Searle

GEA Searle - GF Gas Cooler Flatbed

General infomation - The Searle GF – Gas cooler Flatbed for CO2 is part of a family of air side products including the RF - Refrigeration Flatbed, LF - Liquid Flatbed and NF – Ammonia Flatbed. The GF range is primarily designed to work with refrigerants for use with Carbon Dioxide (R744) as the working fluid . For selection and pricing can be performed using the Searle Product Selection Software which can be downloaded from our website **www.searle.co.uk**

Fin material	Description
CU/AL	Copper tube/Aluminium fin
CU/AV	Copper tube/Epoxy coated Aluminium fin
CU/BG	Copper tube/Aluminium fin Blygold coated
CU/MB	Copper tube/Aluminium Magnesium fin Blygold coated
CU/AM	Copper tube/Aluminium Magnesium fin
CU/CU	Copper tube/Copper fin
CU/ET	Copper tube/Copper fin Electro tinned

Coil - TThe GF range utilises both the G-Fin and T-Fin tube configuration for most applications. Standard G (12FPI) incorporates 8mm tube diameter on an equilateral spacing achieveing a good balance of reduced refrigerant charge whilst maintaining appropriate thermal load to achieve good system stability. The T-Fin (11FPI) incorporates 12 mm tube on an equilateral spacing to achieve optimal heat exchanger efficiency for this tube diameter. The coil is fully supported, through its length and depth, by tube sheets and internal fan baffles secured to thecontinuous one piece side plates. The coil tubes are also supported on Aluminium or Copper insert plates secured to the tube sheets and fan baffles.

Casework - The casework is designed to maximise strength whilst reducing the number of components. Each side plate is cold formed from a single piece of pre-galvanised sheet steel and powder coated RAL7032 (Pebble Grey) on the outside with an Interlock construction creating an 'I' frame structure. This special form, which can be maufactured up to 12m long, gives tremendous strength and forms an integral part of the heat exchanger support structure.

Options	Description
Legs Extended	250mm, 500mm (Standard), 750mm, 1000mm
Isolators	Fan mounted isolators
Packing	Open crate, Closed boarded crate, Pallet, Hardboard coil protection
Stacking	Flat-bed units can be stacked to reduce transport costs
Vertical Arrangement	Vertical units – no additional cost
Alternative Fin Materials	Cu/Al , Cu/Av, Cu/Bg, Cu/AM, Cu/Cu, Cu/Et
Special Paint / RAL / C5M	Alternate unit colours or C5M Marine coating
Adiabatic System	Copper or PVC piping
Terminal Box	Terminal box for customer control
Control Box	Available for AC and EC fan motors using - Pressure control, Temperature control
Model option	GF-SJ, GVM, GVL

Fans - Searle offer either AC or EC fans supplied by either EBM Papst, Ziehl-Abegg or Fläkt Woods with options of 800mm, 900mm and 910mm diameter and 6, 8,12 pole.



Controls - Basic options on these ranges are:

- Unwired – Installer wires directly to fan terminal boxes.
- Junction Box – Single or twin according to unit model
- Staged Control – motor switchgear with or without controller.
- Speed Control – EC, inverter or triac.

All the above options are available with fan mounted isolators.

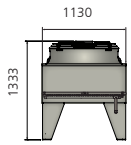
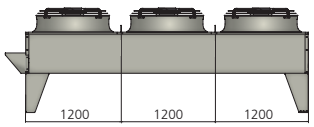
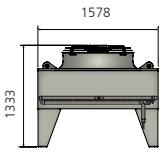
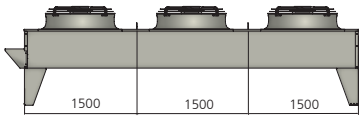
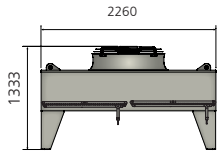
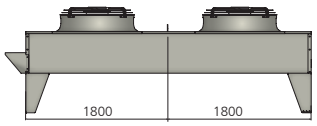
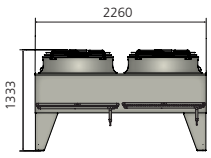
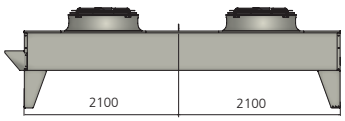
Features

- Maximum operationg pressure of 120 BarG
- Manufactured to Quality Standard ISO9001:2008
- Formed side channel for strength
- Centre plates for 'H' frame construction
- Forklift channels and lifting eyes on 3 fan units and above
- Galvanized steel case, legs and centre plates.
- Aluminium/Copper tube support
- Standard fin spacing 2.1mm on L fin units or 2.3mm on T fin units
- 4 module sizes
- Powder coated RAL 7032 grey
- Standard Copper (CU) tube, Aluminium (AL) fins
- Copper inlet and Outlet headers
- Pressure tested and sealed
- AC and EC fans available as standard
-

Certification - GF models are quality assured company to ISO 9001: encompassing Performance Testing, Manufacturing Systems and Inspection Procedures. Searle's products are also CE marked.

Selection software - - Selection and pricing can be performed on the Searle Selection software which can be downloaded from our website **www.searle.co.uk**

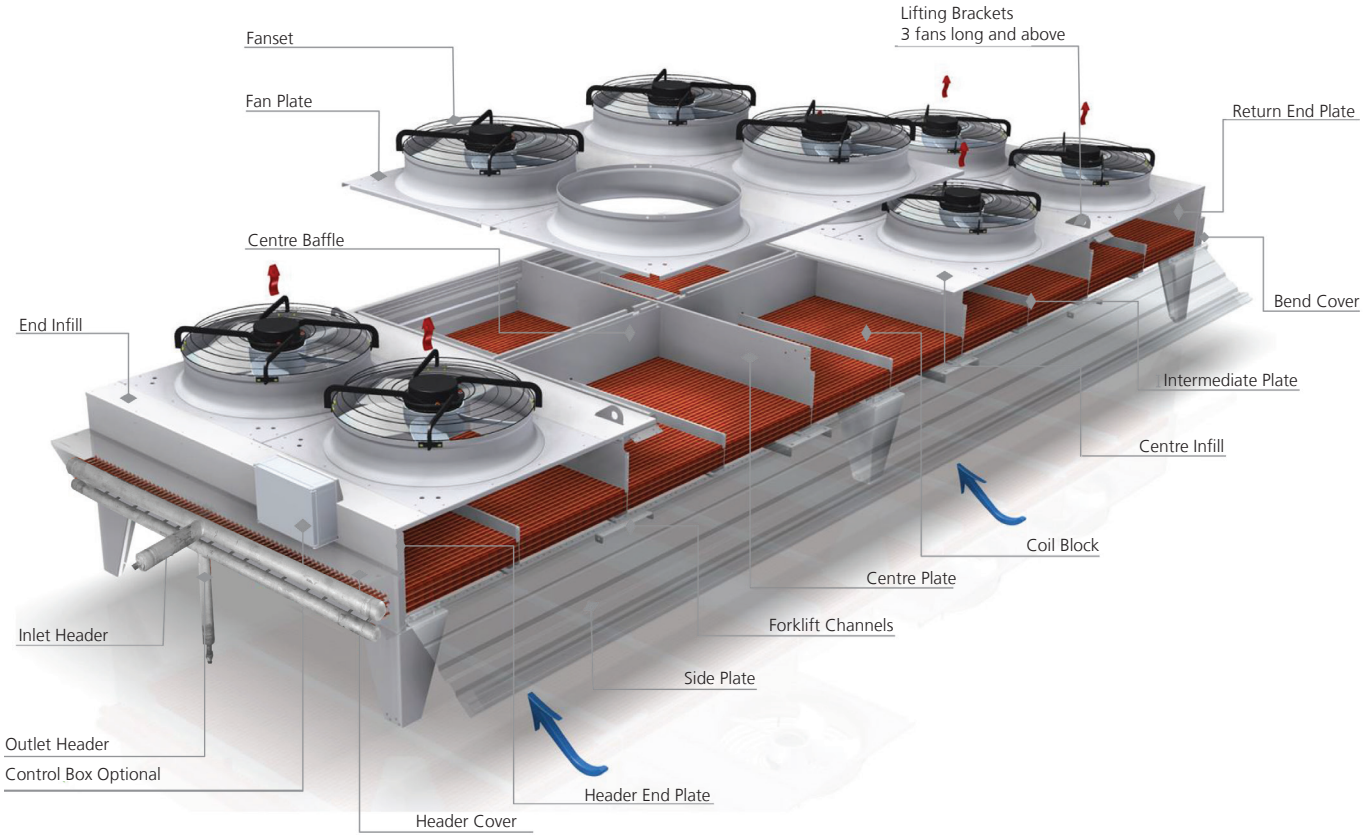
Dimensions drawings

Module Width		Module Length	Module Width		Module Length
GF-M		A 	GF-N		B 
GF-P_1		C 	GF-P_2		D 

Nomenclature

G	F	-	P	A	2	04	T	2	H	-	080	N	06	D

Product series:	**G** = Gas cooler
Unit form:	**F** = Flatbed
Module width:	**M** = Narrow, **N** = Medium, **P** = Wide
Module length:	**A** = 1200mm, **B** = 1500mm, **C** = 1800mm **D** = 2100mm, other options available
Fan rows:	1 or 2
Fans per row:	1 - 10
Fin type:	**EL** = $^{3}/_{8}$" (9.5mm) tube, **T** = 12 tube
Coil rows:	2, 3, 4
Orientation:	**H** = Horizontal, **V** = Vertical
Fan Diameter:	**080** = 800mm, **090** = 900mm, **091** = 910mm
Fan type:	**N** = AC Normal Woods, **H** = AC high power, **E** = ebm EC, **P** = Ziehl EC
Speed Options:	06, 08, 12, EC
Motor wiring:	Delta, Star



GEA Heat Exchangers

Searle

20 Davis Way, Newgate Lane, Fareham, Hampshire, United Kingdom
Phone: +44 (0) 1329 823344, Web: www.searle.co.uk

© Searle reserve the right to change in whole or part the specification detail.