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6. 2018-2019
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(Oxford Economics) • (Ben May) :“

2017

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• (Donald Trump) “ ”

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2019

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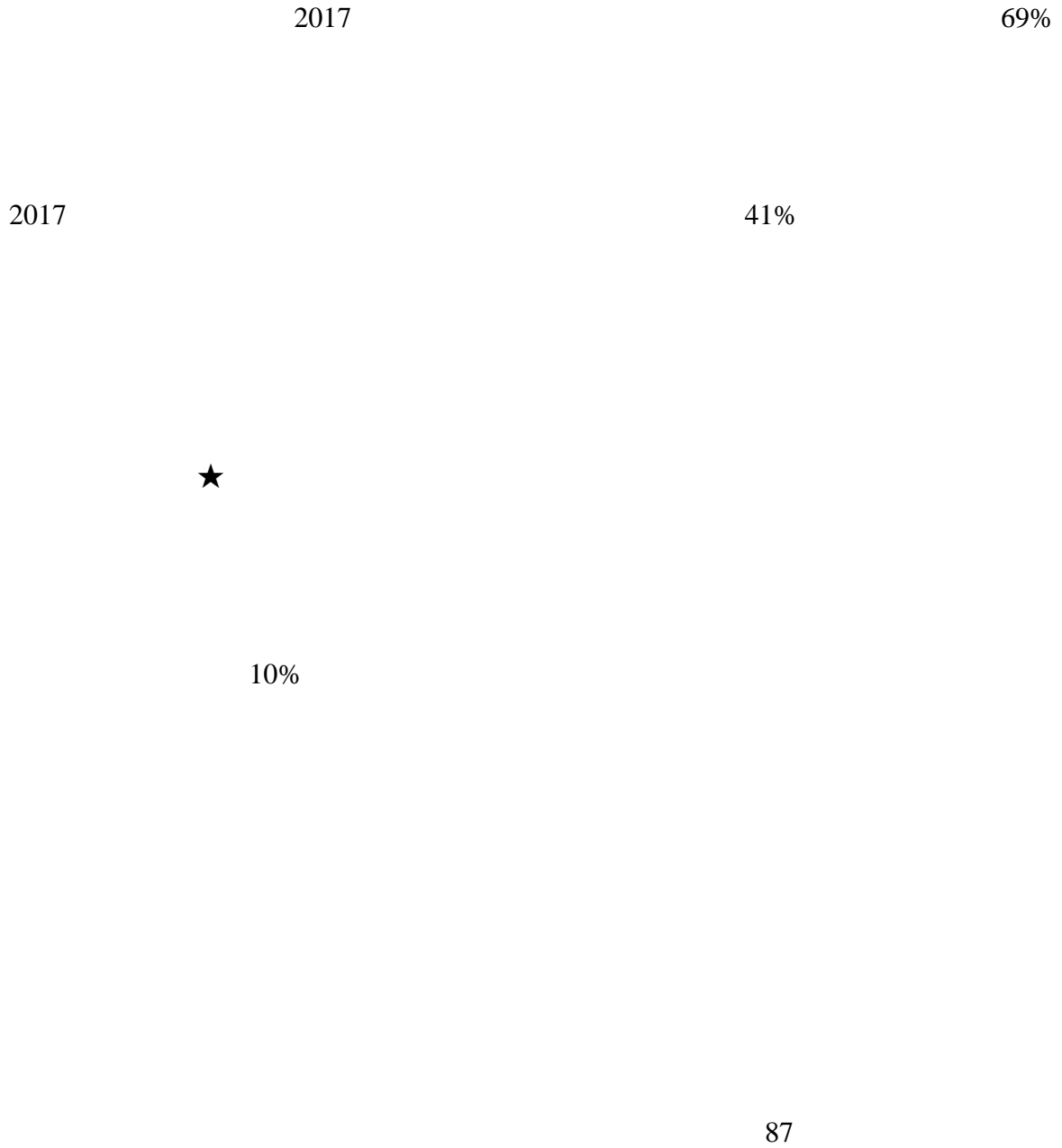
“ , 3

” (Capital Economics) Andrew wishard

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2017

4%

8

30

版块	品类	2017出口总额 (亿美元)	2017对美出口额 (亿美元)	2017年对美 出口占比
工业	工业	8.5	3.4	40%
	其他			
	其他			
	其他			
其他	其他			
	其他			
	其他			
	其他			
合计		8.5	3.4	40%

版块	公司	外销规模 (百万)	收入规模 (百万)	外销占比	出口美国收入占比	相关涉及产品
	格力电器	18494	150020	12%	2%	白电及厨房小家电
白电板块	美的集团	203956	241919	43%	5%	白电及厨房小家电
	海尔集团	67040	150020	45%	5%	白电及厨房小家电

<http://news.ehvacr.com/news/2018/0718/104763.html>

Top

3 7 14.3%

1-7 39038.1 17.1%

1-6	0.1								
	1-7				11913.2			30.5%	
		125.2	4.1%			27801			
21.3%				9422.4		7.5%			
	10215.1	10.3%							
	1-7			3366.7		53.4%			
	33084.4	14.3%						2587	
	17.8%								
1-7	41		32			9			
					18%			4.5	
		1.4%	0.2%					36.1%	
			29.2%			45.2%			
	97.8%		9%			23.1%			
1.6%			1%					0.9%	
		19.6%				9.8%			
	1-7				60.5			9.9%	
	51.1	9.5%				6.46%			

0.3%

6 713.0 3.6% 2079.8

12.1% 538.5 3.9%

2018 1-6 97.4% 0.8%

2029.3 7.1%

6 97.5% 0.2% 353.5

3.9%

<http://news.ehvacr.com/news/2018/0822/104959.html> Top

5

2018 478.55 12.44%

2018 3

? ? ?

7 PMI 51.2% 0.3

5 51.0% . 21 14 PMI

PMI

15

60.0%

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<http://news.ehvacr.com/news/2018/0822/104963.html> Top

6 2018-2019

2018-2019

2018 ;2018 10 1 2019 3 31
(PM2.5) 5% 5%

“2+26”

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(VOCs)

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1. “ ”

2018 12

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355	150	48	294
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2018 12 90% 70%
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VOCs

364 ; VOCs

144

20. VOCs

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580 600 550 550 / ()

;"2+26" 2019 1 1 VOCs

2019 1 1 VOCs 540

/ 420 /

21. VOCs VOCs

2018

9 VOCs 2018 12 VOCs

VOCs

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VOCs ;

(LDAR)

2018 12 3‰

LDAR

76.6kPa

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5.2kPa

76.6kPa

10% 15% 20%

10% 20% 30% VOCs

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32.

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VOCs

45

90%

VOCs

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2018 8 27 —2018 8 31

010-68552977

2018 8 27

<http://news.ehvacr.com/news/2018/0828/105007.html> Top

8

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<http://news.ehvacr.com/news/2018/0807/104869.html> Top

9

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<http://news.ehvacr.com/news/2018/0831/105043.html> Top

11

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30%

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3000

3

<http://ww>

3

R22
“HFC R134a R507A -10
R507A
(R1270) (R290)
API619
SH/T 3157

MR

<http://www.chinaiol.com/cold/s/0827/15200591.html> Top

13

DOE

TBT

WTO/TBT

8

2018 6

WTO/TBT

76

“ ”

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<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=106&id=8136> Top

14

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3

PM2.5

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2015

15%

PM2.5

2015

18%

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2015

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40% 12

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30%

50

PLUS50

2018

50

/PLUS50

2018年营业收入

排名	公司	国家	营业收入 (亿元)	占比 (%)
1	卡特彼勒	美国	26657	10.10%
2	沃尔沃	瑞典	7810	4.80%
5	利勃海尔	德国	7393	4.60%
7	斗山工程机械	韩国	6232	3.80%
9	约翰迪尔	美国	5718	3.50%
10	杰西博 (JCB)	英国	4644	2.90%
13	中联重科	中国	3796	2.30%
14	维特根集团	德国	3690	2.30%
15	家士科-维尔杰	美国	3165	2.00%
17	神钢建机	日本	3115	1.90%
18	凯斯纽荷兰工业集团	意大利	2626	1.60%
20	现代重工	韩国	2400	1.50%
21	阿特拉斯	德国	223	1.40%
22	克诺森	德国	1883	1.20%
23	曼尼通	法国	1800	1.10%
24	尔菲格	奥地利	1791	1.10%
25	柳工	中国	1709	1.00%
26	马尼托瓦克	美国	1581	1.00%
28	科普柯	瑞典	119	0.80%

2018 10 1 2019 3 31

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IHSMarkit JosefinBerg 30

EPC

LCOE

EnergyTrend

MIPS

Berg

2019

40

6 IHSMarkit

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MIP

9

2018

12

2019

17

MIP

<https://solar.ofweek.com/2018-09/ART-260008-8420-30264805.html>

Top

21 531

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531

2018

24 3GW 2017

GTM

research

2018

48 2GW

28 8GW

40

4 5GW

19GW

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<https://solar.ofweek.com/2018-09/ART-260009-8420-30268229.html>

Top

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WTO

2	77000MW			2022	38 5
	77 000			2022	10
		2018 7		23 120	
3 7		14 24		64 95	
7		320 19		12 23	1720 31
		9 08	9 29	312 53	296 66
		10 04	14 24	64 95	
7			2116 +	3	

400 95	4 82	6601 69	79 41
1311 22	15 77		
4	7	2022 72	6 2 = \hat{A}_0

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YANGHUIJIN

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271 773 229 00

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0 4744 0 4814

0 2324 0 2394

2018 5 1

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2018

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<https://solar.ofweek.com/2018-08/ART-260006-8440-30258405.html>

Top

23

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2018 9 4 SEMI

IC

The China IC Ecosystem

Report IC

16 2020 20

2020 200

SEMI IC

IC 2017 319

IC

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1,400 215 2014

1500-2000 230 300

IC

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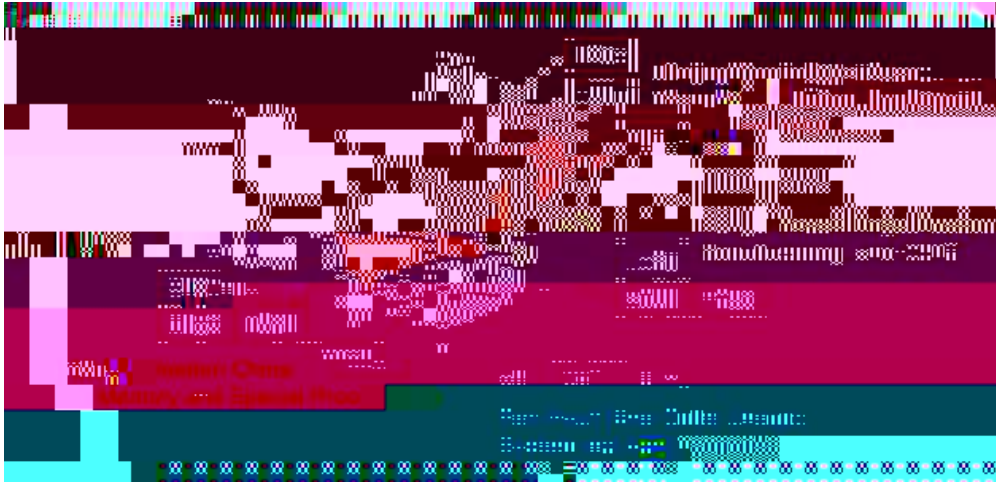
25

17 300mm DRAM 3D NAND

IC

IC 2016 2017

2019 10 Fab 14 2015



IC

IC

IC

<http://www.semi.org/en/china-ic-ecosystem-report>

http://www.semi.org.cn/news/news_show.aspx?ID=53889&classid=117 Top

24

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2014

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2018 9 5

http://www.semi.org.cn/news/news_show.aspx?ID=53929&classid=117 Top

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http://www.semi.org.cn/news/news_show.aspx?ID=53991&classid=117

Top

27

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270

AMOLED

465.8

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Mirai “ ”
Mirai Yoshikazu Tanaka
“ Mirai
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11000 8000
60000 (40)
FCV FCV
2020 Mirai
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2025
SUV
2020
Mirai 500km 700-750km 2025
1000km

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=108&id=8123> Top

20%

5%~6%

1~2

30

2000

5%

80%

10%

0.2

4~5

0.2

0.7~0.8

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<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=106&id=8138> Top

2 2018 “ ”

2018 “ ”

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<http://www.compressor.cn/News/hyqx/2018/0628/105391.html>

49%

2020

21.7%

2017

2386

2018

2987

2020

4700

2020

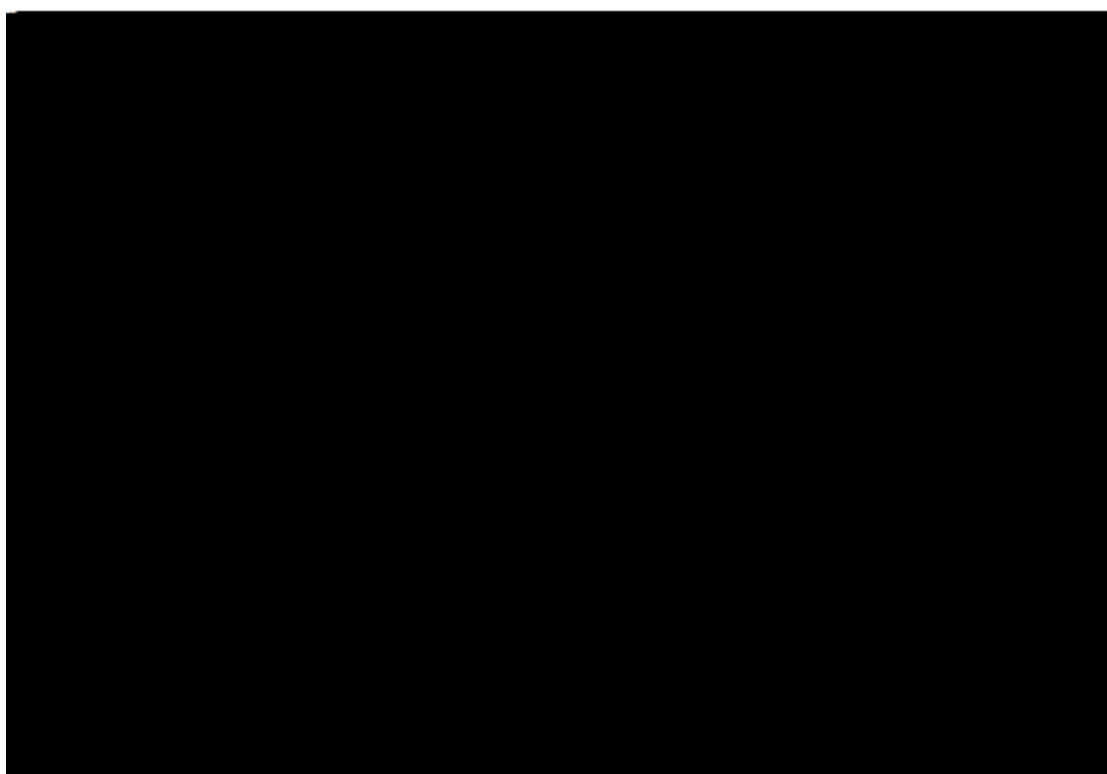
1200

<http://www.chinaiol.com/cold/s/0905/11201057.html> Top

产品	规格	8月1日	8月8日	8月15日	单位
多晶硅料 致密料	高	88	89	89.00	吨
	中	99	99	99.00	
	低	92	92	92.00	
多晶硅料 一级料	低	11.2	11.5	10.4	吨
	均	10.8	10.2	10.5	吨

产品	价格	8月1日	8月8日	8月15日
多晶硅料	高	88.000	89.000	89.000
多晶硅料	中	99.000	99.000	99.000
多晶硅料	低	92.000	92.000	92.000
多晶硅料	一级料	11.2	11.5	10.4
多晶硅料	二级料	10.8	10.2	10.5

产品	价格	8月1日	8月8日	8月15日
多晶硅片 (RMB)	高	2.550	2.550	2.520
	低	2.400	2.420	2.400
	均	2.500	2.500	2.500
多晶硅片 (USD)	高	0.330	0.330	0.330
	低	0.320	0.322	0.320
	均	0.325	0.325	0.322
单晶硅片 (RMB)	高	3.400	3.280	3.280
	低	3.120	3.120	3.120
	均	3.150	3.150	3.150
单晶硅片 (USD)	高	0.450	0.420	0.420
	低	0.390	0.395	0.395
	均	0.405	0.405	0.405



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110 kg

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270 275W 285 290W

PERC

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IEC

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12

2018 8 1

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2 2

2 2

13

2018 2020

2020

45

14

0 81

8 10

0 0336

0 45

0 4744 0 4814

0 2324 0 2394

15

2020

500MW

2020

450MW

100MW

570MW

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http://www.semi.org.cn/news/news_show.aspx?ID=54005&classid=117 Top

7

5

2018 5 31

2018-2022

<http://news.ehvacr.com/news/2018/0808/104878.html> Top

8

	(2017-2018)	2017	
40			
	2020		72
2017		40	32
10			3
	2017	2018	
	9120	52	6

2020 5000 /kW 2030

600 /kW

2020

1000 /kW 2030 150 /kW

2020 3000 /kg 2030 1800 /kg

1kg 1800

2030

40 /kg 2020

20 /kg 2030 9 /kg

2t

1000 2030 350

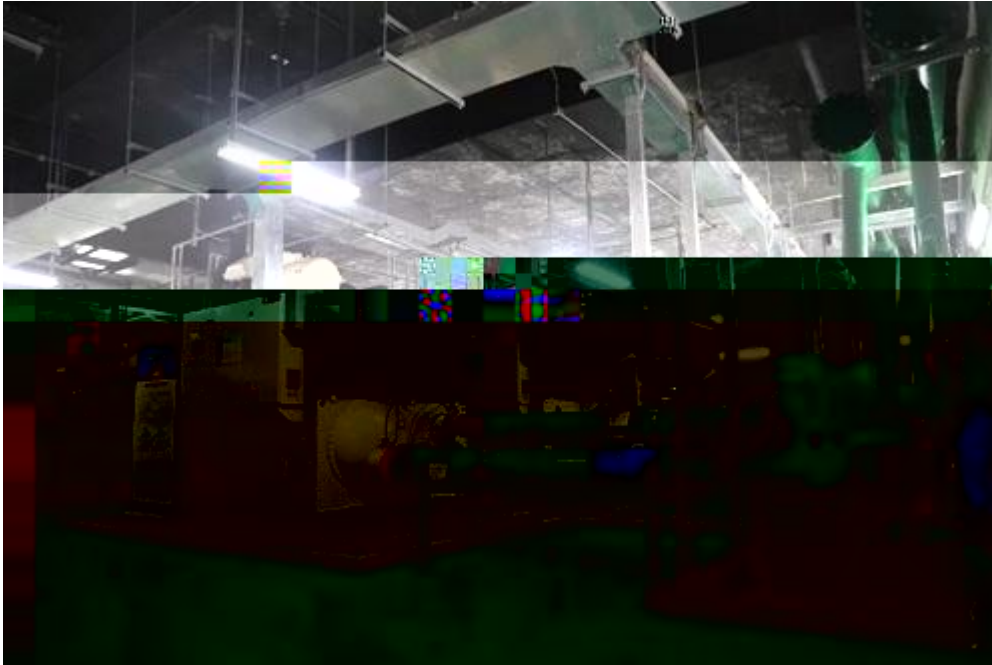
12m)

60

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COP 6.0

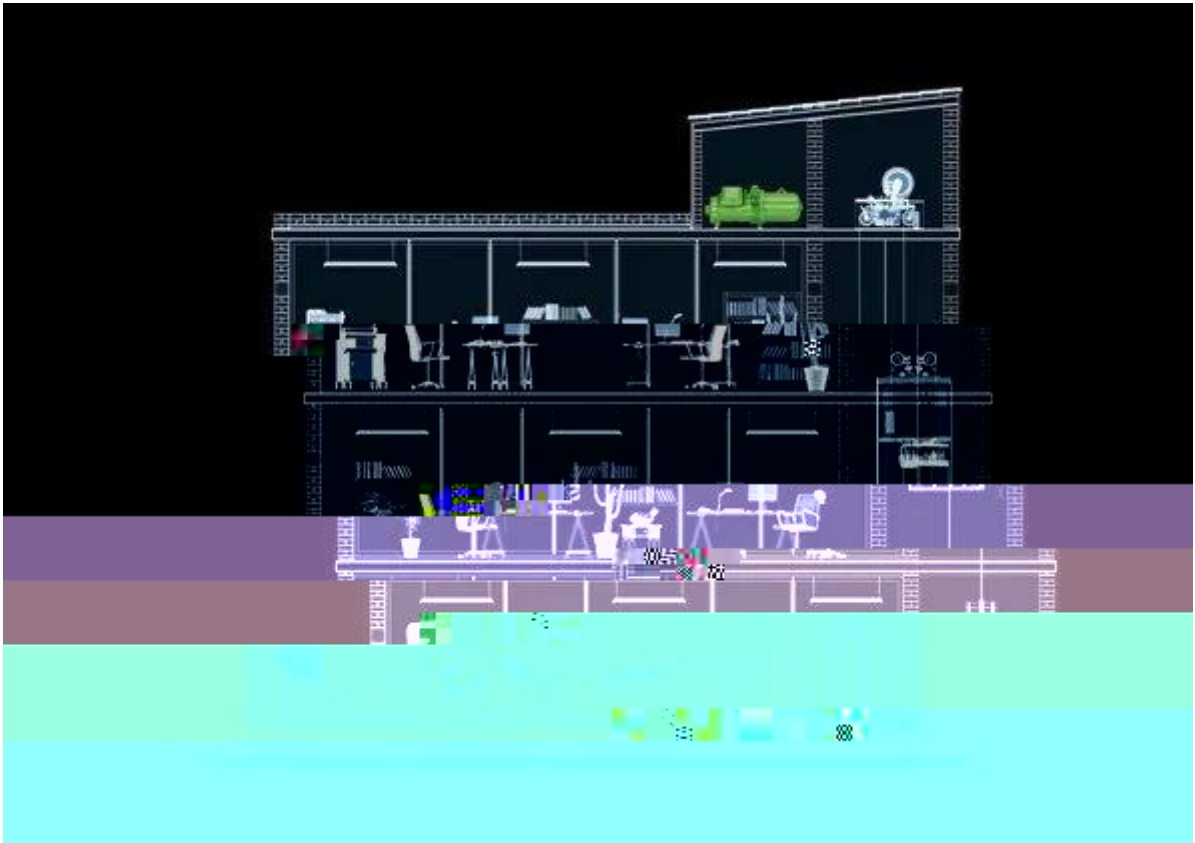


CSW



R134a

20°C



<http://www.chinaiol.com/cold/s/0810/53199900.html> Top

2

CO2

UNDP

FECO

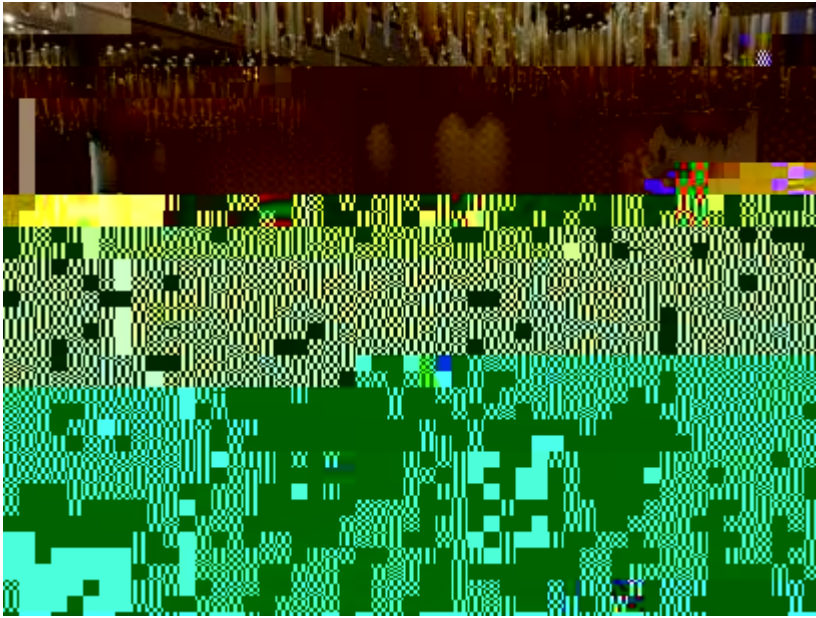
“

CO2

” 07 30-31

CO2

20



HCFCs

HFCs

GWP

CO2

CO2

10

CO2

CO2

CO2

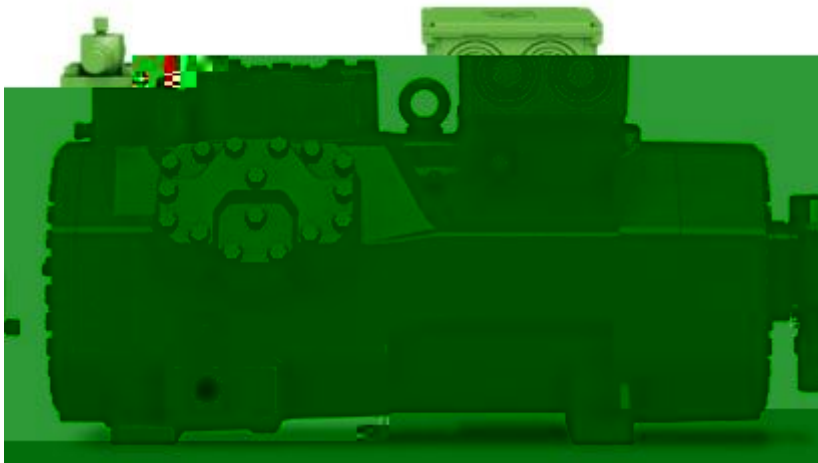
CO2



CO2

CO2

CO2



CO2

CO2

<http://www.chinaiol.com/cold/s/0810/07199902.html> Top

8 23 2018

-60°C

-60°C



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-30°C

-60°C

-60°C

25°C

-18°C

30~40

-60°C

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3

-60°C



-18℃

-60℃

<http://www.chinaiol.com/cold/s/0824/09200511.html> Top

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WCFX



DCLCDX



HFC-134a

CCS TOUCH

I-VISION

WCOX

-110~25℃

WCDSX-D

<http://cac.chinaiol.com/s/0921/29201666.html> Top

6

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+freecooling

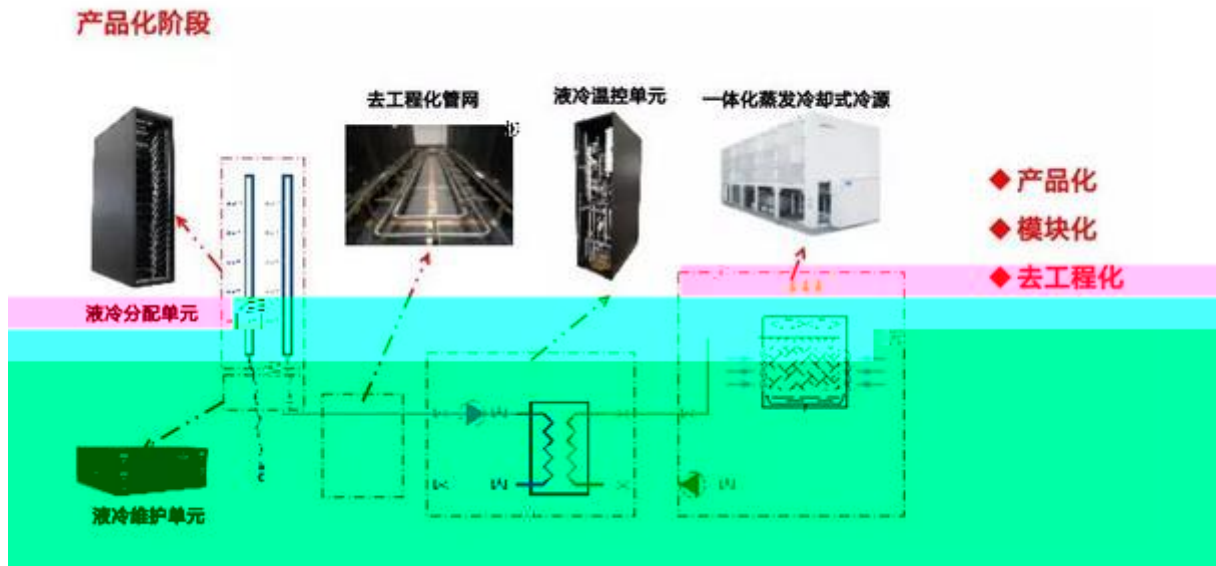
1

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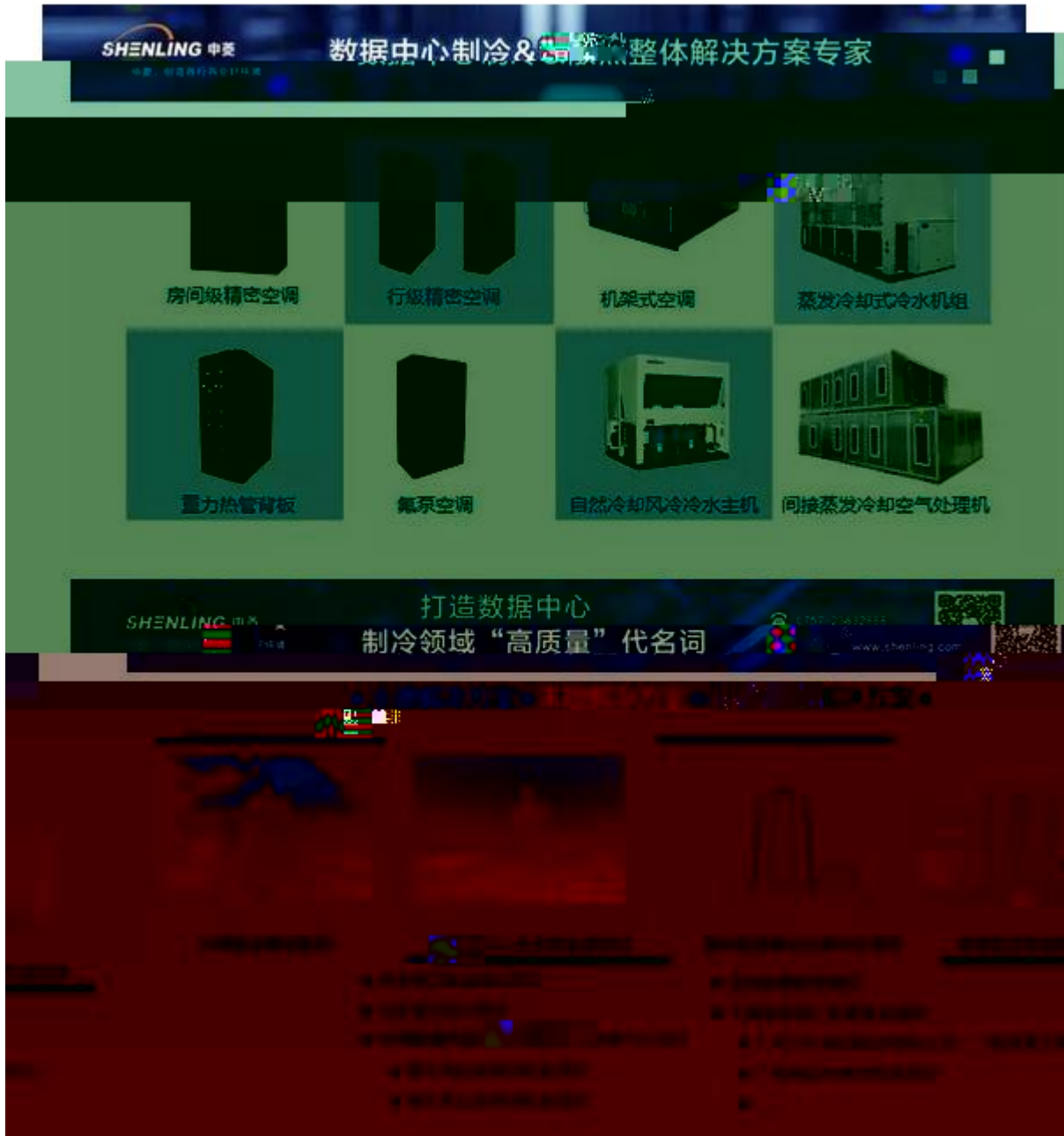
3

蒸发冷却式冷水主机系统 VS 传统水冷冷水主机系统

- 降低无效热损
- 降低无效水耗
- 去工程化
- 简化运维



“ ”



<http://cac.chinaiol.com/s/0920/32201604.html> Top

8

15 “ ”

15

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3

8 27

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8°C

4°C

50°C

2019

9 30

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<http://cac.chinaiol.com/s/0829/17200722.html> Top

9

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9 19

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<http://www.chinaiol.com/cold/s/0912/02201299.html> Top

11



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2006 8

100

<http://www.chinaiol.com/cold/s/0829/01200710.html> Top

12

7 16

Alabama Baldwin

65000 2019 2

Loxley 62

1100

Kaishan USA CEO, Keith Schumacher “

Loxley ”

“

”

“ Loxley ”Loxley Billy Middleton “

”

Baldwin CEO Lee Lawson Baldwin

2017 Baldwin

MSA 11 3 SmartAsset

2009 “ ”

<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=107&id=8073>

15 TM

2018 7

TM

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<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=107&id=8130> Top

16 7

2018

69

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<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=106&id=8068> Top

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2018 7

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Nicolas Bonleux

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1840

BPRT SHRT

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16GW

20GW

21.08

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<http://www.compressoronline.cn/index.php?m=content&c=index&a=show&catid=106&id=8062> Top

19

1.6

GE

ATB

SIR

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GE

1.6

“SIM”

SIM

GE

1750

100%

100%

10

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GE

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SIM

1+1

2

4.0

20

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1.5

50

3



6

5%



2.5

1.3

4

8

1.2

8

<https://www.ysjw.cn/news/show-2805.html> Top

22

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8

17

18

1

2017 12 27

1120

1080

100

4 8GW

2018

45GW

83GW

63 2

TOP10

60

72

9 19

16

1 246 066 96

12 24

91 935 44

16 14

88 994 56

15 85

Buffalo

2016

26

SolarCity

SolarCity

2017 8

Buffalo

SolarCity

Elon Musk

SolarCity

6

9

SolarCity

12

Home Depot

SolarCity

2015

SolarCity

253

76

<https://solar.ofweek.com/2018-08/ART-260008-8460-30258505.html> Top

24

8 18

12

11

25

<https://solar.ofweek.com/2018-08/ART-260002-8460-30258622.html> Top

25

3GW

3 3GW

2018

2012

COMSYS

200

47

3 3GW

430

350

PID

PERC

PERC

PERC

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<https://solar.ofweek.com/2018-08/ART-260008-8460-30257388.html> Top

26

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3 6 25 3

7 21 4 “ ”

8 12 —

2019 1

http://www.semi.org.cn/news/news_show.aspx?ID=53702&classid=117 Top

27 “ ”

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PowerPC CPU

PowerPC

C*Core CPU

C2000/C8000/C9000

CPU

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2017

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http://www.semi.org.cn/news/news_show.aspx?ID=53678&classid=117 Top

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7 30

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”

2017

2018 -2019

100

594

“

31

9 5 --

Hydrogen Council

Air Products

SINOPEC

(thyssenkrupp)

15

(Mitsubishi Heavy Industries) Re-Fire

7

Re-Fire

2017

Anglo American plc

Air Liquide

Iwatani

Linde

Shell

Statoil

Total

18%

6Gt

2.5

3000

65°C 125°C

RC2-Z LB LT RG

LB

LT

LB-PLUS

LB-PLUS

-35~0°C

LT

COP

26%

LT-S-L

LT

LT-S-L

8%

10%

1

2

3

LT-S-L

LT

:

1

2

3

1-18°C —LB VS RC2

2-35°C —LB VS LT

3 — VS LT

1

2

3

1 RC2-G R134a 80°C 15°C

2 LT-S-H R134a 90°C 15°C

3 RC2-T 100°C

4 LT-S-A -35°C 60°C

1

2

3

:

Top

4

342.00

4.70%

2018-07-04

7 2

832605

342.00

4.70%

,3,420,000.00

,0

2018 6 29

2018 12 28

,

,

2017 12 31

2.31

1.23

7017.03

20.83%

793.00

29.38%

002158

Top

5 2018

2018-07-11

973

2017

2020

1000

17

2018 2

—

2018 5

Mirai

6000

5000

Pt/C

2030

Trendbank 2018 4

4 20-21

2018

MEA

DCDC FCU



Ballard Plug Power Hydrogenics

Doosan

EWII

.....

TE

Connectivity

.....

À À

300

4 20-21

2018

TrendBank

TrendBank

unima

/

Top

6

2018-07-17

Wind

2016 5 31

2016 7

11 45.79%

39.68

2016 7

12

2018 7 13

48.41%

42.94

2016

9

4

5

5

2

,3

	17897		1418	
7.9%	2018		2158	
	49%		2020	21.7%

“ ”

“ ”

6 53%

12 7 5

4

6

30% 14

12

289

290.7 21.2% 29.5%

12.4%

,

Top

7 A

5

2018-07-18

1

MLF

1:1 MLF

AA+

AA

AA+

2

3

“

”

18

“

”

T3

4

“ ”

5 IPO

IPO

IPO

6

CSX

6 13

2 1

60

1227.90

1% 68.76

600 0.5% 387.06

2800

OLED

8

15%

3275

2000

(7.63 +0.93%,)

(5.61 -0.71%,)

7 17

11680 /

41.08%

12500 /

(7.28 +6.43%,)

(5.24 +0.58%,)

18

“ ”

“ ”

“ ”

2016 1

(9.50 +2.26%,

(5.66 +2.91%,)			
(7.49 +0.00%,)		50%	
(8.79 +1.38%,)	7.25		49%
(0.00 +0.00%,)	4.71		
(5.18 -0.77%,)	1.66	PPP	
A(7.94 +2.19%,)			
(44.40 +0.93%,)	6.6		
(4.26 +0.95%,)	1.83		
(0.00 +0.00%,)	1.8		
(15.20 +3.33%,)		6	
(3.60 +3.75%,)	7.36		
(15.81 +2.60%,)			
(19.40 +0.00%,)		(5.50 -0.90%,)	
.....	Top		

8

2018-07-20

2017

1418

2018

2158

4700

1

002463

PCB

()

(27.42%)

603306 ()

,

603799

002158

1943

1969-1994

1994

2011 11

000536

2005

1971

1989

1993

300046

2014

1215

8.55%

2013

405

2008

44.51 /

60

A

300260

ASME BPE

603922

2003 ,

,

ED

603929

2002

2008

IC

603160

2002

“ ”

A

LKJ15S

◇

300 /

1000 /

Top

12

2018-08-30

3

		11-7	2018 021
		18 F 1-1 1-2	2018 022
	23 25	1	2018 023

Top

14 “ ” A

2018-08-22

[] 8:30

1. “ ” A 5
2. A 6
3. 5
- 4.[]
- 5.PTA 40% 4
6. 5G 6 5G
7. 4
- “ ” A 5
(“ ”)6 29
- 8 () (“ ”)
IPO
A

002371 300604 300666 603690
603929

A 6

300 500

“

” 50

A

50

50

600030

600036

601211

601288

601318

601336

5

“ ”

30% 2021

18.7

002065

300075

300212

600171

600602

[]

0.8%

0.5%

0.9%

(CNH)

04:59 6.8351

PTA 40% 4

PTA PTA1809 PTA1809

2500 40% PTA1809 4.58%

PTA -PTA

PTA 000703 002493 600346 601233

5G 6 5G

8 20

5G

5G

4 5G

5G

2018

5G

5G 300570 002913 603559 300312

300563 002792

4

2017

1200

1.3

20%

2020

4700

75%

“

GDP

”

2030 15.7 GDP 7

2035 27% GDP 27

3 2018 8 24

2018 8 24 2729.43 0.18% 8484.74

0.20% 1044.38 0.25%

4 2018 8 24

5 2018 8 24

5.1

002529 2018

17111.61 0.46%

2618.12 0.56%

ST 600421 2018

-34104.54 100.20% -339.52

002613 2018

6.25 41.81% 1.01 542.86%

0.76 393.33% 0.0813

393.50% 5.14%

000903 2018

	318941.73	9.47%	20323.01	
19.98%	20303.63	4.63%		17650.49
	5.93%			
	300193		2018	
	45116.07		12.49%	10262.47
	21.46%		8634.50	
20.68%				
	603855		2018	
	67199.76		21.99%	
5543.33		72.83%		
	4258.86	48.02%		
	300210		2018	

	5.80%	0.92%		
	603277		2018	2018
	68616.60		3.51%	
11648.39		0.83%	Top

16

2018-08-27

1994

1997

Hailfingen

EEC1836/93

1998

1999 CO2

CSH

2003

ESH7

2003

CO2

2005

2008

2009

R410A /

2009

CSW

R134a

2009

HSK

2010

R134a

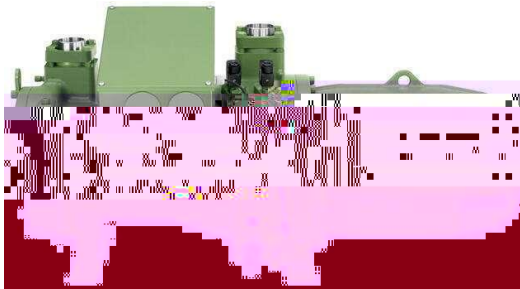
ECOLINE

CSH

2010

2600

5



1

1968

UL CE

PED

ISO-9001

2004 039
2005 2 23 ,
(2005)29 , 130 , HERMES EQUITIES CORP.
CAPITAL HARVEST TECHNOLOGY LIMITED 65
2005 2020 2005 5
, (2005)34 , HERMESEQUITIES
CORP. 3.75 (0.75%),
1.25 1.25
CAPITAL HARVEST TECHNOLOGY LIMITED
3.75 (0.75%)
,
2005 5 30
024506
4





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17

2018-08-29

7.2%

7

	2018	7		11123		45.28%		8745
	26.74%		479		38.84%		1383	
2.47%	2018	6		548		28.34%		3198

