

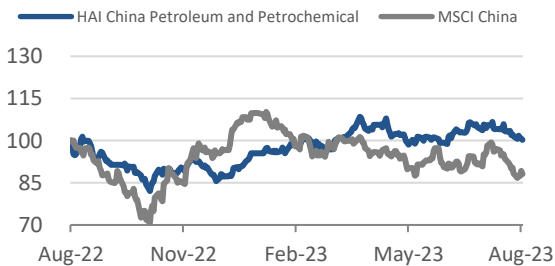
石化行业周报 Petrochemical Industry Weekly Report

风电涂料概述

Overview of Wind Power Coatings

观点聚焦 Investment Focus

股票名称	评级	股票名称	评级
中国石油	Outperform	华润材料	Outperform
中国石化	Outperform	九丰能源	Outperform
中国海油	Outperform	纳微科技	Outperform
荣盛石化	Outperform	维远股份	Outperform
恒力石化	Outperform	胜华新材	Outperform
东方盛虹	Outperform	华锦股份	Outperform
中海油服	Outperform	滨化股份	Outperform
新奥股份	Outperform	海优新材	Outperform
卫星化学	Outperform	卓越新能	Outperform
广汇能源	Outperform	卓然股份	Outperform
桐昆股份	Outperform	同益中	Outperform
上海石化	Outperform	德美化工	Outperform
中油工程	Outperform	蒙泰高新	Outperform
新凤鸣	Outperform	万凯新材	Outperform
齐翔腾达	Outperform	天振股份	Outperform
东华能源	Outperform	鹿山新材	Outperform



资料来源: Factset, HTI

Related Reports

- 7月以来国际油价震荡上行 (International oil prices fluctuated in the upward trend since July) (20 Aug 2023)
- Presentation: 化工行业投资组合 (8月份) Chemical Industry Portfolio (August) (15 Aug 2023)
- MTBE 价格上涨, 原材料 C4 价格下降, 相关企业有望受益 (MTBE Prices Increase, Raw Material C4 Prices Decrease, and Related Enterprises are Expected to Benefit) (14 Aug 2023)

(Please see APPENDIX 1 for English summary)

- 核心观点:** 风电涂料按使用部位分位风电叶片涂料和风电塔筒涂料, 主要用于涂抹在风电叶片和塔筒表面形成保护膜, 从而减少腐蚀及破坏情况的发生, 增加产品的使用寿命。其中风电叶片涂料由腻子、底漆、面漆、前缘保护材料四部分组成, 目前国内需求 2-3 万吨, 市场空间约 10-15 亿元。根据麦加芯彩招股说明书援引 GWEC 数据, 2020、2021 年中国风电新增装机量分别为 54.43、47.57GW, 预计 2030 年将达到 70-80GW, 风电叶片涂料市场仍有较大成长空间。风电塔筒涂料分为聚氨酯体系和氟碳体系, 其中聚氨酯体系工艺较成熟, 但存在维护成本较高的问题, 新推出的氟碳体系涂料有望解决相关痛点。
- 风电涂料分为风电叶片涂料和塔筒涂料。** 涂料是涂覆在被保护或被装饰的物体表面, 能与被涂物形成牢固附着的连续薄膜, 可以起到保护、装饰或其他特殊功能。风电叶片、塔筒等长期暴露在大气中, 受到水分、氧气、盐雾等环境作用, 易于发生腐蚀和破坏, 尤其是风电叶片处于高速旋转, 叶片尖端速度可达每秒百米以上, 更容易受到侵蚀和破坏, 因此在物体表面涂抹涂料形成保护膜, 可以有效减少腐蚀及破坏情况的发生, 增加物体的使用寿命。
- 风电叶片涂料产品体系由腻子、底漆、面漆、前缘保护材料四部分组成。** 其中腻子分为快干型聚氨酯微孔腻子和聚氨酯腻子两种, 前者专用于修补基材表面微小针孔。特点是干燥速率快, 后者用于修补、填充基材表面大凹坑, 在干燥后易于打磨修型的同时, 具备优异柔韧性能。底漆分为油性底漆和无溶剂水油两用配套水性底漆两种, 面漆也分为油性面漆和水性面漆两种, 其中水性底漆和面漆 VOCs, 环保优势突出等优点。前缘保护材料分为聚氨酯前缘保护胶衣和聚氨酯前缘保护漆, 主要应用于叶片的前缘部位, 具有耐雨蚀、耐砂蚀的特性对于风电叶片前缘有较高的防护性能, 能有效减轻叶片前缘在运转过程中的损伤。
- 风电叶片涂料市场空间较大。** 根据麦加芯彩招股说明书, 2020-2021 年, 麦加芯彩在风电叶片涂料市占率约 1/3。2020-2021 年, 麦加芯彩风电涂料销售量分别为 9189 吨, 6919 吨, 销售额分别为 5.21、3.42 亿元, 可结合市占率算出 2020、2021 年中国风电涂料市场需求量分别为 27567、20756 吨, 市场空间分别为 15.64、10.27 亿元。根据麦加芯彩招股说明书援引国家能源局和 GWEC 数据, 2020、2021 年中国风电新增装机量分别为 54.43、47.57GW, 预计 2030 年将达到 70-80GW, 风电叶片涂料市场仍有较大成长空间。

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- **风电塔筒涂料主要用于保护塔筒免受腐蚀。**风电塔筒在使用过程中，不仅受到来自风轮、机舱以及自身的重力作用，同时还受到各种风况作用，长期经受紫外线、雨雪、昼夜温差、盐雾等各种恶劣的自然环境腐蚀，致使涂层损伤；另外，设计防腐配套系统失败造成涂层过早失效，或是原始施工时没有对塔筒表面进行处理，或是表面处理不彻底就进行油漆施工，也容易造成涂层松动脱落，致使塔筒受到腐蚀。
- **传统聚氨酯体系塔筒涂料维护成本较高，氟碳体系涂料有望解决相关问题。**目前我国大部分风电塔筒沿用欧美聚氨酯涂料，这类涂料技术比较成熟，耐候性较好，但寿命有限，需要经常进行维护甚至重涂。重涂的装卸、运输以及停机维修费用远高于初次涂装成本费用，设备维护成本和安全隐患也较高。近来有涂料厂家针对这个问题，推出高性能长效防护的氟碳体系涂料，具有较强耐候性、耐沾污性、耐粉化和保光保色性，物理机械性能也较强，能对底材起到屏蔽的作用，只需 20 微米膜厚就达到满足 40 年的防腐要求，其漆膜年损耗量低，在风机正常使用寿命期内不需要进行维护或只需一次维护，可大幅提升风电塔筒的使用寿命、减少维护成本。
- **投资建议。**建议关注中国风电涂料龙头企业**麦加芯彩**等。
- **风险提示。**产品价格大幅波动；项目进展不及预期，下游需求不及预期等。

1. 建议关注：新凤鸣、桐昆股份、中国石油、卫星化学、荣盛石化、东方盛虹、恒力石化、新奥股份

1.1 新凤鸣

(1) 涤纶行业龙头，主业稳步扩张，提供业绩增量。截至 2022 年底，公司拥有民用涤纶长丝产能 630 万吨/年，涤纶短纤产能 90 万吨/年。根据公司 2022 年报，到 2023 年底公司将拥有长丝产能 700 万吨、短纤产能 120 万吨。此外，公司拥有 500 万吨 PTA 产能，预计到 2026 年，公司 PTA 达到 1000 万吨。(2) 拟启动泰昆石化印尼北加炼化一体化项目。泰昆石化由华灿国际、上海青翎分别持股 90%、10%，其中桐昆股份、新凤鸣分别持有华灿国际 51%、49% 股权。项目报批总投资 86.24 亿美元，拟投资建设 1600 万吨/年炼油、520 万吨/年 PX、80 万吨/年乙烯。

风险提示：项目建设进展不及预期；产品价格大幅波动。

1.2 桐昆股份

(1) 涤纶行业龙头，主业稳步扩张，提供业绩增量。截至 2022 年，公司 PTA 产能 720 万吨/年，涤纶长丝产能 960 万吨/年。根据公司现有项目规划，未来公司长丝（短纤）产能约 1500 万吨/年，其中 2023 年计划投产长丝约 300 万吨/年。(2) 拟启动泰昆石化印尼北加炼化一体化项目。泰昆石化由华灿国际、上海青翎分别持股 90%、10%，其中桐昆股份、新凤鸣分别持有华灿国际 51%、49% 股权。项目报批总投资 86.24 亿美元，拟投资建设 1600 万吨/年炼油、520 万吨/年 PX、80 万吨/年乙烯。(3) 参股大炼化。参股 20% 的浙石化，我们预计 2023 年随着下游需求改善，炼化行业景气度有望逐步回升。

风险提示：原油价格下跌；产品价格下跌；长丝产能扩张不及预期。

1.3 中国石油

(1) 国际油价维持高位震荡，我们预计 2023 年公司有望维持较好盈利水平。(2) 注重股东回报：2022 年公司 A 股、H 股股息率分别为 8.5%、13.6%，行业领先；拟回购增强股东回报。(3) 转型升级、提升经营质量：上游构建“油、气、热、电、氢”五大能源平台，下游减油增化。

风险提示：原油、天然气价格回落等。

1.4 卫星化学

(1) 轻质化龙头，工艺具有成本低、排放低、副产氢等优势。(2) 连云港年产 135 万吨 PE、219 万吨 EOE 和 26 万吨 ACN 联合装置项目二阶段工程全面投产，且主要原材料价格高位回落，我们预计盈利有望改善。(3) 在建及储备项目提供未来增长动能，包括绿色化学新材料产业园项目（20 万吨/年乙醇胺、80 万吨/年聚苯乙烯、10 万吨/年 α -烯烃与配套 POE、75 万吨/年碳酸酯）、平湖基地新能源新材料一体化项目（年产 80 万吨 PDH、80 万吨丁辛醇）等。

风险提示：产品价格大幅波动；项目进展不及预期等。

1.5 荣盛石化

(1) 控股 4000 万吨/年浙石化 51% 股权，我们预计 2023 年随着下游需求改善，炼化行业景气度有望逐步回升。(2) 完善下游新材料布局，重点布局新能源和高端材料领域，浙石化三大项目（二期工程产品结构优化、高端新材料、高性能树脂项目）合计总投资规模 1178 亿元，主要包括 EVA、DMC、ABS、 α 烯烃-POE、己二腈-PA66 等产品，公司预计年均可实现净利润合计 164 亿元。

风险提示：原油价格下跌；产品价格下跌；项目进度不及预期。

1.6 东方盛虹

(1) 公司上游拥有 1600 万吨/年炼化一体化项目（2022 年底全面投产）、240 万吨/年甲醇制烯烃装置（MTO）、70 万吨/年 PDH 装置，实现“油、煤、气”三种烯烃制取工艺路线全覆盖。(2) 公司加快布局新材料产业链，规划未来实现 EVA 产能 100 万吨/年（现有 30 万吨/年）、POE 产能 50 万吨/年（分期建设，其中 800 吨 POE 中试装置于 2022 年 9 月 27 日一次开车成功），并拟在湖北宜昌投资建设配套原料及磷酸铁、磷酸铁锂新能源材料项目。

风险提示：原油价格下跌；产品价格下跌；项目进度不及预期。

1.7 恒力石化

(1) 公司以“炼化+乙烯+煤化”为载体，强化上游大化工平台支撑，主要包括 2000 万吨/年炼油、150 万吨/年乙烯、500 万吨/年现代煤化工装置。(2) 加速新材料布局，打造第二成长曲线，稳步推进 160 万吨/年高性能树脂及相关配套工程、260 万吨/年功能性聚酯工程、30 万吨/年己二酸化工新材料配套项目及 16 亿平锂电隔膜项目等在建项目建设。

风险提示：原油价格下跌；产品价格下跌；项目进度不及预期。

1.8 新奥股份

(1) 天然气龙头企业，控股新奥能源 33% 的股权，受益天然气需求较快增长。(2) 注入舟山 LNG 接收站，接收站一、二期合计实际处理能力有望达到 800 万吨/年。

风险提示：天然气价格大幅波动；天然气消费增速不及预期。

2. 一周跟踪：新奥股份、东华能源

2.1 新奥股份

发布未来三年（2023-2025 年）股东特别派息规划。公司将新能矿业 100% 股权出售交易取得的投资收益进行特别派息，2023 年-2025 年每股现金分红 0.25 元（含税）、0.22 元（含税）、0.18 元（含税）。

风险提示：天然气价格大幅波动；天然气消费增速不及预期。

2.2 东华能源

发布关于宁波百地年增资扩股暨关联交易的公告。公司拟引入专业的 LPG 综合运营商马森能源（新加坡）有限公司或其子公司、关联方作为战略投资者，增强宁波百地年运营能力，同时公司及其他原股东放弃增资的认购权。增资后，马森能源持有宁波百地年 51.00%股份。

风险提示：产品价格大幅波动；下游需求不及预期；在建项目进展不及预期。

3. 风险提示：

产品价格大幅波动；下游需求不及预期；在建项目进展不及预期。

APPENDIX 1**Summary**

- **Conclusions.** Wind power coatings are divided into wind power blade coatings and wind power tower coatings according to the parts of use. They are mainly used to form a protective film on the surface of wind power blades and towers, thereby reducing the occurrence of corrosion and damage and increasing the service life of the product. Among them, wind turbine blade coating consists of four parts: putty, primer, topcoat, and leading edge protection materials. The current domestic demand is 20,000 to 30,000 tons, and the market space is about 1 billion to 1.5 billion yuan. According to GWEC data quoted in the prospectus of Mega P&C Advanced Materials (Shanghai), China's newly installed wind power capacity in 2020 and 2021 will be 54.43 and 47.57GW respectively, and is expected to reach 70-80GW in 2030. The wind power blade coating market still has considerable room for growth. Wind power tower coatings are divided into polyurethane systems and fluorocarbon systems. The polyurethane system technology is more mature, but there is a problem of high maintenance costs. The newly launched fluorocarbon system coatings are expected to solve the related pain points.
- **Investment Advice.** It is suggested to pay attention to China's leading wind power coatings company Mega P&C Advanced Materials (Shanghai), etc.
- **Risks warning.** Product prices fluctuate significantly; project progress is less than expected, downstream demand is less than expected, etc.

附录 APPENDIX

重要信息披露

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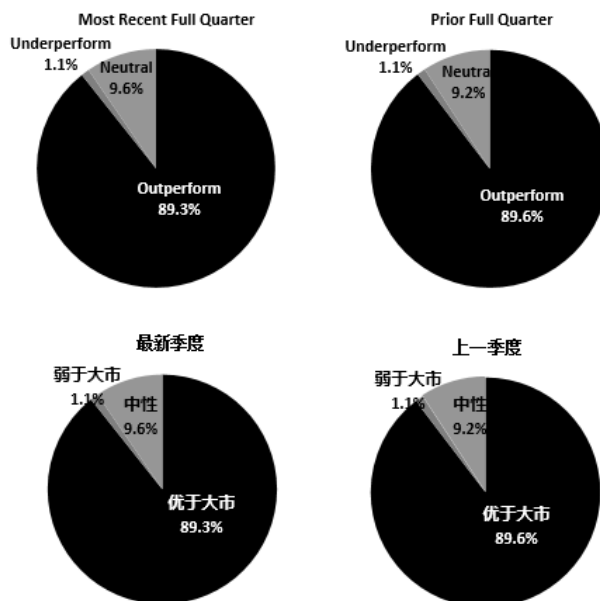
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卖出，未来 12-18 个月内预期相对基准指数跌幅在 10%以上，基准定义如下

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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