

中船特气 Peric Special Gases (688146 CH)

国内电子特气细分龙头，新建项目强化竞争优势

Leading domestic electronic specialty gas segmentation & New projects to reinforce competitive advantages

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热点速评 Flash Analysis

(Please see APPENDIX 1 for English summary)

- **公司电子特气与三氟甲磺酸系列产品双主业发展。**公司电子特气主要产品包括高纯三氟化氮、高纯六氟化钨、高纯氯化氢、高纯氟化氢等电子特种气体，三氟甲磺酸系列产品包括三氟甲磺酸、三氟甲磺酸酐、双（三氟甲磺酰）亚胺锂等含氟新材料。电子特种气体广泛应用于光刻、刻蚀、成膜、清洗、掺杂、沉积等工艺环节，三氟甲磺酸系列产品广泛应用于医药、化工、锂电新能源、显示材料等行业。
- **2020-2022 年公司营业收入总体实现较快增长，实施员工股权激励助力公司长远发展。**公司 2020-2023Q1 实现营业收入 12.20 亿元、17.33 亿元、19.56 亿元、4.01 亿元，同比增长 17.69%、42%、12.90%、-6.1%；公司 2020-2023Q1 实现归母净利润 2.38 亿元、3.55 亿元、3.83 亿元、0.85 亿元，同比增长 21.45%、49.46%、7.92%、-7.36%。其中 2019-2021 年公司电子特种气体实现收入 9.3 亿元、11.04 亿元、14.94 亿元，占比 89.73%、90.47%、86.21%。万海长风、万海长红作为公司直接股东持有公司股权，万海长胜作为万海长红的有限合伙人间接持有公司股权。
- **电子特气市场规模持续增长，进口替代空间广阔。**根据公司援引 TECHCET 数据，全球电子特种气体的市场规模 2017 年至 2021 年复合增长率为 5.30%，预计 2025 年市场容量将超过 60 亿美元，2021-2025 年复合增长率预计达到 7.33%。我国集成电路用电子气体预计 2021 至 2025 年复合增长率为 12.05%。全球电子气体主要生产企业林德等前十大企业，共占据全球电子气体 90% 以上市场份额。其中，林德、液化空气、太阳日酸和空气化工国际巨头市场份额超过 70%。
- **募集资金扩产传统主业产品及扩产新品类，打造新的盈利增长点。**公司目前三氟化氮年产能达 9250 吨、六氟化钨年产能达 2230 吨、三氟甲磺酸年产能 660 吨。2022 年公司 IPO 发行股份 79411765 股用于年产 3250 吨三氟化氮项目、年产 1500 吨高纯氯化氢扩建项目、年产 735 吨高纯电子气体项目、年产 500 吨双（三氟甲磺酰）亚胺锂等项目。
- **风险提示：**公司风险主要包括：（1）宏观经济环境变化风险（2）原材料价格波动风险（3）市场需求及产品售价变化的风险（4）项目投资进度低于预期的风险。

一、公司电子特气与三氟甲磺酸系列产品双主业发展

公司电子特气主要产品包括高纯三氟化氮、高纯六氟化钨、高纯氯化氢、高纯氟化氢、高纯四氟化硅、高纯氖气、高纯六氟丁二烯、高纯八氟环丁烷、高纯电子混合气等电子特种气体，三氟甲磺酸系列产品包括三氟甲磺酸、三氟甲磺酸酐、双(三氟甲磺酰)亚胺锂等含氟新材料。电子特种气体广泛应用于光刻、刻蚀、成膜、清洗、掺杂、沉积等工艺环节，三氟甲磺酸系列产品广泛应用于医药、化工、锂电新能源、显示材料等行业。

公司电子特气产品及用途:

产品名称		用途	客户
三氟化氮		集成电路和显示面板等制造过程中的清洗、刻蚀工艺	台积电、美光、海力士、中芯国际、长江存储、京东方、LGD等
六氟化钨		集成电路化学气相沉积工艺	台积电、铠侠、美光、海力士、中芯国际、长江存储等
无机类气体	氯化氢和氟化氢	大规模集成电路清洗、刻蚀工艺	
	四氟化硅	集成电路制造中有机硅化合物的合成	
	氖气	集成电路热处理，以及在光纤制造领域抗老化退火处理，提高抗氢老化能力	
混合气		集成电路和显示面板制造过程中的光刻、退火等多个工艺	
氟碳类气体	六氟丁二烯	集成电路先进制程的刻蚀工艺	客户验证阶段
	八氟环丁烷、八氟丙烷、六氟乙烷	集成电路制造领域的等离子刻蚀和清洗工艺	

资料来源: 公司招股书, 海通国际整理

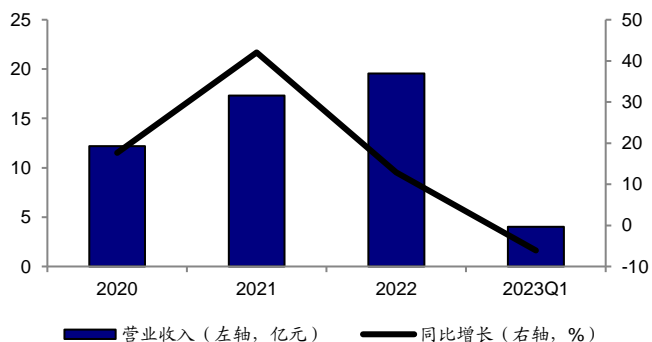
公司三氟甲磺酸系列产品及用途:

产品名称	用途	客户
三氟甲磺酸	医药或化工中间体的反应原料及催化剂	医药、有机硅、香精香料、化工等
三氟甲磺酸酐		
三氟甲磺酸三甲基硅酯		
双(三氟甲磺酰)亚胺锂	锂电电解液添加剂、离子液体原料、显示材料中间体等	锂电新能源、显示材料等
三氟甲磺酸锂		

资料来源: 公司招股书, 海通国际整理

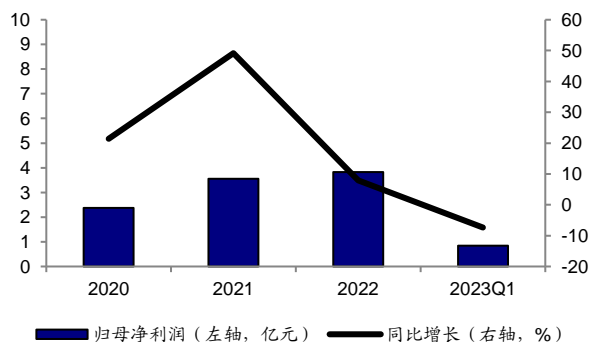
2020-2022 年公司营业收入总体实现较快增长。公司 2020-2023Q1 实现营业收入 12.20 亿元、17.33 亿元、19.56 亿元、4.01 亿元，同比增长 17.69%、42%、12.90%、-6.1%；公司 2020-2023Q1 实现归母净利润 2.38 亿元、3.55 亿元、3.83 亿元、0.85 亿元，同比增长 21.45%、49.46%、7.92%、-7.36%。其中 2019-2021 年公司电子特种气体实现收入 9.3 亿元、11.04 亿元、14.94 亿元，占比 89.73%、90.47%、86.21%，三氟甲磺酸系列产品实现收入 0.84 亿元、0.97 亿元、1.47 亿元，占比 8.06%、7.96%、8.47%。

图 1 公司 2020-2023Q1 营业收入及同比增长情况



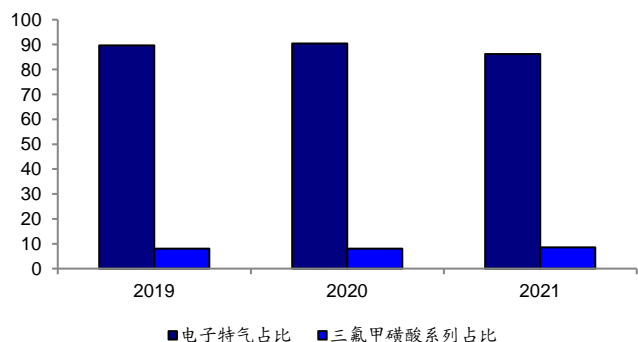
资料来源: Wind, 海通国际

图 2 公司 2020-2023Q1 归母净利润及同比增长情况



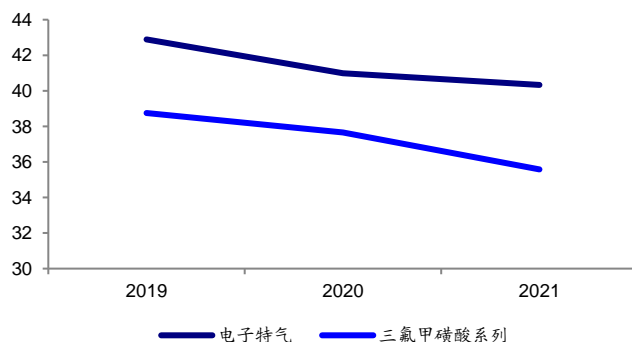
资料来源: Wind, 海通国际

图 3 公司 2019-2021 主营产品收入占比



资料来源: Wind, 海通国际

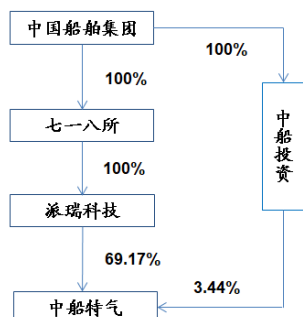
图 4 公司 2019-2021 主营产品毛利占比



资料来源: Wind, 海通国际

实施员工股权激励，助力公司长远发展。中国船舶集团通过七一八所间接持有派瑞科技 100% 股权、通过中国船舶集团投资有限公司持有中船投资 100% 股权，通过派瑞科技、中船投资合计间接控制公司 72.62% 股权。万海长风、万海长红作为公司直接股东持有公司股权，万海长胜作为万海长红的有限合伙人间接持有公司股权。

图 5 公司发行后股权结构

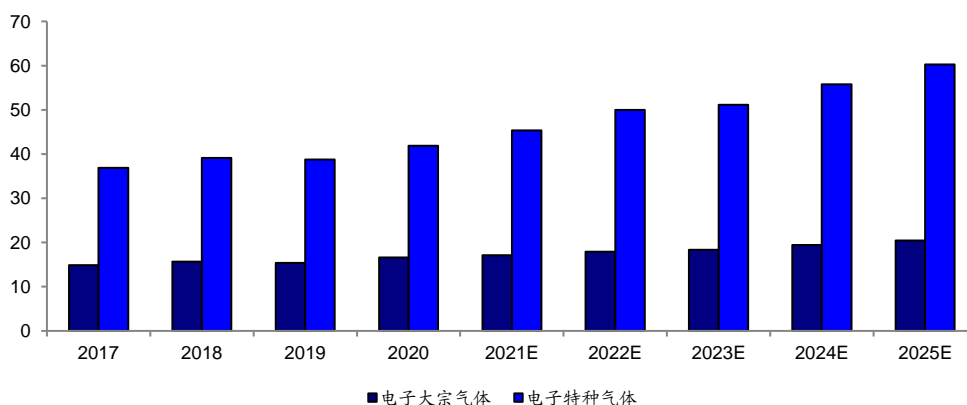


资料来源: wind, 海通国际整理

二、电子特气市场规模持续增长，进口替代空间广阔

2017-2021 年全球电子特种气体市场规模复合增长率为 5.30%。根据公司援引 TECHCET 数据，全球电子特种气体的市场规模 2017 年约为 36.91 亿美元，2020 年增加至 41.85 亿美元，2021 年进一步增长至 45.38 亿美元，2017 年至 2021 年复合增长率为 5.30%，预计 2025 年市场容量将超过 60 亿美元，2021-2025 年复合增长率预计达到 7.33%。2021 年，全球电子气体的市场规模约为 62.51 亿美元，其中电子特种气体占 72.60%，电子大宗气体占 27.40%。

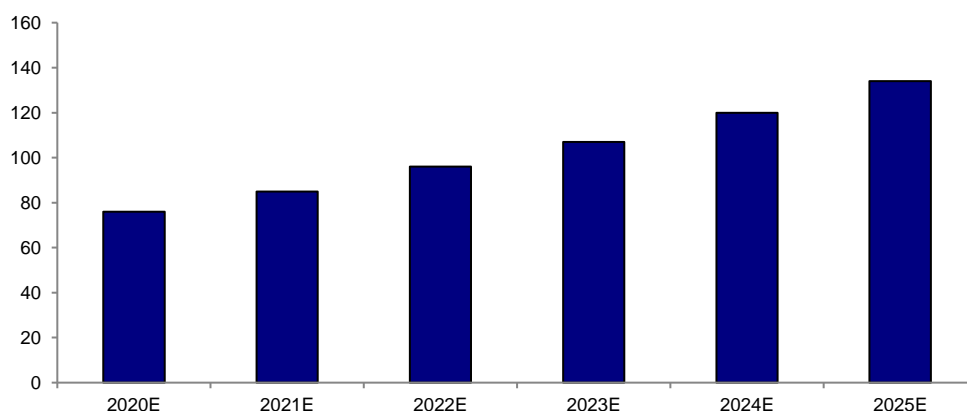
图 6 全球电子气体市场规模（亿美元）



资料来源：TEHCET，公司招股书，海通国际整理

根据公司援引前瞻产业研究院数据显示，我国集成电路用电子气体的市场规模 2020 年为 76 亿元，2021 年增长至 85 亿元，预计 2025 年规模将达到 134 亿元，2021 至 2025 年复合增长率为 12.05%。根据 ICMtia 统计数据测算，中国集成电路用电子气体中，电子特种气体市场规模约占 64%。

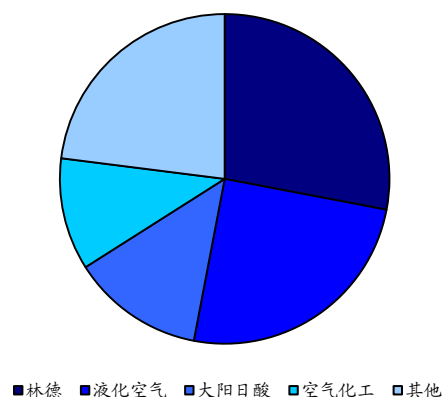
图 7 中国集成电路用电子气体市场规模预测（亿元）



资料来源：前瞻产业研究院，招股书，海通国际整理

电子特气进口替代空间广阔。全球电子气体主要生产企业林德等前十大企业，共占据全球电子气体 90%以上市场份额。其中，林德、液化空气、太阳日酸和空气化工国际巨头市场份额超过 70%。三氟化氮气体领域，公司拥有 9250 吨三氟化氮产能，仅次于 SK Materials，排名全球第二，是国内最大的三氟化氮生产企业。此外，国外主要的三氟化氮生产企业还有韩国晓星、日本关东电化、德国默克。六氟化钨气体领域，主要竞争对手为韩国 SK Materials、日本关东电化、韩国厚成化工、日本中央硝子、德国默克，公司是国内六氟化钨量产企业之一。

图 8 2020 年全球电子气体市场份额



资料来源：TECHCET，公司招股书，海通国际整理

三、募集资金扩产传统主业产品及扩产新品类，打造新的盈利增长点

公司目前三氟化氮年产能达 9250 吨、六氟化钨年产能达 2230 吨、三氟甲磺酸年产能 660 吨。2022 年公司 IPO 发行股份 79411765 股，募集资金净额 28 亿元用于年产 3250 吨三氟化氮项目、年产 1500 吨高纯氯化氢扩建项目、年产 735 吨高纯电子气体项目、年产 500 吨双（三氟甲磺酰）亚胺锂等项目。

年产 3250 吨三氟化氮项目拟投资 45998.00 万元。公司拥有有全国最大的三氟化氮研发生产基地，形成了电解氟化技术、化学合成技术、精馏技术、化学纯化技术、吸附技术、混配技术、痕量杂质分析技术、充装技术、绿色环保技术等核心技术工艺储备。我们认为公司现有三氟化氮产线产能利用率已处于较高水平，新建项目有望缓解产能瓶颈，进一步巩固电子特气细分行业龙头地位。

年产 500 吨双（三氟甲磺酰）亚胺锂项目拟投资 27721.00 万元。双（三氟甲磺酰）亚胺锂与六氟磷酸锂配比添加至电解液中可有效提高电池的使用寿命及安全性能，具有更高的导电率、不易水解及热稳定性等特点。双（三氟甲磺酰）亚胺锂采用公司自主研发的电解氟化技术、精馏技术，亚胺锂产品纯度达到 99.9%以上，与公司主营业务和核心技术之间密切相关。

年产 735 吨高纯电子气体项目拟投资 22138.00 万元项目达产后每年将增加 735 吨高纯电子特种气体，含一氟甲烷、二氟甲烷等 9 种，并回收副产品硅烷，项目建成后丰富公司产品结构，完善公司产品布局。

年产 1500 吨高纯氯化氢扩建项目拟投资 9658.00 万元。高纯氯化氢为集成电路外延阶段的一种重要的清洗气体，通过强腐蚀性将生产中产生的杂质去除，实现对炉壁及基座的清洗，同时，硅片在进行外延加工前，氯化氢作为蚀刻气体对硅片表面清洗处理，保证外延工艺的质量可靠性。公司现有高纯氯化氢产品处于满产满销状态，已成功打入国内部分先进制程客户供应链。此次公司扩大高纯氯化氢生产能力，有利于提升公司现有产业布局，全面提升公司的综合竞争实力。

公司主要募集项目汇总：

项目名称	项目投资金额（万元）
年产 3250 吨三氟化氮项目	45998.00
年产 500 吨双（三氟甲磺酰）亚胺锂项目	27721.00
年产 735 吨高纯电子气体项目	22138.00
年产 1500 吨高纯氯化氢扩建项目	9658.00
制造信息化提升工程建设项目	6775.00

资料来源：公司招股书，海通国际整理

APPENDIX 1

Summary

- The company's electronic specialty gas and trifluoromethanesulfonic acid series products are developing as two main businesses.** The main products of the company's electronic specialty gases include high-purity nitrogen trifluoride, high-purity tungsten hexafluoride, high-purity hydrogen chloride, high-purity hydrogen fluoride, and other electronic specialty gases. The trifluoromethanesulfonic acid series products include trifluoromethanesulfonic acid, trifluoromethanesulfonic anhydride, bis (trifluoromethanesulfonyl) imine lithium, and other fluorinated new materials. Electronic special gases are widely used in processes such as lithography, etching, film formation, cleaning, doping, deposition, etc. The trifluoromethanesulfonic acid series products are widely used in industries such as pharmaceuticals, chemicals, lithium new energy, display materials, etc.
- From 2020 to 2022, the company's overall operating revenue achieved rapid growth, and the implementation of employee equity incentives helped the company's long-term development.** The company achieved operating revenue of RMB1.220bn, 1.733bn, 1.956bn, and 401mn in 2020-2023Q1 (YoY +17.69%, 42%, 12.90%, and -6.1%); The company achieved net profit of RMB238mn, 355mn, 383mn, and 85mn in 2020Q1-2023Q1 (YoY +21.45%, 49.46%, 7.92%, and -7.36%). From 2019 to 2021, the company achieved revenue of RMB930mn, 1.104bn, and 1.494bn in electronic special gases, accounting for 89.73%, 90.47%, and 86.21% respectively. WanHaichangfeng and WanHaichanghong hold the equity of the company as direct shareholders of the company, and WanHaichangsheng holds the equity of the company indirectly as the limited partner of WanHaichanghong.
- The scale of the electronic specialty gas market continues to grow, and there is broad room for import substitution.** According to TECHCET data cited by the company, the global market size for electronic specialty gases has a compound growth rate of 5.30% from 2017 to 2021. It is expected that the market capacity will exceed USD6bn in 2025, and the compound growth rate is expected to reach 7.33% from 2021 to 2025. The composite growth rate of electronic gases used in integrated circuits in China is expected to be 12.05% from 2021 to 2025. The top ten global electronic gas manufacturers, including Linde, together account for over 90% of the global electronic gas market share. Among them, Linde, liquefied air, Taiyo Nippon Sanso, and Air Products and Chemicals have a market share of over 70%.
- Raise funds to expand the production of traditional main products and new product categories, and create new profit growth points.** The company currently has an annual production capacity of 9250 tons of nitrogen trifluoride, 2230 tons of tungsten hexafluoride, and 660 tons of trifluoromethanesulfonic acid. In 2022, the company's IPO issued 79411765 shares for projects such as the annual production of 3250 tons of nitrogen trifluoride, the annual production of 1500 tons of high-purity hydrogen chloride expansion project, the annual production of 735 tons of high-purity electronic gas project, and the annual production of 500 tons of lithium bis (trifluoromethanesulfonyl) imine.
- Risks:** (1) the risk of changes in the macroeconomic environment, (2) the risk of fluctuations in raw material prices, (3) the risk of changes in market demand and product prices, and (4) the risk of project investment progress falling below expectations.

附录 APPENDIX

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中性，未来 12-18 个月内预期相对基准指数变化不大，基准定义如下。根据 FINRA/NYSE 的评级分布规则，我们会将中性评级划入持有这一类别。

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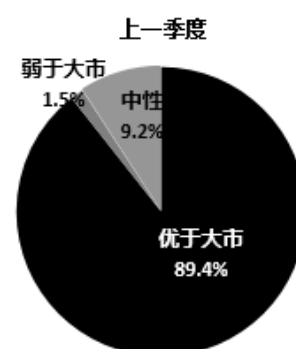
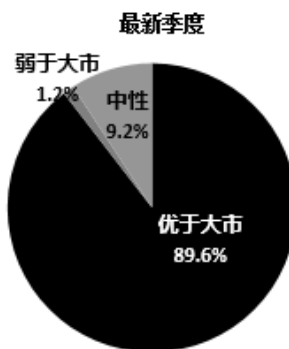
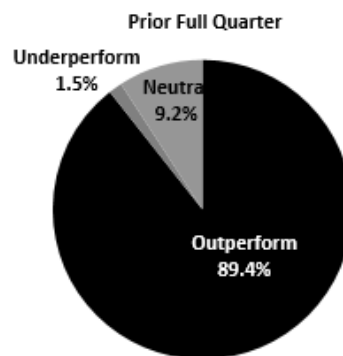
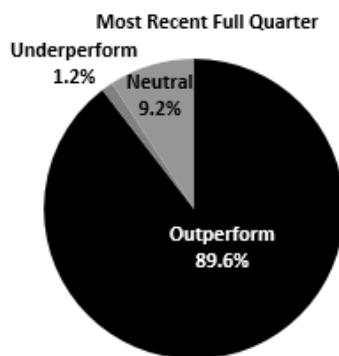
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	优于大市	中性 (持有)	弱于大市
海通国际股票研究覆盖率	89.6%	9.2%	1.2%
投资银行客户*	5.2%	6.4%	9.5%

*在每个评级类别里投资银行客户所占的百分比。

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卖出，未来 12-18 个月内预期相对基准指数跌幅在 10%以上，基准定义如下

各地股票基准指数：日本 – TOPIX, 韩国 – KOSPI, 台湾 – TAIEX, 印度 – Nifty100; 其他所有中国概念股 – MSCI China.

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	Outperform	Neutral (hold)	Underperform
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IB clients*	5.2%	6.4%	9.5%

*Percentage of investment banking clients in each rating category.

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SELL: The stock's total return over the next 12-18 months is expected to be below the return of its relevant broad market benchmark, as indicated below.

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