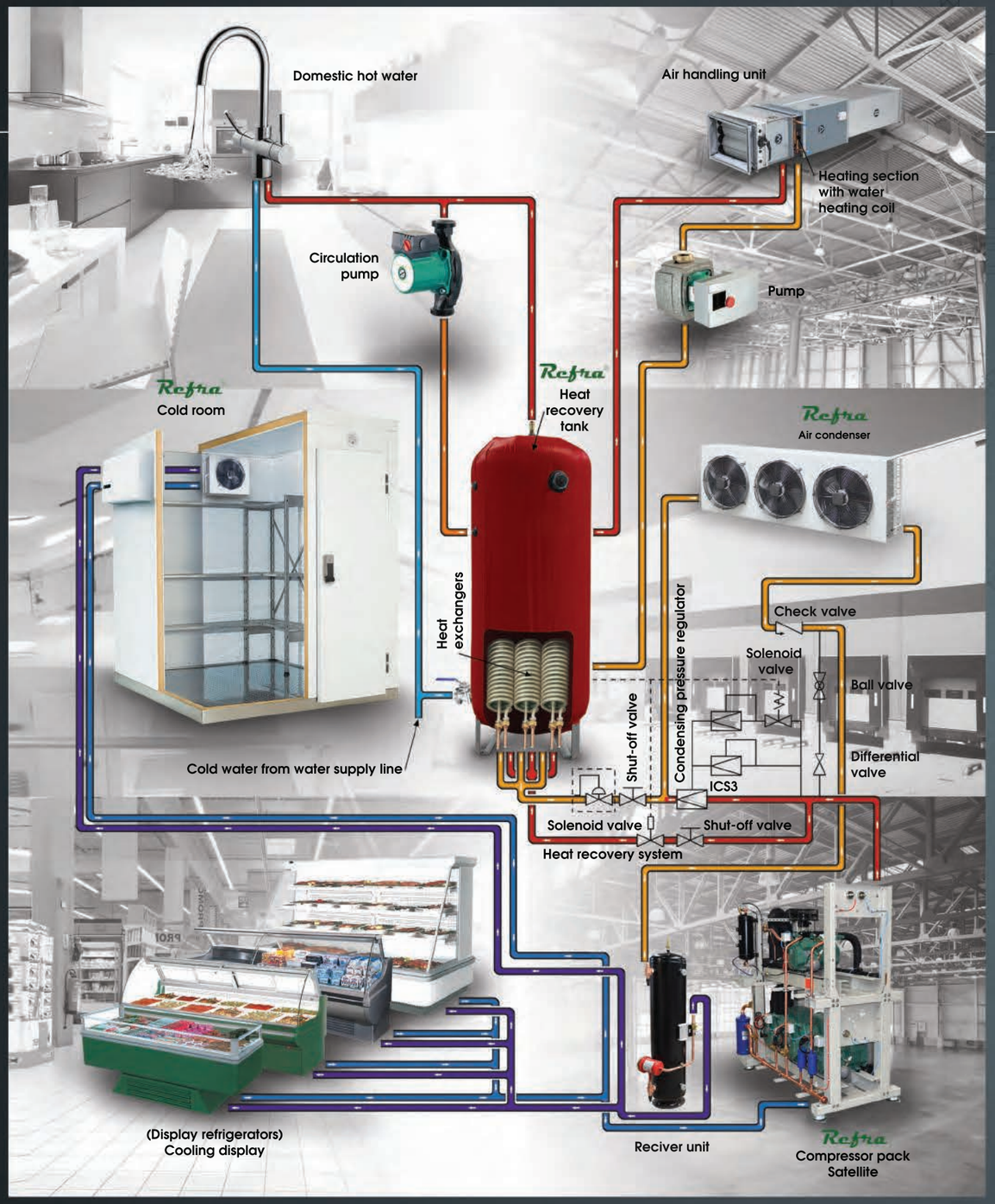
HEAT RECOVERY SYSTEM



Refra®
Steel equipment

UAB "REFRA"
Dariaus ir Gireno str. 107
Vilnius, LT-02189, Lithuania

+370 520 31020
+370 520 31021
+370 520 31023
info@refra.eu
www.refra.eu

HEAT RECOVERY LINE

Refra® Steel equipment

Heat recovery line

Heat Recovery Line is very innovative heat recovery system which is compulsory for progressive business. Today, when energy is consumed in every process, using it in most efficient way is essential for making noticeable savings. JSC “Refra” with Heat Recovery Line is offering wide range of buffers tanks with internal heat exchangers and allows reaching higher results with minimum investments.

Heat Recovery Lines designed by our engineers gives the opportunity to double the benefit gained from the energy you are using in refrigeration processes as heat, is eliminated during them. It can be used for heating sanitary water or fluid you are using for room/floor heaters - everything you need is to have buffer tank with heat recovery system inside. The tank is connected to refrigeration machine and accumulates heat which is abstracted from the process.

By having wide possible range of the buffer tanks with heat recovery system, consumers can be every appliance where heat is needed - starting with buffer tanks from carbon steel just for room heating, floor heating or similar, continuing with stainless steel tanks for sanitary water (showers, wash room, ets.) and finishing at combi – tanks where possible to have flexible hoses, smaller vessel inside or everything combined. Also, all this different solutions can be connected into one system for optimum efficiency on customer need.

Buffer tanks for Heat Recovery Lines are designed and manufactured from high standard materials and components so is reliable and durable.

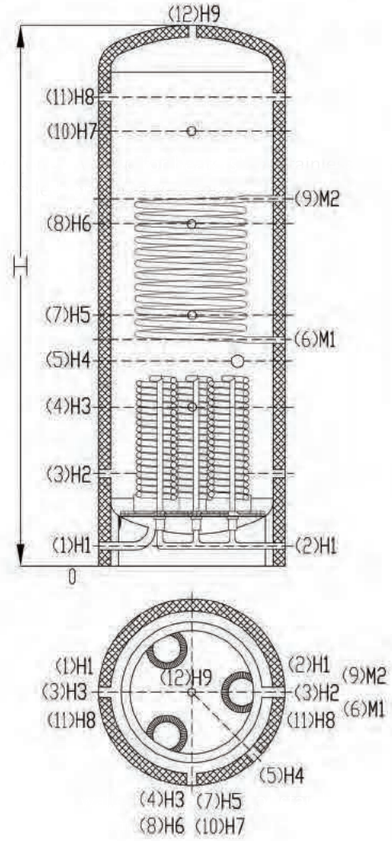
Having such buffer tank in heating system allows having significant saving in power usage. The best way to prove it is this typical example:

Capacity of the installed equipment in the building

Cold storage room	1300 Watt
Refrigerator for beer	2500 Watt
Refrigeration equipment in the kitchen	1980 Watt
Deep freezer	890 Watt
Total:	**6670 Watt = 6,67 kW**

How much money we can save?

29120 kWh/year
3328 m
1802 EUR/year



TECHNICAL DATA

Model	Number of heat exchangers*								Volume	Diameter	H	H_1	H_2	H_3	H_4	H_5	H_6	H_7	H_8	H_9	M_1	M_2	Area of aditional heat exchanger, m_2
	1	2	3	4	5	6	7	8	dm^3	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	
HR300D65	9 kW	18 kW	22 kW	37 kW					300	650	1260	140	840	380	814	866	918	970	990	1260	-	-	-
HR400D65									400		1560				760	920	1080	1240	1260	1560		1075	0,9
HR500D65									500		1860				700	980	1260	1540	1560	1860	890	1225	1,7
HR600D65									600		2160				640	1040	1440	1840	1860	2160		1375	2,4
HR600D85	Ø16 mm	Ø22 mm	Ø28 mm	Ø28 mm	47 kW				600	850	1430	110	860	390	812	908	1004	1100	1120	1430	910	1015	0,7
HR800D85									800		1780				742	978	1214	1450	1470	1780		1190	2,0
HR1000D85	13 kW	24 kW	30 kW	45 kW		52 kW	68 kW	79 kW	1000		2130				672	1048	1424	1800	1820	2130		1365	3,2
HR1000D110					Ø35 mm				1000	1100	1420	100	900	430	876	924	972	1020	1040	1420	950	1095	1,5
HR1200D110						Ø35 mm	Ø35 mm	Ø42 mm	1200		1620				836	964	1092	1220	1240	1620		1195	2,5
HR1400D110									1400		1820				796	1004	1212	1420	1440	1820		1275	3,3
HR1600D110									1600		2070				746	1054	1362	1670	1690	2070		1320	3,7
HR1800D110					60 kW	70 kW	75 kW	89 kW	1800		2270				706	1094	1482	1870	1890	2270		1420	4,7
HR2000D110									2000		2440				672	1128	1584	2040	2060	2440		1505	5,6

* Double walled heat exchanger which certified under the Pressure Equipment Directive 97/23/EC, Quality Directive DIN EN ISO 9001 and can be used under Higene Directive EN 12897:2000

COMPRESSOR'S PACK COOLING CAPACITY, kW (refrigerant R404a)
Evaporating temp./Condensing temp: -10°C/+45°C
Evaporating temp./Condensing temp: -35°C/+45°C

By ordering please provide the following code:

HR800D85/4-FH2.0

- Type: Heat Recovery
- Volume: 800 litres
- Diameter: 850 mm
- Number of heat exchangers: 4 pcs.
- Aditional heat exchanger: 2.0 m^2 (if required)

1	Drain 3/4” (1” from 1000 litres)
2	Domestic Cold water innlet 1” (1 1/2’’ from 1000 litres)
3	Probe 1/2“
4	Electrical heating unit 1 ½”
5	Anode ½”
6	Pressure gauge 1/2“
7	Mechanical thermometer 1/2“
8	Connection for recirculation 1” (1 1/2” from 1000 litres)
9	Domestic Hot water oulet 1” (1 1/2” from 1000 litres)
10	Connection for refrigerant heat exchanger, D = 22mm
11	Primary circuit inlet (outlet) 1“
12	Primary circuit outlet (inlet) 1“

HEAT RECOVERY LINE