

emily_huai@hanbell.cn
ir@hanbell.cn

021-51365368

1.

2. R290

3.

4.

5.

6.

7.

8.

9. 10 %

10.

11.

12. 50 4

13. 9

14. 24

15.

16.

17.

5.

6. 2014

7.

8. 2014

17. ASK

18.

19.

20.

21. :Mink

22. EDWARDS SEMICON China 2014

1. : , ---

2. : , ---

3. ---

4. (002158):14 2014

5. 4 21 1.52%

6.

7. : , ---

8. : , ---

9. ---

10. : , ---

11. : ,

12.

2 R290

R290

R22 R410A R22

HCFC

2013 HCFC 2009 2010 2030

HCFC R410A

R410A R410A

HCFC

1.2

R290 R22

3000-4000

30

700 -800

R410A

R410A

R290 R32 R290 R161

http://www.chinahvacr.com/News/Class1/201404/News_3106901.shtml

3

4 14 14

1 1 1 2

1.35 28.74%

2%

1%

8

9

http://bao.hvacr.cn/201404_2045830.html

4



2050 2020 50%

75%

1/3

40

400

200

http://www.chinahvacr.com/News/Class1/201404/News_3106867.shtml

5

“ ”

SOHO

2013 11

1000

2015

16%

2014

1.7

5

2012

54.2%

200

20%-30%

3000 /

350

http://www.chinahvacr.com/News/Class1/201404/News_3106984.shtml

6

337.7

2011

6000

1000

7000

300

http://www.chinahvacr.com/News/Class1/201404/News_3107389.shtml

7

50

70%

,

http://www.chinahvacr.com/News/Class1/201404/News_3107349.shtml

8

2006

50

4000

2008

287

3.56

10

2000

80

2010
2009 30%. 2011 28%.2012
20% 30%.
2013 2013
10
25000 2012 30%.2014 3
2013 2012
26% 2014 20% 2012
2013 2012 45% 30% 40%
2013
30%

20-30

2013

2014

2014

2014

3P 50P

15

3P 15P

40P

3 5

2014

5P 15P

40P

40P

15P 30P

10

GEA

2013 2014 2011 70% 80% 15%

http://www.chinahvacr.com/News/Class1/201404/News_3106856.shtml

11

(20091367-T-469)

(GB/T19680-2013)

()

()

()

http://bao.hvacr.cn/201405_2046335.html

12

50

4

2014

50

1600

4



11 66

7 42

8

3 11

7

20%

5%

2013 1 11

[2013]5

2014

http://bao.hvacr.cn/201405_2046415.html

13

9

2014 4 20

9

600

32

320

4.9

2015 10

6000

http://bao.hvacr.cn/201404_2046125.html

14

24

(

18

1/10

500

24

http://bao.hvacr.cn/201405_2046827.html

15

4 23

http://bao.hvacr.cn/201404_2046260.html

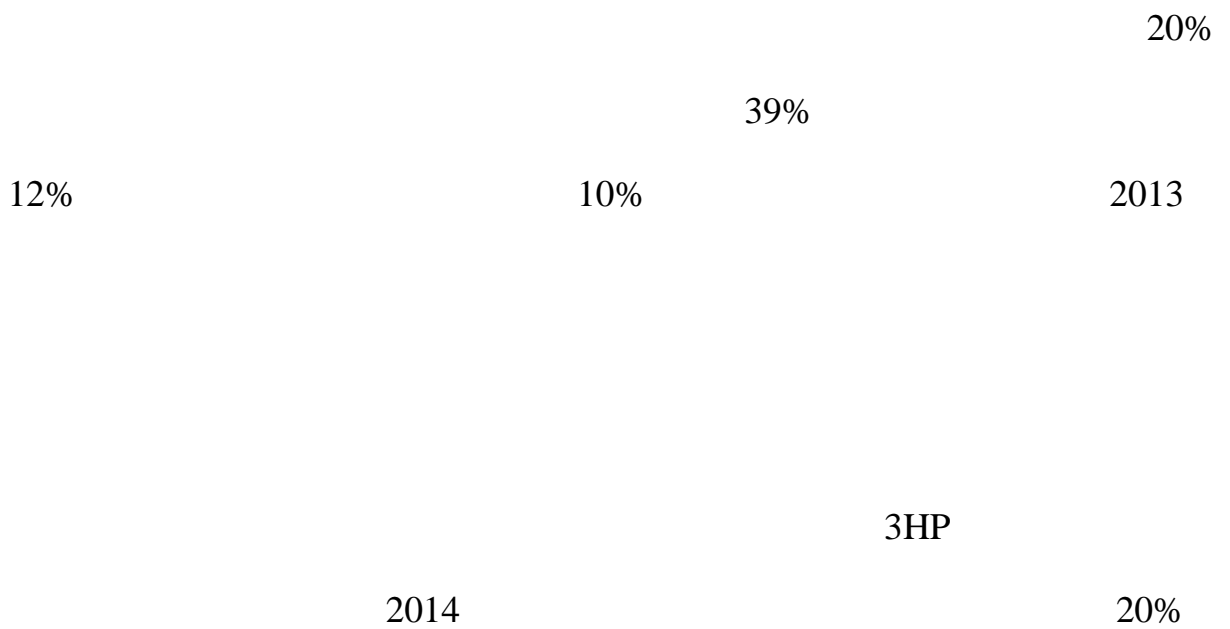
16

2014 2020

1

http://bao.hvacr.cn/201404_2045776.html

17



EVI

http://bao.hvacr.cn/201405_2046716.html

18

2013

2014

<http://www.compressor.cn/News/hyqx/2014/0409/72505.html>

19

<http://www.compressor.cn/News/hyqx/2014/0317/72251.html>

20 2014

4 15

INVT-LX600

INVT-LX800

100

INVT-LX600 INVT-LX800

<http://www.compressor.cn/News/hyqx/2014/0417/72702.html>

21

2014 3 18

2014 2 5

2014 4

22

2014 3 3

2014 4

1

<http://www.compressor.cn/News/hyqx/2014/0408/72493.html>

22

95%

3-5

5

Made in China

GasPure

<http://www.compressor.cn/News/hyqx/2014/0313/72205.html>

23

()

:

1

3.0

2

3

4

5

<http://www.compressor.cn/News/hyqx/2014/0303/72043.html>

24

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<http://www.chinesevacuum.com/ShowArticle.aspx?id=43973&pid=39>

25

26

70

6

7

4

26

30%

4K2K	55.3%			22.8%		
	13.5%	8.4%		6		39~65
		40	48	55	60	65
		4K2K				
WitsView						
		32	39	40	42	opencell
		3		32	40	42

WitsView

0.5~0.6

<http://www.chinesevacuum.com/ShowArticle.aspx?id=43805&pid=39>

27

FTO

ITO

FTO

FTO

FTO

100

FTO

200K-300K

FTO

FTO

OGS

G+G

500K

FTO

400K-500K

100

ITO

ITO

​

FTO

SnO2

SnO2:F

FTO

FTO

ITO

FTO

FTO

OGS

FTO

OGS

OCA/OCR

ITO 40% FTO
600 ITO
OGS 600Mpa
ITO OGS OGS
FTO OGS 0.5mm 90%
OGS FTO OGS
FTO OGS
ITO

<http://www.chinesevacuum.com/ShowArticle.aspx?id=43761&pid=39>

28 2014

2 14

19

10

2013

6,600

95%

2015

3

250

100°C

1,000

100-250°C

250-400°C

3,000

7,470

10

1

2050 1/4

90

60%

<http://www.chinesevacuum.com/ShowArticle.aspx?id=43654&pid=39>

29

4 23 2013

2013

2012

2013

36GW

12.5%

47% 8.7%.

2013		7	15	
		15%		
2013		3230		2090
1140	10		23.6%	50
63.6%				

http://www.chinahvacr.com/News/Class1/201404/News_3107339.shtml

30

2013

10 2006 2010

2010

2010 100

3%.

2000 1.5

2 7

2011 262 2012 112

http://www.chinahvacr.com/News/Class1/201404/News_3107030.shtml

31

2008

4~5

2008

*ST

2014-2018
2012
17
2012 1823 25.3
2011 63.6% 60.7%.2013

http://www.chinahvacr.com/News/Class1/201404/News_3107033.shtml

1

R22 R717 R134A R404A R407C R410A R502 R507

H.Krigar

1878

1934

A.Lysholm

SRM

1957

1961

1960

SRM

1

2

3

1

2

		5	5
	6	12	
3			
4			
5		3 4	
6			
	10-15%	25-40%	4
		5%	
4			
		6	

D

D

1-2.6% 10000-26000ppm

10m³/min

8bar

79L/min

40%

0.4bar

82L/min

2.6%

26000ppm

27°C

10bar

2

	400	510	630	816
25-40bar	1000m ³ /min		6000	

1

35bar

60bar

40bar

61.6bar

100bar

2

3

4

1989

LG-5/7

5

6

7

8

1

2

3

4

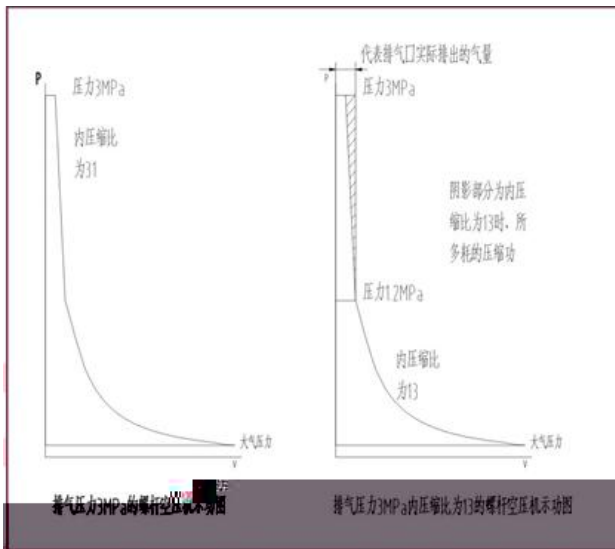
5

1

6

3MPa

31



61.6bar

7

8

9

21

2005

2010

2014 4

2 2013

2013

2013

1

31

2013

1-11

731873

6.29%

165348

4.2%

100.96%

2012

9.35%

31

18

0.82%-27.2%

20%

7

27.2%

27.25%

26.85%

24.07%

24.07%

21.31%

20.78%

5

20%

2

31

2013

1-11

738880

5.49%

3

31

2013

1-11

9471

19.9%

2012

4

31

2013

1-11

704641

1.3% 31

21

	0.04%-38.15%	8	10%	5
20%				38.15%
			25.05%	
	24.72%			20.78%
5				
31			2013	1-11
	35244	21.6%		3.6%
	0.9			2012
31		22		
			117.24%	
116.48%			66.61%	
	63.44%			
6				
31			2013	1-11
	898646	0.65%		0.56%
	0.3%		0.77%	
7				
2013	5			
	=	-	-	-

31

27964

1.1%

4.1% 1-11

35.6%

24.5%

135.5%

2012

11



8

31

2013

1-11

253208

14.7%

112469

30.6%

11

9

6.13%

2012

1.53

39.57%

2012

50.12

66.99%

2012

16.97		0.86	2012	0.61
	5.17%	2012	6.68	
151.94	2012	47.05		
2013				
	2013			
1				
1				
	4			5
2				

1%-99%

-17°C

2013

1.3

40%

2

GB19153-2009

1

II

15%

III

30%

3

LNG

BOG

BOG

BOG

-160°C

API618

BOG

4

65%-85%

/

t/aPP			6K-375MG	
	2K300/375			2K-140MG
	-130℃		4MG124	EO/EGCO2
6	LNG	BOG		LNG
6K-375MG	BOG	-162℃		60 t/aLNG
	4K-300MG	-162℃		
7				2D-140MG100Nm3/h
	250℃			
2D-160MG		300℃		
8				
	PSA			
9	CO2	CO		
		BOG		
10				
11				
	ORC			
3				

2013

1 2013 139

2 2013 31 615

2

1

ISO

1

2

5

50%

2014 4

3

30%-60%

70%

2006

50

4000

2014 1

7000

287

3.56

2.48

6.52

2015

5269

7%.

http://www.chinahvacr.com/News/Class1/201404/News_3107230.shtml

30%

40%-60%.

20%

1200 -1800

70%

2005

15%

2012

30%

<http://news.ehvacr.com/news/2014/0415/91052.html>

5

3

1 1

8 1

STCE1008

STCE1009 LED

8 1

STCE1010

2013 10

3

6

LED

LED

<http://news.ehvacr.com/news/2014/0321/90822.html>

6

2014

2014

[2014]668

2014

2014

1

2

3

40

4

5

24

26

6

1

1

7

2

5

3

1

2

3

4

5

2014

1

2

2000

5000

1

3

4

5

2014

1

7

2

5

3

4

2014

1

2

3

1

1

2

1

2

3

4

5

3

2014

2014

4

//tzs.ndrc.gov.cn/xmrjxz

2013

http

imo

2014 4 29

2013

15%

2000

8% 10% 12%

1000



.doc



2014

.doc



.doc



.doc

<http://news.ehvacr.com/news/2014/0404/90980.html>

7

2009 2013

2009

;

;

2100

5500

2009

360.37

1757.9

1133.85

2009

EMCA

65

450

2008

385

16.88%;

2008

386

502

30.05%

EMCA

/

EPC

2008

129

2009

181

40.31%;

2008

65000

113000

73.85%

2010

2006

2010

EMCA

89

560

5 ;

76

782

9 ;

1.6

17.5

10 ;

47.3

836.29

16 ;

13.1

287.51

22 ;

86.18

1064.85

215.45

2662.13

11 ;

1800

2011

!

16%

17%

2011

2011		EMCA	
2011		3900	
1719		1472	
782	88.23%	1000	
1250.26			287
	412.43	43.45%	1648.39
		175000	378000
	116%		
2012		2012	
	4175	7%;	
	2339	122	40
43	14%		
	2011	1250.26	1653.37
32.24%		3905	505.72
	22.62%	1774.46	
4430			
59.2%	26.7%	14.1%	
	10	6	5
			18
			1
83		5	12
			1

46

2013		EMCA	2013
			2012
1653.37	2155.62	30.38%;	2012
557.65	742.32	33.12%	2559.72
	6399.31	;	2012
4175	2013	4852	16.22%;
43.5	50.8	16.78%	2012

2014

<http://news.ehvacr.com/news/2014/0424/91175.html>

8 2014

NPDSolarbuzz

2014

(Demand-constrainedMarket)

(Supply-drivenMarket)

NPDSolarbuzz

MichaelBarker

2014

50%

(PVCell)

2010

2013

2013

2013

--

60%

Barker

2014

NPDSolarbuzz

FinlayColville

<http://news.ehvacr.com/news/2014/0314/90713.html>

1.

80

?

80 ?

Wahlers

Luerssen

20

?

?

Wahlers

Ecoline

10

7%

?

Wahlers

http://bao.hvacr.cn/201404_2045966.html

2.

4

2013

VZH

2012

VZH

;

IT&

VZH

47

94kW

VZH

30%

±0.3℃

VZH

167kW

10%-100%

VZH

http://www.chinahvacr.com/News/Class9/201405/News_3108631.shtml

3.

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4 20 ,

(

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, 2011 2012

, 2013

, 2011 3

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, ,

IT , 2013

600 ,

, ,

, ,

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， ， ，
， 36 ， 36 ，
，1954 ，
，1990 ， ，
40
42 ，
1992 ， 1600 ， 1/8 ，
200
， 3650
1994 ， ，
， ，
2001 ， ，
2012 5 ，
，
， ， ，
， ， ，
，
2014

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（ ） ，

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2013 6 ，

10

10% ， ，

http://www.chinahvacr.com/News/Class9/201405/News_3108526.shtml

4.

2014 5 9 , MicroluxTechnology,Inc. TomTNguyen

Microlux

MEMS

1,000

630

63% Microlux

370

37%

100

MEMS

Microlux

http://www.chinahvacr.com/News/Class9/201405/News_3108492.shtml

5.

MOMA

MOMA

MOMA

MOMA

MOMA

10

8

MOMA ()

16

4

MOMA BC

3000

http://www.chinahvacr.com/News/Class9/201405/News_3108692.shtml

6.

2014 4 9

2014

14

2013 12

6-8

15

2013

1.5MW

1

8000

8

10MW

1.2

1

10MW

3500

http://www.chinahvacr.com/News/Class9/201405/News_3108248.shtml

8.

2014 5 7

70

2014

2013

400

10%

40

-20°C

-12°C

40°C

COP

3.0

2008

2013

D

SET-FREE

http://www.chinahvacr.com/News/Class9/201405/News_3108087.shtml

9.

3500

2014

3

http://www.chinahvacr.com/News/Class1/201404/News_3107028.shtml

10.

2014 4 2015 3

24

1500

2012

13 3

853

http://bao.hvacr.cn/201404_2045980.html

11.

2014 4

10

http://bao.hvacr.cn/201405_2046559.html

12. 4

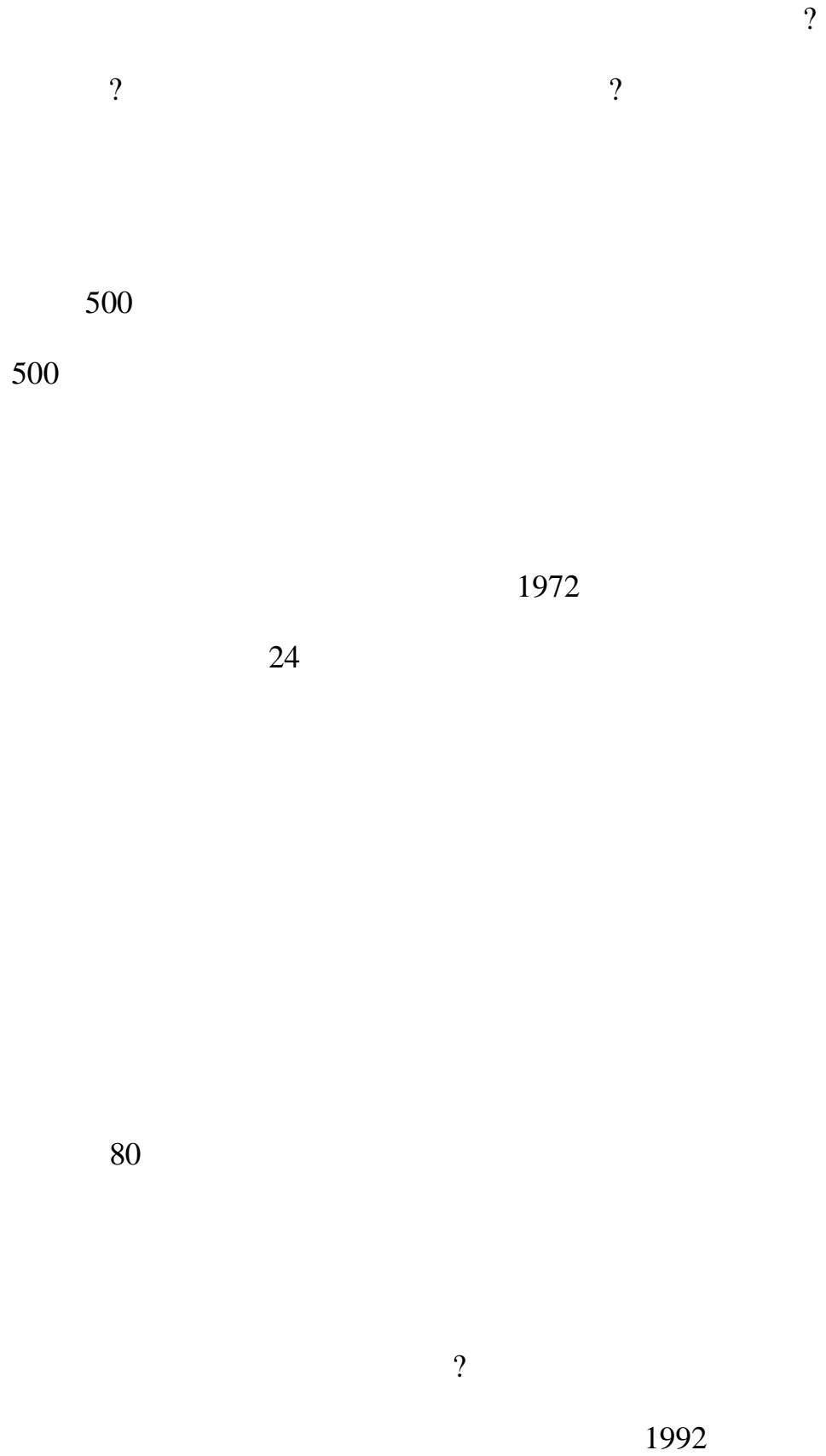
4	23	2014	1	2014
3.74		5.99%		0.21
	2.53%	2014		
,	,	4	,	4
				,5

http://bao.hvacr.cn/201405_2046728.html

13.

1992-1997

300% 1997



2000

1992

8

22

2009

5

2014

2018

8

!

http://bao.hvacr.cn/201405_2046693.html

14.

2014

25

33

1206

100

6

T

SV

B

http://bao.hvacr.cn/201404_2046129.html

15. 2014

2014 4 9 11

Ecoline

25Hz 87Hz

70%



CSVH3

CSVH3

CSVH

2

CSVH37

550Kw +5/50°C

960m3/h,

CSVH38

660K w (+5/50°C)

1156m3/h

CSH

CSVH3



ESEER IPLV SCOP

Modbus

Ecoline

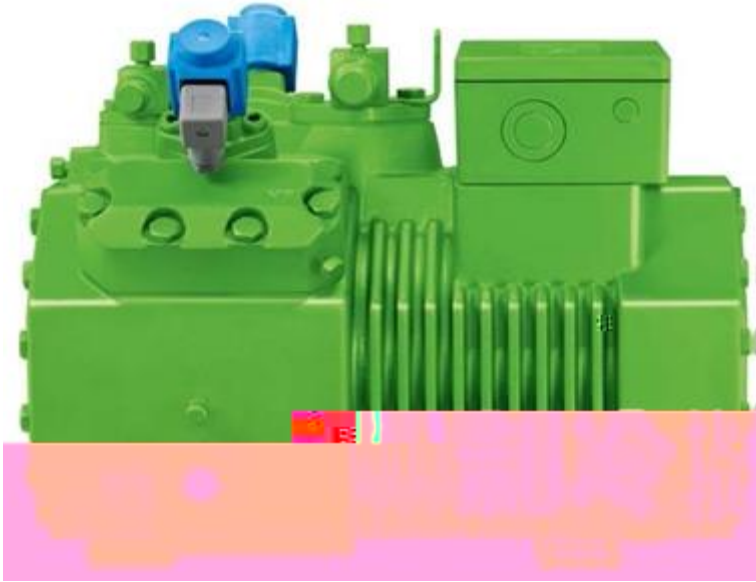
CRII

CRII

CRII

10% 100%

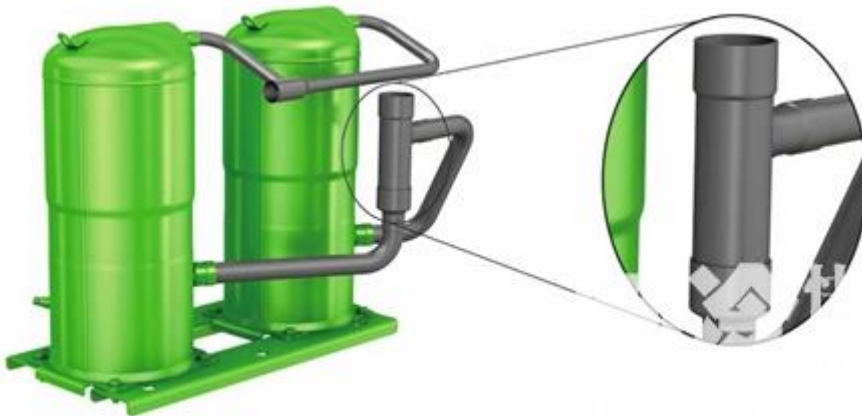
5%



BITZER

BITZER

Advanced Header Technology (BAHT) BITZER



BITZER BAHT

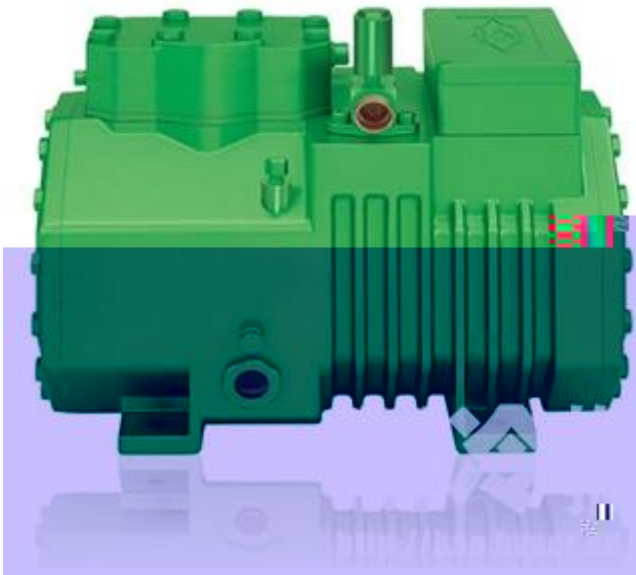
15

CO2

CO2

CO2

CO2



http://bao.hvacr.cn/201404_2045953.html

16. 5

1990

4

2000

6

300

59

4 KAPP

KAPP 2013

50000 80000

KAPP

KAPP

KAPP 5

10 55

<http://www.etyjx.com/2014/05/07710510176.shtml>

17.

ASK

ASK



ASK

SIGMA

IE3

20%

ASK

0.79 4.65 m³/min

/

SIGMA

IE3

ASK

ASK

0.79 4.65

m³/min

5.5 15bar

<http://www.compressor.cn/News/qyzc/2014/0423/72776.html>

18.

4 14

TQM

<http://www.compressor.cn/News/qyzc/2014/0425/73031.html>

19.

2 28

1955

20.

- ;
- ;
- ;
-
- 12 18 ;
-
IR
&

Centac

Centac

AirCare

12

4000H

IR

<http://www.chinairn.com/news/20140519/10525862.shtml>

21. :Mink

Mink MV 1202 A		Busch		Mink
	Busch		50Hz	950m3/h
60Hz		1150 m3/h;		
	Busch	11	Mink	50Hz
	62	950m3/h 60Hz	75	1150 m3/h

Edwards STP-iXA4506 (large-capacity)
(turbomolecular pump TMP)
FPD LED STP-iXA4506
(4300 l/s N2) (4300 sccm N2)
LCD (physical-vapour deposition
PVD) PVD
Edwards iH600 iXM1200 / 1800 STP
iXA3306 iXH645H
iH600 PECVD LPCVD
iXM1200 / iXM1800 Edwards
STP-iXA3306
(rack-type)
iXH645H MOCVD LED
iXH

<http://www.chinesevacuum.com/ShowArticle.aspx?id=43810&pid=39>

1. : ,

, 36.1%,
, 14.9%, 12
,
,
,
1

9.5%; , ,

20% 25% 2013 ,

548 , 23.7%, 2.4 42.2%

:

, , 2013

, ,

, 2013 , 238

, 24.6%, 2.3 23.5%

:

, ,

,2013 , , ,

20 , 0.92

:

2014-2016 1,013

1,199 1,412 ,EPS 0.770 0.937 1.106

,

:

,

<http://finance.qq.com/a/20140331/005765.htm>

3. ---

2014-03-31

			8.50	1.49		21.3%	39.9%
1.38		28.8%	EPS0.62				
			2014-16	EPS	0.75	0.91	1.11
19.5		2014	26	PE			
						2014	
36.1%		3.6		1			2
			3				
		2014					
1	448		367	2			884

2013 40%

LB

<http://yanbao.stock.hexun.com/dzgg487503.shtml>

4. (002158):14 2014
2014-04-17

			14 ()		15
			1.88	19.6-23.5	
			1.94	20.18	
			1.78	-	
		-	1.85	-	
		-	1.87	-	
			1.87	21.84	
			1.88	18.17	
			1.83	-	
			1.78	-	

<http://stock.10jqka.com.cn/20140417/c564969270.shtml>

5. 4 21 1.52%

2014-04-21

2100

1%

2065.83

1.52%

816.5

7353.6

1.37%

937.9

IPO

A

IPO

IPO

6%

4 18

20

28

16

					4				
					8				
			28			2012	10	25	
									IPO
		1	ST		5%		89		
13	ST		30		5%				

IPO

IPO

IPO

IPO

IPO

2100

2080

IPO

(000530,)

1

2013

2014

(601688,)

2013

3~6

2014

2014

3

1.4

3.5

16%

2012

50%

2014

(002158,)

<http://stock.hexun.com/2014-04-24/164206323.html>

7. : , ---

2014-03-31

:
 2013 8.5 , 21.3%; 1.7 ,
 35.2%; 1.49 , 39.9%
 0.62 10 3.5 , 1
 :
 13 5.5 ,
 23.8% 3 , 42.2% 2.4 , 24.6%
 2.4 , 23.5%
 13
 , ,
 , 30% ,13

,

,13 , ,

, 12

,13

, 36.1%,

, 14.9%, 12

,

1 , ,

14 , 20%

:

,

, 2014-2016

0.74 0.86 0.99 , 23 20 17

,

<http://finance.qq.com/a/20140331/017208.htm> To

8. : , ---

2014-03-31

2013 850 , 21.3%;

149 , 39.9%,EPS 0.62

0.35 , 10 1

,2013 644 ,

9.5%; ,

20% 25% 2013 ,

548 , 23.7%, 2.4 42.2%

:

, , 2013

, ,

, 2013 , 238

, 24.6%, 2.3 23.5%

:

, ,

,2013 , ,

20 , 0.92

:

2014-2016 1,013

1,199 1,412 ,EPS 0.770 0.937 1.106

: ,

;

<http://finance.qq.com/a/20140331/005765.htm>

9. ---

2014-03-31

		8.50	1.49		21.3%	39.9%
1.38	28.8%	EPS0.62				
		2014-16	EPS	0.75	0.91	1.11
19.5		2014	26	PE		
					2014	
36.1%	3.6		1			2
		3				
	2014					
1	448	367	2			884

2013 40%

LB

<http://yanbao.stock.hexun.com/dzgg487503.shtml>

10. : , ---

2014-04-01

2013 8.5 , 21.34%,

1.49 , 39.9%, ,

,

, 2014 2015

0.81 0.98 , 2014 25 , 26.13

20.18 ,

2 , ,

,4 32.68%, 65.82%

, ,

3.63 , 36.12% 1

3,000 , ,

, ,

, 30%

, LB

, ,

, ,

, , ,

, ,

, 2014 2015 0.81

0.98 , 2014 25 , 26.13 20.18 ,

<http://finance.qq.com/a/20140401/021953.htm> T

11. : ,

2014-04-28

2014 1 , 183 , 27.0%,
29

12.

2014-04-28			1.83	2915		26.97%	42.95%
	2662		43.20%	EPS 0.12			
2014-16	EPS	0.79	+0.04	1.01	+0.1	1.21	+0.1
20.5		2014	26	PE			
26.97%				20%			
	2013						
		10%					
					20%		
	2013		50			2013	
							33.33%
1							5.47% 9.93%
0.29%							
							2013
10					2014		200
30%				2014			100

<http://www.cfi.net.cn/p20140428000585.html>