17.

18.

19.

20. 3000

21.

22.

23.

24. 2

25. 2015 5

26.

27. 2016

28.

29.

30. 2025

31.

32.

1.

2.

3. 9

4.

5.

6.

7.

8. 2015

1.

2.

3. P

4. : ,

5. :

6. 1750

7.

8. 150

9. 2015

10. 500

11.

12.

13.

14. · Monier GHS

15.

16.

17.

18.

19.

20.

21. /

22.

23. Busch

24. Edwards

25.

26.

27. Busch

28.

1.

2. 25

3. 19

# 1

5 20 -21

(Energy Charter)

2001 12

2015

http://news.ehvacr.com/news/2015/0629/95824.html

2 8

8

2014-2015

1999 Top Runnet Program

;

;

http://news.ehvacr.com/news/2015/0623/95747.html

## 3

6

25 2

40%

60% 2

2 3 10

2 1500

1000 4000

1+1 17 1

1

2

http://news.ehvacr.com/news/2015/0626/95808.html

4

80

20

4

http://news.ehvacr.com/news/2015/0626/95800.html

## 5

0.78 1.28

(MPa) 0.12 0.25MPa

85% (

40%)

2006

4 20% 2 15%

2012 6000 2.2

2011 33%

10%

12.5

http://news.ehvacr.com/news/2015/0625/95783.html

6 100

10

10

2001 14

100 1000

?

75%

66.7% 50%

( )

2014 2015

?

?

100

1000

http://news.ehvacr.com/news/2015/0624/95766.html

7

6 30 3

2016 71

48 3 6

120.54

2012 11

2015 6 30

3 2015 12 31 2.4 2016 6 30 1.5 2016 12 31

1

http://news.ehvacr.com/news/2015/0619/95737.html

8

2013

2017

30%

50%

50%

3 /

4 / 6 /

500

8

40 /

800

900

http://news.ehvacr.com/news/2015/0721/96018.html

## 9

0.20

/KWh.

30 3 4

15 20

，　　，

，

2014

http://news.ehvacr.com/news/2015/0709/95897.html

## 11

(600066, )

3

http://news.ehvacr.com/news/2015/0625/95785.html

## 12

2015

5% 15% 23% 20% 30% 36%

15% 30% 40% 30% 50% 65%

100% 95%

15% 5%. 1/4 1/3

750

0.3%

500 3

4 5

5

2500 1000

5600 2000 850 1000

1000 1500 800

4120

1500

GDP2%

100% 95%

15% 5%. 1/4

1/3 750

0.3%

500

3 4

5

**1**

**2**

**3**

http://www.chinalenglian.com.cn/info_zc.asp?id=329

13 10 50

200

2015-2020

" +"

[2014]790 2015 7

" +"

1-2 10

50 200

20% 20%

:

http://www.chinalenglian.com.cn/info_zc.asp?id=331

14 7 1

( GB 29753-2013) 2015 7 1

A H

http://news.ehvacr.com/news/2015/0626/95796.html

## 15

SOHO

7000

2012

1%

1%

?

1 3 1 2 ;

21cake

10% 30%

5%

100

http://news.ehvacr.com/news/2015/0624/95761.html

## 16

2015 6 12



2876.2

Thomas Lonholdt

Thomas Lonholdt

2000 30~50bar

Niels P. Vestergaard

ENGINEERING TOMORROW
Danfoss
氨亦可安，氨制冷系统的现在与未来
主办单位：中国制冷学会，丹佛斯中国
北京 · 长春 · 济南 · 上海 · 合肥 · 郑州 · 成都 · 长沙 · 福州 · 广州
2015 年 6 月 1 日 ~ 2015 年 06 月 12 日
氨亦可安
暖通空调在线微信公

http://news.ehvacr.com/company/2015/0616/95696.html

17

( )

47%

1

26.71% 165.04%

3

18.3%

6.3% 12% 27%

37.6% 58.3%

2012 14.02 42.75%;

65.9%

2015

16.5% 17% ; 30% ;

12% 13%

13% 12%

10.6GW

http://news.ehvacr.com/news/2015/0619/95740.html

## 18

2012

289

114

http://news.ehvacr.com/news/2015/0623/95750.html

## 19

http://www.compressor.cn/News/scdt/2015/0504/78687.html

20 3000

2015 2016 2017

3000

http://www.compressor.cn/News/scdt/2015/0624/79496.html

21

1/5 ONGC

1/5

3624.9 57

IEA

IEA 4 19%

22

5 30

6

90%

10

200 8-10

8-12 15

3-5

6S MRP

2

2025

http://www.compressor.cn/News/scdt/2015/0612/79331.html

## 23

11 1000 150G 1

(

(

2015 5 16 1

500 690kW

“ ” “ ” “ ”

20 70

2003

20

8 2011

2

2015 5 2 7

2011

190kW

500 690kW

2013 12

500 2014 10

“ ” **60%**

2014

57%

690kW

60% 70%

2

400

2020 100

60%

100 2.4

40% 240kW 4

11.52 40000

46 46

2009

2015 4 400 4

100%

98%

http://www.compressor.cn/News/hykx/2015/0624/79539.html

24 2

5 31

2015 2

http://www.compressor.cn/News/hykx/2015/0604/79253.html

25 2015 5

6 11 2015

5 5 11

**2015 5**

2015

5 5

ysjbz@126.com 2015 8 10

| | | |
|---|---|---|
| | | |
| | | 13705512483<br>ysjqianze@sohu.com |
| | | 13066865195<br>2803783928@qq.com |

13961846132

tanmx2006@163.com

OCI HankookSilicon 2.4% 2.8%

2014 5

5

2081 51.7% 1~5

9983 52.0% 2.4%

5 2311

96.0% 1~5 8223 94.5% 5

2295 67.5% 1~5

8409 58.3%

6 6

121666 / 6 120750 / 0.75%

25.39%

8000

6

7

http://www.chinesevacuum.com/ShowArticle.aspx?id=50027

27 2016

3%

2016

3%

10% 6%

10% 4

2

16 16

20

http://www.chinesevacuum.com/ShowArticle.aspx?id=49974&pid=39

## 28

1954

10

2030

First

Solar First Solar

5

15 0.93

15 0.93

0.8-1.4 / 0.42

0.5 /

1

17MW

1900 20%

6200 ;

2010

2000 50 3.37

2012 13-19 0.88-1.28 25

Manz CIGS

2012 3 Q.cells SE

Solibro; Miasole Global Solar

Energy Alta Devices CIGS

GaAs

5

CIGS

http://www.chinesevacuum.com/ShowArticle.aspx?id=50024&pid=39

## 29

2000

Datamonitor 2010 2005-2015

2009

4% 2009

2014 3184 2009 58.5%

Datamonitor 2009

66.3%

IMS 2010 2009 8150

1300 15.9%

TNF

http://www.chinesevacuum.com/ShowArticle.aspx?id=49482&pid=39

## 30 2025

2025

" 2025" 2014 12 3 23

" 2025"

2025

" " "

"21 " "

" " " " " "

" " " " "

" "

2014

"

"

5

28.11 3.65

26

42 130

24 60

8 10 2020

5

300 300 1000 2015

1 5

10 100

200 50

" "

" "

iPhone6

168 4 460

IDC iPhone6 Plus

14.7% 13.7%

4 26

2011 43

2500

80%

80%

2010

30 ( 0.25 )

-

2014 2652 13.6

2%

1780

500 2020 1

http://www.chinesevacuum.com/ShowArticle.aspx?id=49086&pid=39

## 32

6

RSD 7% 2500 Da

1PPM FWHM 0.5 Da 5Hz

http://www.chinesevacuum.com/ShowArticle.aspx?id=49862&pid=39

1

2300

81000kW 3974 kW/h 9.6%

10

2 2014

500 200 650

3000

3

40 30

20 60

2015

**1**

**2**

70%

2002

3 6 9

1

0.3 3 m3/min

2.0

2015 6

2

+

3G 4G

2007 PPTX

2003 PPT

2011

50-60%　2013　　14　15

3-5%

/

2015 6

3 9

2015 9

9

2015 518

2015 3 20

2015 703

2015 4 7

2015

6 APP

[2015]9

2015 962

2015 5 5

,

http://news.ehvacr.com/news/2015/0611/95635.html

## 4

0.78 1.28

(MPa) 0.12 0.25MPa

85% (

40%)

2006

4 20% 2 15%

2012 6000 2.2

22075 27.49%

19.25%

63% 2000

2011 33%

10%

12.5

http://news.ehvacr.com/news/2015/0625/95783.html

5

7 1

9

1+1 2 3 5

http://news.ehvacr.com/news/2015/0701/95847.html

6

20

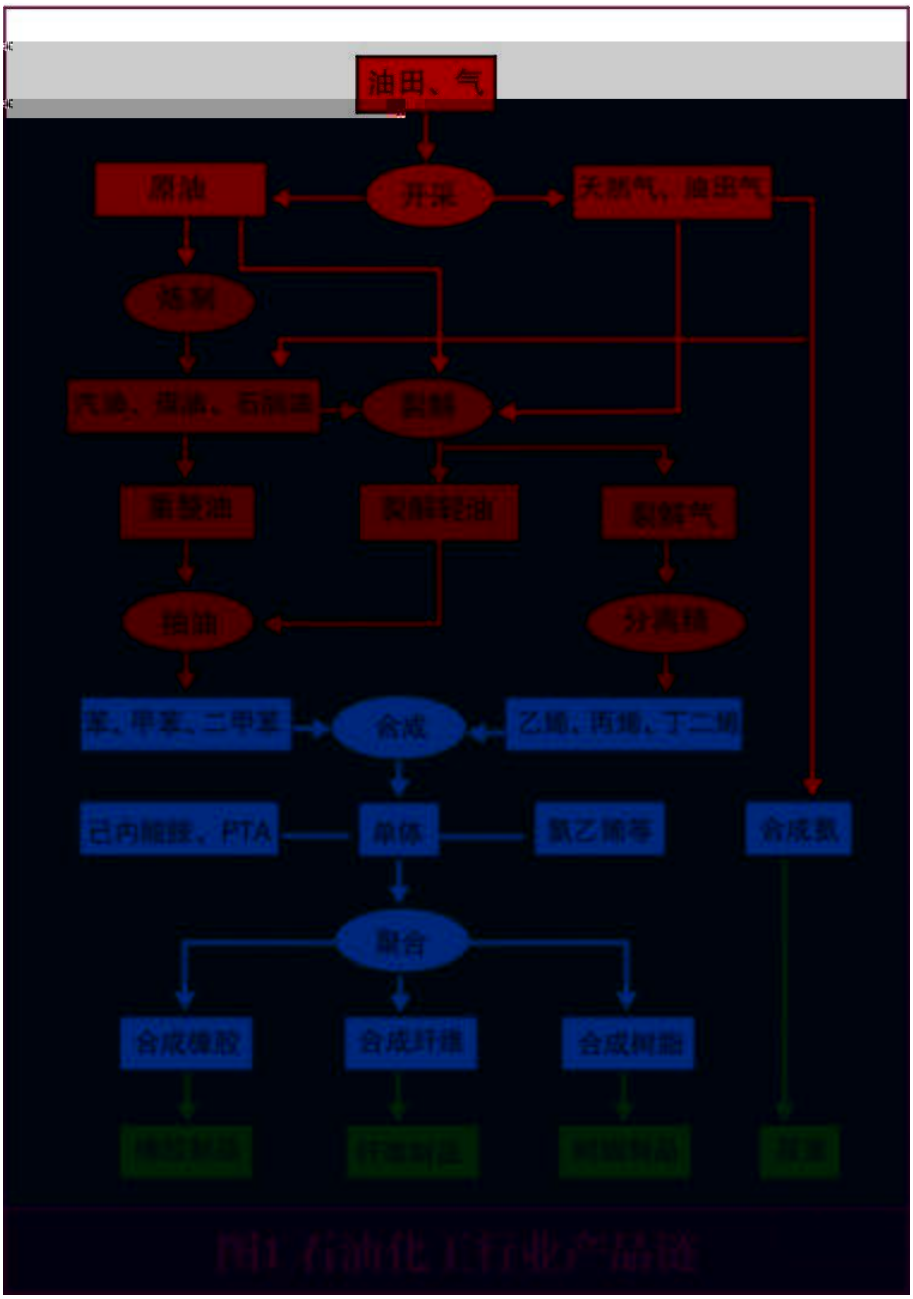
2

20

20

137 400

1 1




2002

25%

2020

90 90 10% 12%

15%

40

1

2011 12 13

4

[2][3]

5 104 15000

GDP

1.5 2015 200

2 [1]

2

85%~90%

2000

20

3

Atlas Copco

Ingersoll-Rand TurboMaster ManTurbo

Fs-Elliott - Cameron-Cooper

KobelCo IHI-Sullair

**表1 石油化工装置中的部分专用压缩机**

| | | | |
|---|---|---|---|
| [illegible] | [illegible] | [illegible] | [illegible] |
| 7 | [illegible] | 丙烯压缩机 | 离心压缩机 |
| 8 | 丁二烯 | 丁二烯压缩机 | 螺杆压缩机 |
| 9 | 聚乙烯 | 高压聚乙烯超高压缩机 | 往复压缩机 |
| | | 低压聚乙烯压缩机 | 往复压缩机 |
| | | 再生气体压缩机 | 螺杆压缩机 |
| 10 | 聚丙烯 | 循环气压缩机 | 离心压缩机 |
| | | 回收气压缩机 | 往复压缩机 |
| | | 尾气压缩机 | 往复压缩机 |

**表2 近年国产大型透平压缩机产量**

| | 2007年 | 2008年 | 2009年 | 2010年 | 2011年 |
|---|---|---|---|---|---|
| 离心压缩机（台） | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |
| 轴流压缩机（台） | [illegible] | [illegible] | [illegible] | [illegible] | [illegible] |

4

3

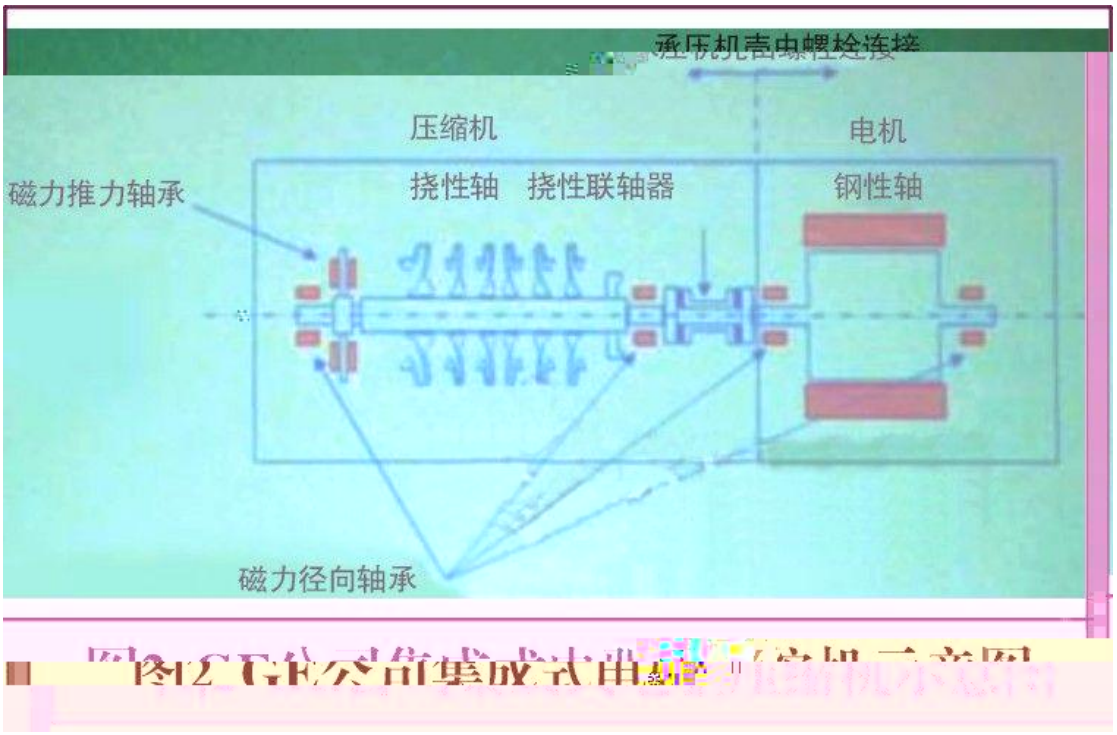
表3 我国压缩机产品差距国内外比较

| 序号 | 比较项 | 国外 | 国内 |
| --- | --- | --- | --- |
| 1 | 设[illegible] | 三元流动理论研究进一步[illegible]入，应用[illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | 机电一体化 | 扩大机电一体化应用范围 | 逐步实现机电一体化 |
| [illegible] | 部件研究 | 新型气体密封、[illegible]承和无润滑 | 能够迅速做出反应，比较快速地 |
| [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |
| [illegible] | [illegible] | [illegible] | [illegible] |

1

4

[2]




2.

3 20 25

4

1

20

CO NO SO

2 GE

20MW

20MW

4800rpm 25MVA

4740rpm

2.

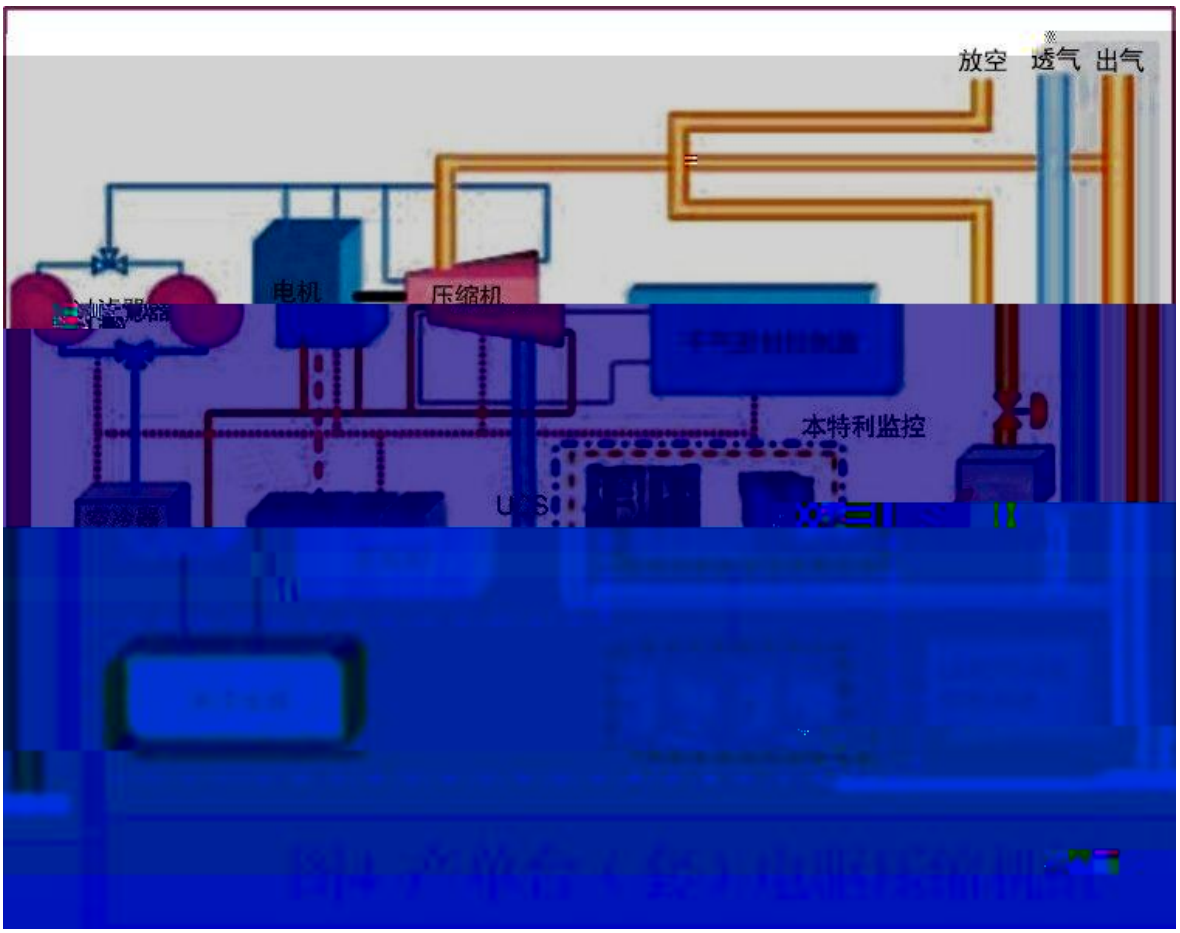
MAX1

0.8 0.9MPa 70 150 m3/h

3

5512t 16 m3/h MAX1

4



http://www.chinajnsb.cn/news/show-11599.html

7

http://www.chinesevacuum.com/ShowArticle.aspx?id=49356&pid=39

8 2015

80

1

2

3

80 90

;

20

; cad/cam

http://www.chinesevacuum.com/ShowArticle.aspx?id=49242&pid=39

1

BITZER

2015

SPEEDLITEELV

中国客车网
CHINABUSES.COM
BITZER
Bitzer Refrigeration Technology (China) Co. Ltd.
比泽尔制冷技术（中国）有限公司

ELV

2016

1994

80%

8-18 8

GDP 2015

http://www.chinabuses.com/supply/2015/0526/article_15472.html

## 2

2015 6 18 1060

1060

2015

1060

1060

2014 3168

,2015 1060 ,

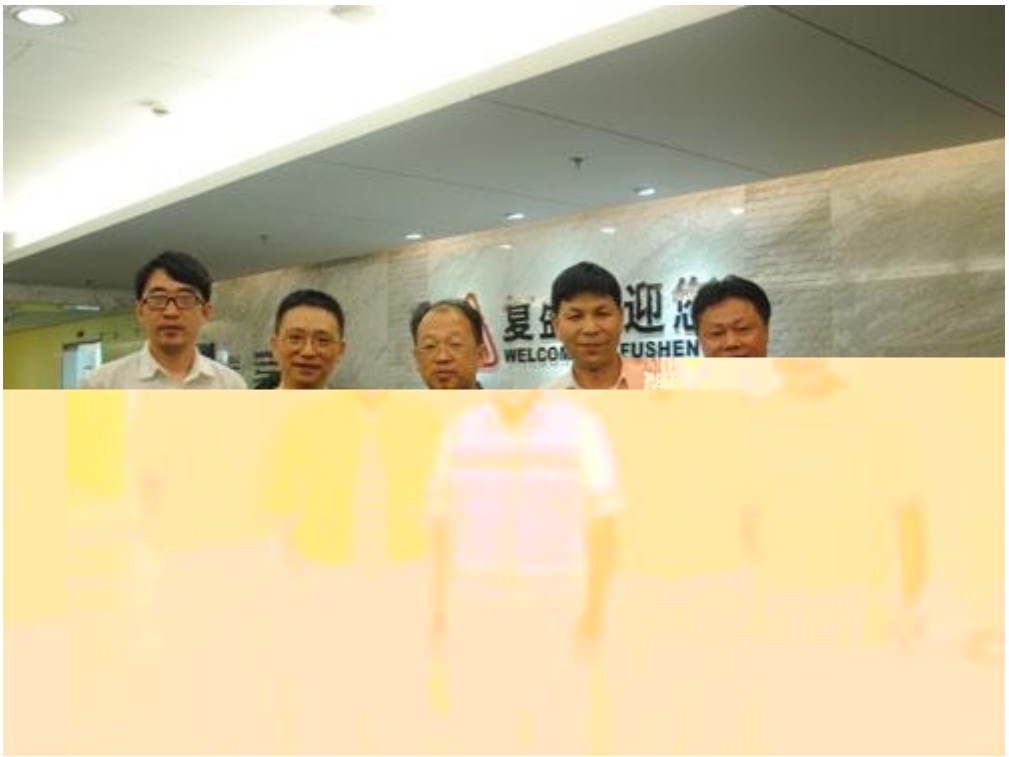
1.

1

2.

80

http://www.chinabuses.com/supply/2015/0626/article_15652.html




P

P

P

P

P 50P 25P

11

pc

http://bao.hvacr.cn/201507_2058934.html

## 4 : ,

:1) ,

1000 , 29%, 51% 20% 2)

OPCON , OPCON

SvenskaRotorMaskinerAB(SRM) OpconEnergySystemsAB(OES)100% ,

OES 48.9796%

, :

:

,

, , 2012

, OPCON(SRM)( )

( ) ( ) ( )

, , ,

50

5 22

http://stock.sohu.com/20150526/n413783649.shtml

## 6 1750

6 4 LIGHTNING DOCK GEOTHERMAL

EPC 1750

2015 7 31 2016 2 28

http://finance.ifeng.com/a/20150604/13755591_0.shtml

7

2015 6 25-26 CCFA 5

+

CCFA 2015

25 CCFA 2015

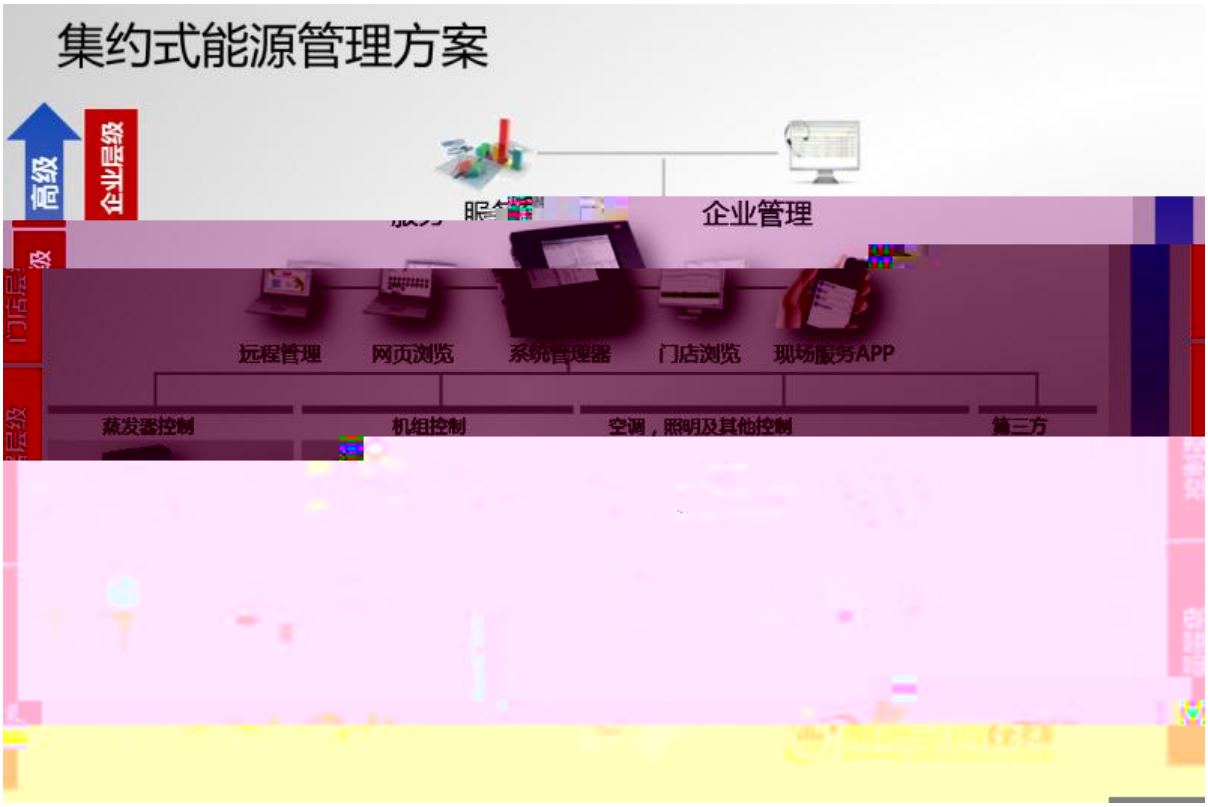
26

(FDS)

(EDS)

TM

2015 CCFA 连锁店节能


集约式能源管理方案
高级
企业层级
企业管理
远程管理
网页浏览
系统管理器
门店浏览
现场服务APP
蒸发器控制
机组控制
空调，照明及其他控制
第三方

AKV

Lotus 14

AKV

http://news.ehvacr.com/company/2015/0630/95835.html

## 8 150

4 20

5 "

150

DEL

2014

AP1000

2011

K2/K3 5 6

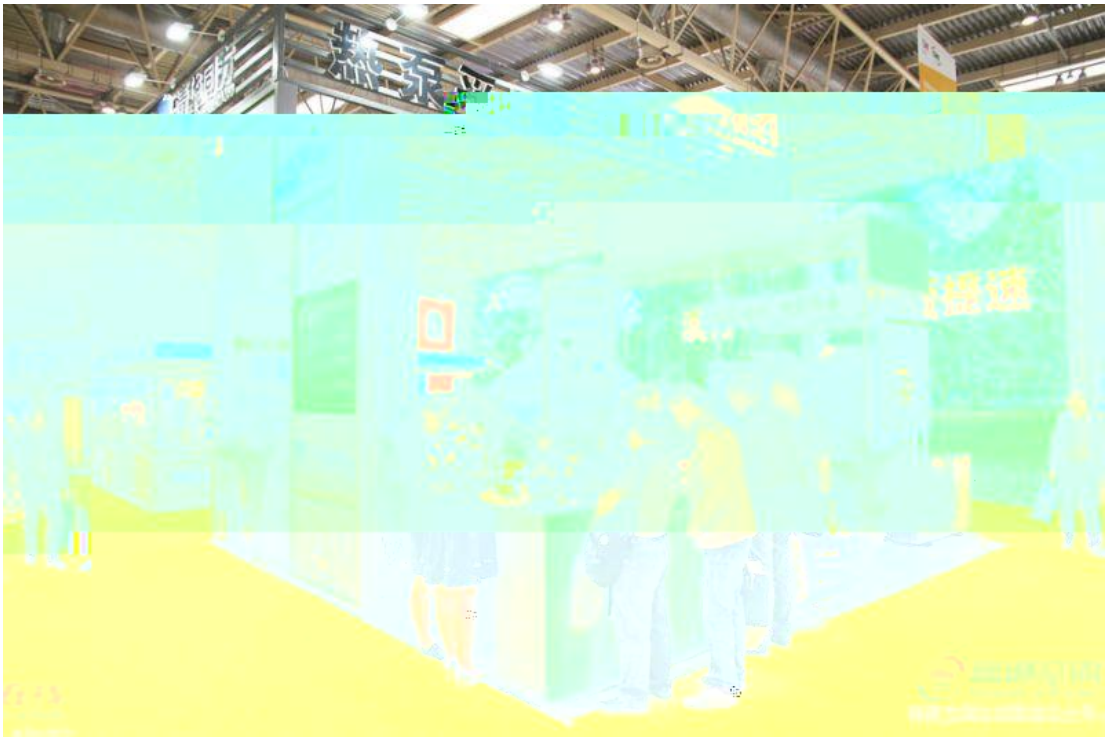
2014 5 6

5

http://news.ehvacr.com/company/2015/0423/95129.html

## 9 2015

5 13 15 2015



暖通空调在线
www.ehvacr.com
暖通空调在线微信公众号：ehvac

65

2014

65

2014

65℃出水，接散热器
-12℃区域供热
NEW
暖通空调在线微信公众号：e

http://news.ehvacr.com/company/2015/0520/95394.html

10 500

500

2015

2015 2000

385 500 501

100 2000

500

500

500

500

2014 501 2015

116

2010 608.07 2011 835.17

2012 1001.10

2013 1200.43

2014 1400.05

200 2011

1000 1117 2012 300 706

2013 668 2014 501 500 2015

116

8000 2014

•

11

5 28

' 2015

5 100

99.8%

2015

2014 175

PM2.5 4

5 100

2014 TOP25

151.4 10%

500

2015

100

http://news.ehvacr.com/company/2015/0528/95502.html

## 12

2010 500

220

2025 2025

SCR30M

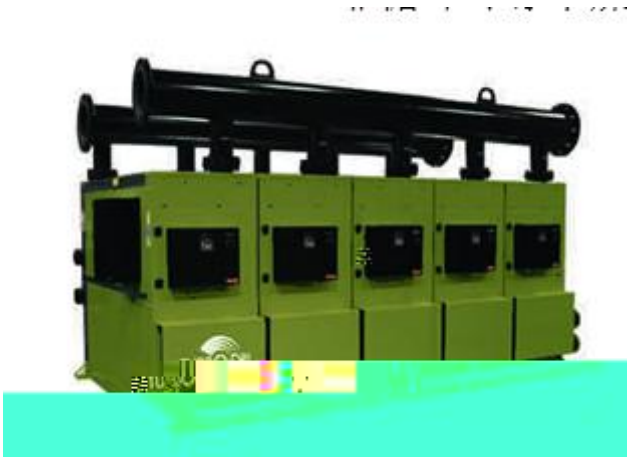
1989 2

D1800IB - ABV

TURBO-AIR NX 12000

TURBO-DRI

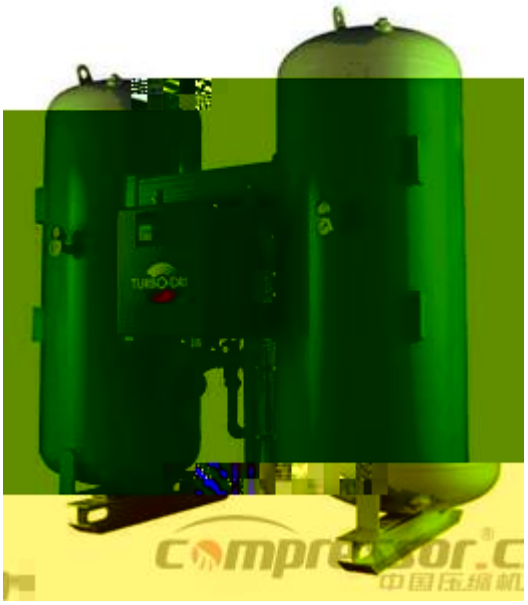
TURBO-



TURBO-

TURBO-DRI
compressor.cn
中国压缩机网

TURBO-


TURBO-DRI
compressor.c
中国压缩机

TURBO-

TURBO-

RS RS 37 160 50 200

RS

RS Xe-145

TURBO-AIR NX 12000

TURBO-AIR NX 12000

http://www.compressor.cn/News/qyzc/2015/0616/79411.html

## 14 · Monier GHS

Brass Monier 36 100

GHS VSD+ · Monier

GHS VSD+

http://www.compressor.cn/News/qyzc/2015/0616/79413.html

## 15

5 30 ,

，

40%

http://www.compressor.cn/News/qyzc/2015/0615/79396.html

## 16

2015 4 1 3

2 +1

http://www.compressor.cn/News/qyzc/2015/0623/79522.html

## 17

,

http://www.compressor.cn/News/qyzc/2015/0617/79316.html

## 18

6 8

5050m3 TRT

5050m3

TRT

9

http://www.compressor.cn/News/qyzc/2015/0614/79360.html

## 19

50 KW/1000

, 2015 ( )

( 10 ), 2000

http://www.compressor.cn/News/qyzc/2015/0610/79311.html

## 20

6 4

http://www.compressor.cn/News/qyzc/2015/0609/79306.html

## 21 /

2015 ComVac

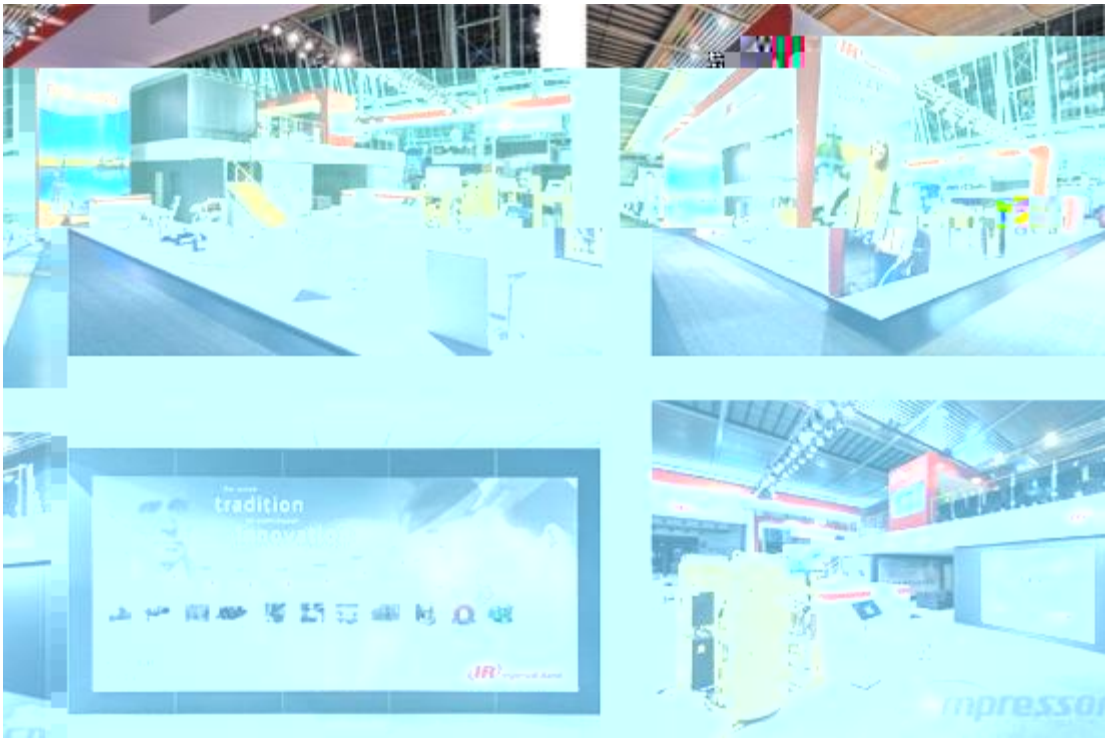
- RS
- SFD XL D1800IB-ABV
- TURBO-AIR NX 12000
- TURB0-DRI

Manlio Valdes 2015

1

26 C14

C08




RS 37-160kW 50-200hp

RS 140

RS Xe-145 WiFi

V-Shield VSD RS

55%

2/3

SFD

SFD Class 3

XL 100-400m3/min, 50 Hz

XL

50%

D1800IB-ABV

40 °

TURBO-AIR NX 12000

TURBO-AIR NX 12000

TURBO-DRI 50-60Hz

TURBO-DRI

500-19000scfm TURBO-DRI

http://www.compressor.cn/magazinearticle/2015/0528/79125.html

22

40%

15

-

http://www.chinesevacuum.com/ShowArticle.aspx?id=49499&pid=39

## 23 Busch

Busch COBRA NX 450 A

COBRA NX

COBRA NX

COBRA NX

COBRA NX Busch 1000 0.1mbar

COBRA NX

IEC

COBRA NX

Panda Puma

http://www.chinesevacuum.com/ShowArticle.aspx?id=49708&pid=39

## 24 Edwards

SHR

http://www.chinesevacuum.com/ShowArticle.aspx?id=49932&pid=39

## 25

http://www.chinesevacuum.com/ShowArticle.aspx?id=49897&pid=39

## 26

2014

http://www.chinesevacuum.com/ShowArticle.aspx?id=49345&pid=39

## 27 Busch

1.Busch

Busch Busch

Busch

Busch 50

6 59

Busch

Busch

Busch 12 Busch

Busch

Busch

Busch

Busch

Busch Dr. Busch

Dr. Busch 87

slowly you go, as long as you don't stop - Confici

Busch

Busch Busch

Busch Busch

Dr. Busch Busch

Busch

3.Busch

Busch

Busch

Busch Busch

http://www.chinesevacuum.com/ShowArticle.aspx?id=49199&pid=39

## 28

4 23

http://www.chinesevacuum.com/ShowArticle.aspx?id=49129&pid=39

1 19

2015-05-20

4 25

8 20

2

( )

16 30

http://www.compressor.cn/News/qyzc/2015/0520/78946.html

2 25

2015-06-18

2015 5 15

25

HANBELL
天津大学—上海汉钟联合研究中心
Joint Research Centre of Tianjing University-Shanghai Hanbell
揭牌仪式

6 19

ORC

CO2

.

http://www.edu777.com/gaoxiao/8721.html