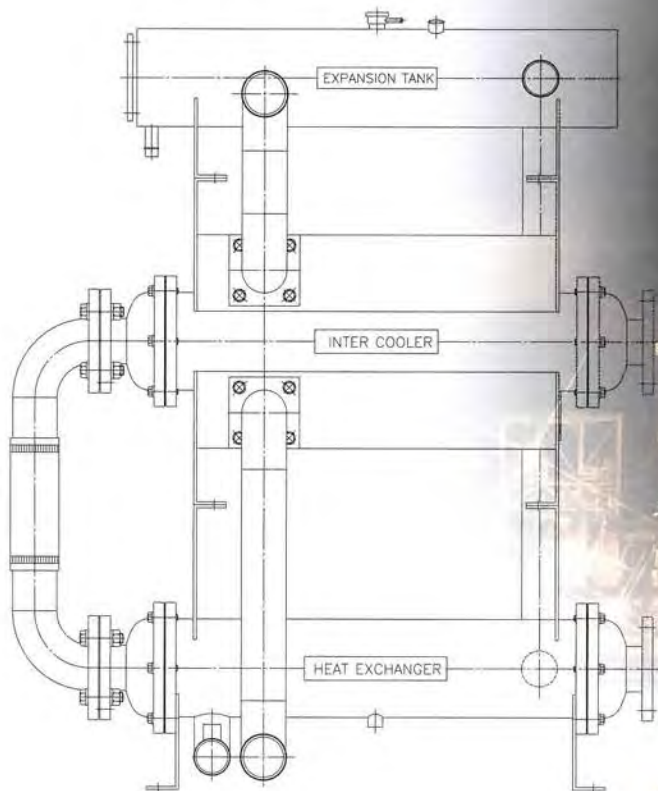


Heat Exchanger

For Generator Engine

비상용 발전기 엔진을 협소한 장소에 놓을 경우 성능과 수명을 늘려주는 열교환기로 끊임없는 연구와 노력으로 실제 Plant 업체에서 필요한 성능을 발휘할 수 있도록 설계 및 디자인하여 유수업체에서 사용하고 있습니다.

Daeheung's heat exchangers improve the performance and life time of the emergency generator engine installed in a narrow space. Engineering and design with ceaseless investigation and effort to exert the required performance enable a numerous plant customers to use our heat exchangers.



Heat Exchanger

For Air & Gas Compressor

다단의 Compressor 사이에 설치되고, 압축되어 나온 고온, 고압의 가스를 냉각유체로 냉각하여 가스의 온도를 낮추고 용적 효율을 높여 다음 압축행정이 용이하도록 하는 기능을 합니다. 자체 개발한 여러가지 Fin Tube로 Compressor에 설치되는 대부분의 Air & Gas Cooler의 제작이 가능합니다.

Our heat exchangers, which are installed between multi-stage compressors, function to cool the compressed high temperature and high pressure gas with cooling fluids to lower the gas temperature and raise the volumetric efficiency, and to ease the next compression stroke.

Daeheung's self developed various fin tubes enable most air and gas coolers installed in the compressors to be manufactured.



PLATE FIN TUBE, ASSEMBLY TYPE FOR CENTRIFUGAL COMPRESSOR



Compressor의 몸체와 별도로 설치되며 통상 대형 다단의 Comprocess에 설치됩니다. 가스 측에 Plate Fin을 적용하여 전열 면적을 극대화하고 수분의 응축이 용이하여 따로 수분분리기 없이도 수분제거가 용이합니다.

■ 적용 업체 : KOBELCO, IHI, 세아이엔티, 대주기계 등

They are installed separately from the compressor body, and normally in the large sized multi-stage compressors.

Application of plate fin in the gas side maximizes the heat transfer area, eases the moisture condensation and enables easy moisture removal without an additional moisture separator.

■ Applied to : KOBELCO, IHI, Seah E&T, Daeju Machinery, etc



PLATE FIN TUBE, TUBE BUNDLE TYPE FOR CENTRIFUGAL COMPRESSOR

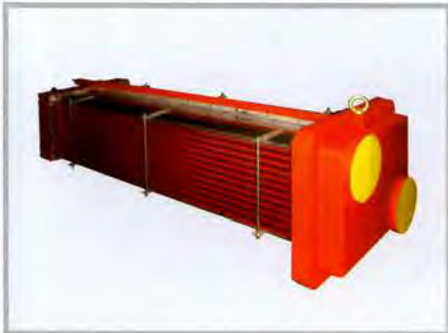


열교환기 몸체가 Compressor와 일체형으로 되어 있으며, Plate Fin Type의 Tube Bundle만 제작하여 조립하는 형태입니다. 비교적 형태가 간단하여 제작 비용이 적고, 유지 보수가 용이합니다.

■ 적용 업체 : KOBELCO, IHI, JOY, ELLIOTT, 세아이앤티 등

The body of heat exchanger is integrated to the compressor, and the tube bundles of plate fin type are manufactured and assembled to it. Relatively simple shapes enable the low manufacturing cost and easy maintenance and repair.

■ Applied to : KOBELCO, IHI, JOY, ELLIOTT, Seah E&T, etc



SPIRAL & INNER FIN TUBE TYPE FOR SCREW COMPRESSOR



Screw Compressor에 적용되는 열교환기로 Spiral Tube와 Inner Fin Tube Type 등이 관 내측으로 가스가 이동하며 Spiral 형상과 Inner Fin에 의해 전열 면적을 늘리고 와류를 형성하게하여 전열효과를 향상 시켰습니다.

■ 적용 업체 : KOBELCO, IHI, JOY, ELLIOTT, 세아이앤티 등

As heat exchangers applied to screw compressors, their spiral shaped tube and inner fin tube increase the heat transfer area while the gas moves through inner side of the tube and forms the turbulent flow and finally improve the heat transfer efficiency.

■ Applied to : KOBELCO, IHI, JOY, ELLIOTT, Seah E&T, etc





INNER FIN TUBE TYPE FOR CENTRIFUGAL COMPRESSOR



Inner Fin Tube Type 열교환기로 관 내부에 작은 관이 있고 그 공간에 핀이 있는 형태로 전열 효과가 매우 탁월합니다. 하지만 제작하는데 있어 상당한 기술을 요하는 제품입니다.

■ 적용 업체 : INGERSOLL RAND 등

Inner fin tube type heat exchanger has small tubes in the tubes, and the pins in their space make the heat transfer effect very superior, which, in return, require a technology of extremely high level in the manufacturing.

■ Applied to : INGERSOLL RAND, etc



INNER FIN & BARE TUBE TYPE FOR RECIPROCATING COMPRESSOR



왕복동식 Compressor에 설치되며 Inter Cooler는 Inner Fin Tube Type이고 After Cooler는 Bare Tube Type으로 Separator가 있어 공기의 수분을 분리하여 배출합니다.

■ 적용 업체 : 광신기계공업, 세아이엔티 등

Daeheung's heat exchangers can be installed in the reciprocating type compressors. Their inter cooler is of inner fin tube type, and after cooler is of bare tube type. With a separator, moisture in the air is separated to be removed.

■ Applied to : Kwangshin Machinery Co., Ltd, Seah E&T, etc

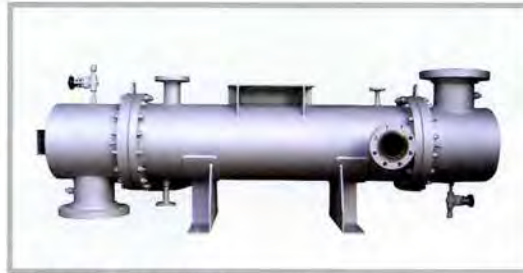


Heat Exchanger

For Industrial Process

화학, 정유, 제철, 발전, 난방 시설 등에 사용되는 순환 유체의 가열, 냉각, 응축, 증발, 폐열회수 등의 여러가지 목적으로 사용되며, 프로그램에 의한 열량설계 및 강도계산을 자체에서 수행하고, 여러가지 형태의 열교환기 제작이 가능합니다.

They are used for various purposes such as heating, cooling, condensation, evaporation, waste heat recovery of circulation fluids in the petrochemical, refinery, steel mill, power generation and heating facilities and others. Heat balance design and strength calculation are performed by our own developed program and various types of heat exchanger can be manufactured.



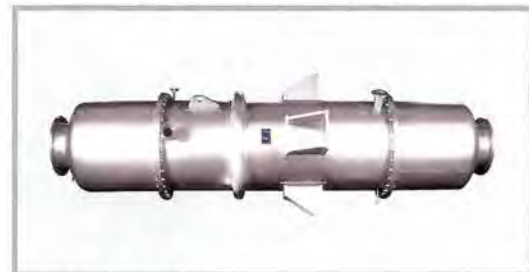
Gland Condenser



Sighting Tube for Radiation Pyrometer



Water Cooler



Heat Exchanger



U-tube Type heat Exchanger



U-Tube type Gas Cooler

Heat Exchanger

For Special

대흥쿨러가 직접 개발한 특수목적용 열교환기로 Fuel Humidifier는 천연가스 및 바이오가스 등의 다양한 원료를 이용, 친환경적이고 높은 에너지 효율을 발생시키는 제품으로 POSCO Power의 용융탄산염 연료전지 발전시스템에 공급되고 있으며 HRU System 역시 석유 의존도 감소를 위해 다양한 원료를 지역난방 및 산업용 열에너지로 공급하는 효율적인 에너지 운용 시스템의 중추적인 역할을 하는 열교환기입니다. Cooling Tower는 산업용 생산라인에 사용하는 용수를 냉각시켜주는 장치로서 대기 중의 공기나 팬을 이용하는 일반적인 Cooling Tower와는 달리 냉각수를 이용하여 고효율을 창출시키는 제품입니다.

Fuel humidifiers, which have been developed by Daeheung Cooler for special purposes, use diversified raw materials such as natural gas and bio gas to generate eco-friendly and high energy efficiency. They are being supplied to POSCO's Molt Carbonate Fuel Cell Generation System. HRU system is also an exchanger that plays a crucial role in the effective energy management system to supply diversified raw materials to district heating and industrial heat energy in order to reduce the oil dependency.

Cooling tower, an equipment to cool the industrial water used in the industrial production line, is a high efficiency creation product using cooling water unlike typical cooling towers which use the air in the atmosphere or fans.



Fuel Humidifier (POSCO Power)



Heat Recovery Unit System



Motor Cooling Unit



Heat Exchanger for Cooling Tower (POSCO)

Lube Oil Unit

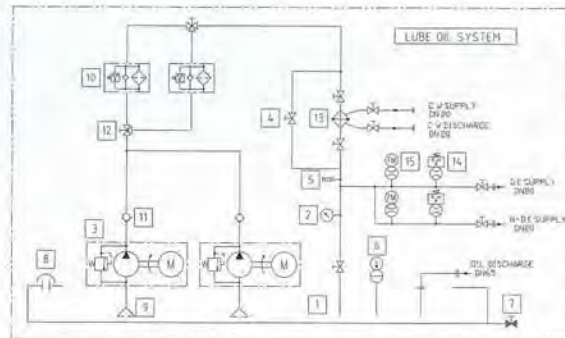
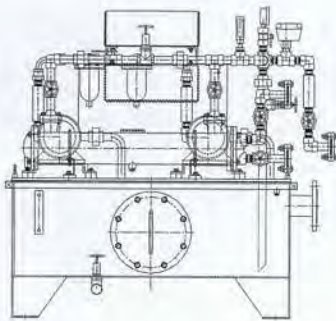
DHRU Series

오일 유닛은 Motor, Gear box, Boiler 등에서 사용되어 뜨거워진 오일을 수냉식 또는 공냉식 쿨러를 통해 재사용할 수 있는 온도범위로 냉각시켜주는 장치입니다.

Oil unit is a device that hot oil used in the motor, gear box, boiler, etc can be cooled to temperature range which can be reused through water cooler or air cooled coolers.

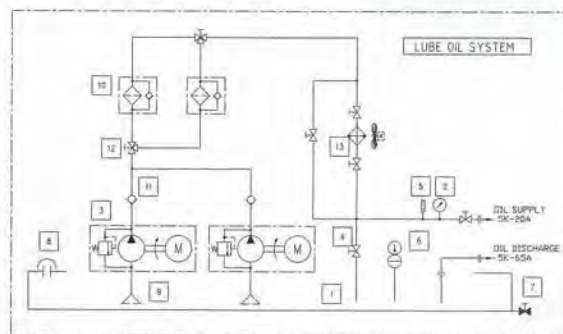
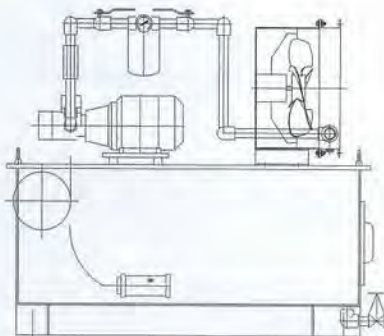


Water Cooled Oil Unit



- 1 OIL TANK
- 2 PRESSURE GAUGE
- 3 OIL PUMP & MOTOR
- 4 GATE VALVE
- 5 THERMOMETER
- 6 LEVEL GAUGE
- 7 DRAIN VALVE
- 8 AIR BRETHRE
- 9 SUCTION FILTER
- 10 FILTER
- 11 IN-LINE CHECK VALVE
- 12 3-WAY VALVE
- 13 OIL COOLER
- 14 FLOW SWITCH
- 15 FLOW METER

Air Cooled Oil Unit



- 1 OIL TANK
- 2 PRESSURE GAUGE
- 3 OIL PUMP & MOTOR
- 4 GATE VALVE
- 5 THERMOMETER
- 6 LEVEL GAUGE
- 7 DRAIN VALVE
- 8 AIR BRETHRE
- 9 SUCTION FILTER
- 10 FILTER
- 11 IN-LINE CHECK VALVE
- 12 3-WAY VALVE
- 13 OIL FAN COOLER
- 14 HANHOLE
- 15 EYE BOLT BOSS



Pressure Vessel

압력용기

열교환기 외에 산업 플랜트 및 석유화학 플랜트에 사용되는 장치류인 압력용기, 리액터, 필터, 각종 탱크류 등을 설계부터 철저한 품질 검사를 바탕으로 제작하면서, 국내·외 플랜트 산업에 이바지하고 있습니다.

In addition to heat exchangers, Daeheung manufactures pressure vessels, reactors, filters and various tanks which are used in the industrial plant and petrochemical plant based on complete quality inspection from the design stage and is contributing to domestic and overseas plant industry.



Reactor

- 사용자 : Sumika Electronics Materials
- 사용유체 : 수산화칼륨 + 스팀
- 용도 : 석유화학 플랜트

- User : Sumika Electronics Materials
- Operation fluid : potassium hydroxide (KOH) + Steam
- Application : Petrochemical plant

Recuperator

- 사용자 : 현대중공업
- 사용유체 : 공기 + 폐가스
- 용도 : 재가열로

- User : Hyundai Heavy Industry Co., Ltd
- Operation fluid : Air + Waste gas
- Application : Reheating furnace



Hot Oil Tank

- 사용자 : Pemex Petroquimica Complejo
- 사용유체 : 오일 + 질소
- 용도 : 윤활유 공급장치

- User : Pemex Petroquimica Complejo
- Operation fluid : Oil + Nitrogen
- Application : Lubrication oil supply unit



Drain Recovery Tank

- 사용자 : Tianjin Dagu Chemical
- 사용유체 : 물 + 에틸 벤젠
- 용도 : 오일-프리 스크류 압축기

- User : Tianjin Dagu Chemical
- Operation fluid : Water + Ethyl Benzene
- Application : Oil-free screw compressor



Pressure Tank

- 사용자 : Sinopec Mitsubishi Chemical
- 사용유체 : 탈염수
- 용도 : 오일펌프장치

- User : Sinopec Mitsubishi Chemical
- Operation fluid : Desalted water
- Application : Oil pumping unit



Cleaning Water Tank

- 사용자 : 포스코 광양제철소
- 사용유체 : 클리닝 워터
- 용도 : 공기압축기

- User : POSCO Gwangyang Steel Mill
- Operation fluid : Cleaning water
- Application : Air compressor

We have produced items as follows

다음과 같은 제품을 생산합니다

WATER COOLED WATER COOLER

- FRESH WATER COOLER FOR DIESEL ENGINE
- JACKET COOLING FRESH WATER COOLER
- PISTON COOLING FRESH WATER COOLER
- NOZZLE COOLING FRESH WATER COOLER

WATER COOLED LUBE OIL COOLER

- OIL COOLER FOR MARINE ENGINE
- OIL COOLER FOR INJECTION MOLDING MACHINE
- OIL COOLER FOR AIR COMPRESSOR
- OIL COOLER FOR PRESS MACHINE
- OIL COOLER FOR HYDRAULIC POWER UNIT
- OIL COOLER FOR CAR MISSION
- OIL COOLER FOR REDUCTION GEAR

WATER COOLED AIR COOLER

- INTER & AFTER COOLER FOR AIR COMPRESSOR
- AIR COOLER FOR GENERATOR & MOTOR
- CHARGED AIR COOLER FOR DIESEL ENGINE

AIR COOLED LUBE OIL COOLER

- OIL COOLER FOR AIR COMPRESSOR
- OIL COOLER FOR HYDRAULIC POWER UNIT
- OIL COOLER FOR HEAVY CONSTRUCTION MACHINE
- OIL COOLER FOR CONCRETE PUMP CAR

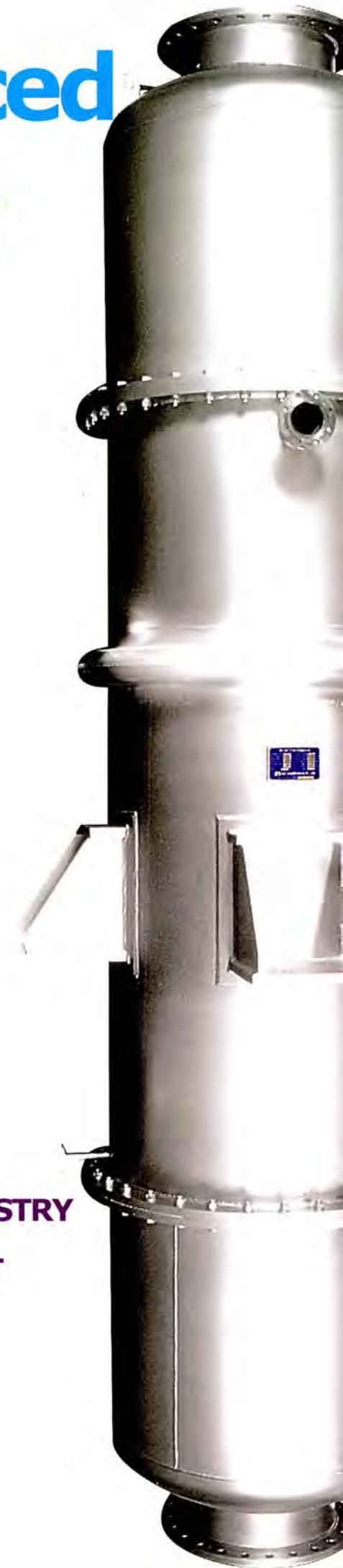
STEAM TO AIR HEATER

- AIR HEATER FOR CHEMICAL INDUSTRY
- AIR HEATER FOR CHEMICAL PLANT

HEAT EXCHANGER FOR CHEMICAL PLANT

HEAT EXCHANGER FOR ENVIRONMENTAL INDUSTRY

PLATE HEAT EXCHANGER FOR CHEMICAL PLANT



Design Condition

CUSTOMER

USE

NO. OF SET

TYPE

TRANSFER AREA

m³

		SHELL SIDE	TUBE SIDE
FLUID NAME		*	*
QUANTITY	m ³ /hr	*	*
INLET TEMPERATURE	°C	*	*
OUTLET TEMPERATURE	°C	*	*
INLET NOZZLE SIZE			
OUTLET NOZZLE SIZE			
NO. OF PASS			
ALLOWABLE PRESS. DROP	kg/cm ² g		
WORKING PRESSURE	kg/cm ² g	*	*
DESIGN PRESSURE	kg/cm ² g		
TEST PRESSURE	kg/cm ² g		
ALLOWABLE TOTAL LENGTH	m		

REMARKS : The value of asterisk (*) should be decided by user

Material

Shell

- Carbon Steel
- Stainless Steel
- Brass

Tube Sheet

- Carbon Steel
- Stainless Steel
- Naval Brass
- Titanium

Bare Tube

- Deoxidized Copper
- Al Brass
- Copper Nickel
- Titanium
- Stainless Steel
- Carbon Steel

Fin Tube (Tube/Fin)

Cu/Cu, Cu/C.S, Cu/Al, Al Brass/Cu,
Al Brass/Al, Cu-Ni/Cu-Ni, Cu-Ni/Cu,
S.S/C.S, S.S/Al, Ti/Cu, Ti/Al, S.S/S.S

HD (주)대흥쿨러

본사 및 영업부

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