

帝科股份 Wuxi DK Electronic Materials (300842 CH)

首次覆盖：全球领先的光伏银浆供应商，TOPCon 银浆即将迎来量利双升

The world's leading supplier of silver paste, TOPCon silver paste is about to usher in both volume and profit: Initiation

观点聚焦 Investment Focus

首次覆盖优于大市 Initiate with OUTPERFORM

评级	优于大市 OUTPERFORM
现价	Rmb76.59
目标价	Rmb111.00
市值	Rmb7.68bn / US\$1.08bn
日交易额 (3个月均值)	US\$46.51mn
发行股票数目	100.25mn
自由流通股 (%)	74%
1年股价最高最低值	Rmb89.58-Rmb41.41

注：现价 Rmb76.59 为 2023 年 6 月 1 日收盘价



资料来源: Factset

	1mth	3mth	12mth
绝对值	3.5%	58.8%	84.3%
绝对值 (美元)	0.9%	55.1%	72.7%
相对 MSCI China	37.3%	94.0%	127.7%

(Rmb mn)	Dec-22A	Dec-23E	Dec-24E	Dec-25E
营业收入	3,767	7,186	9,732	12,771
(+/-)	34%	91%	35%	31%
净利润	-17	379	615	866
(+/-)	n.m.	n.m.	62%	41%
全面摊薄 EPS (Rmb)	-0.17	3.79	6.15	8.66
毛利率	8.8%	11.4%	12.1%	12.5%
净资产收益率	-1.8%	33.4%	37.7%	36.5%
市盈率	n.m.	20	12	9

资料来源: 公司信息, HTI

(Please see APPENDIX 1 for English summary)

帝科股份是全球领先的光伏银浆供应商，TOPCon 银浆即将迎来量利双升。公司发布 2022 年年报及 2023 年一季报，2022 年公司实现营业收入 37.7 亿元，同比增长 33.8%，实现归母净利润 -0.17 亿元，同比下降 118.4%；2023 年 Q1 公司实现营收 15.5 亿元，同比增长 121.7%，实现归母净利润 0.86 亿元，同比增长 370.8%，Q1 业绩超预期。

2022 年业绩承压，2023 年银浆业务将迎来量利双升。公司 2022 年亏损主要系：1) 公司因进口银粉而持有的外币贷款产生汇兑损失约 1 亿元，2) 受行业整体利润空间缩减的影响，导电银浆产品毛利率水平有限；3) 当期中介机构服务费进入当期管理费用；4) 公司计提的信用减值损失增加。随着 TOPCon 产能逐步释放，预计公司 2023 年银浆业务有望量利齐升。

TOPCon 银浆产品竞争力持续提升，国产银粉导入有望增厚盈利。公司 22 年销售量达到 721 吨，同比+46%，其中大部分为光伏导电浆料。TOPCon 方面，公司显著提升了 N 型 TOPCon 电池全套导电银浆产品的竞争力，TOPCon 在出货结构中占比持续快速攀升；HJT 方面，公司的 HJT 产品已在获得多家头部客户的认证，处于持续供货交付阶段；IBC 方面，新型 IBC 电池导电银浆多年来处于持续出货交付阶段。公司配合下游龙头客户的降本需求不断提升国产银粉使用比例，有利于保障公司供应链安全、降低成本以及银点、外汇波动风险，对公司盈利能力起到正积极的影响。

持续完善产业链布局，优化产业结构。2022 年，公司在山东东营启动投资建设电子专用材料项目，包括年产 5000 吨硝酸银项目、年产 2000 吨金属粉项目及年产 200 吨电子级浆料项目，项目有利于强化公司在光伏新能源和半导体电子领域的布局深度。

估值：我们预测公司 23-25 年营收 71.86 /97.32/127.71 亿元；归母净利润分别为 3.79/6.15/8.66 亿元；EPS 分别为 3.79/6.15/8.66 元/股，当前股价对应 PE 分别为 20/12/9 倍。考虑公司 TOPCon 产品有望迅速放量增厚利润，我们给予公司 18 倍 2024 年 PE，对应目标价 111 元，首次覆盖给予“优于大市”评级。

风险：需求不及预期、N 型电池片推广不及预期、技术发展不及预期。

杨斌 Bin Yang
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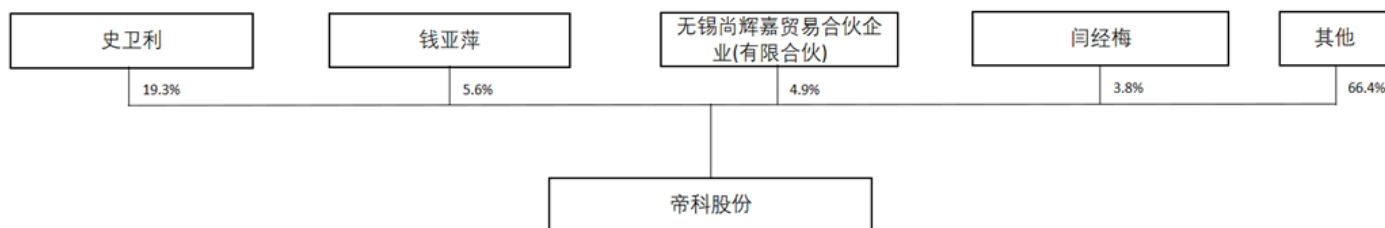
公司概况

帝科股份（300842 CH）是一家专注于高性能电子材料开发与应用的材料科技公司，总部位于中国无锡，在光伏新能源领域已成为全球领先的光伏导电银浆供应商之一。

TOPCon 银浆产品竞争力持续提升，国产银粉导入有望增厚盈利。公司 22 年销售量达到 721 吨，同比+46%，其中大部分为光伏导电浆料。TOPCon 方面，公司显著提升了 N 型 TOPCon 电池全套导电银浆产品的竞争力，TOPCon 在出货结构中占比持续快速攀升；HJT 方面，公司的 HJT 产品已在获得多家头部客户的认证，处于持续供货交付阶段；IBC 方面，新型 IBC 电池导电银浆多年来处于持续出货交付阶段。公司配合下游龙头客户的降本需求不断提升国产银粉使用比例，有利于保障公司供应链安全、降低成本以及银点、外汇波动风险，对公司盈利能力起到正面积积极的影响。

持续完善产业链布局，优化产业结构。2022 年，公司在山东东营启动投资建设电子专用材料项目，包括年产 5000 吨硝酸银项目、年产 2000 吨金属粉项目及年产 200 吨电子级浆料项目，项目有利于强化公司在光伏新能源和半导体电子领域的布局深度

图表 公司股权结构



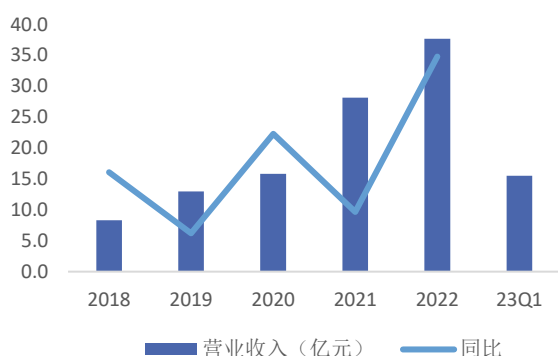
资料来源：公司公告，HTI

公司业绩

公司发布 2022 年年报及 2023 年一季报，2022 年公司实现营业收入 37.7 亿元，同比增长 33.8%，实现归母净利润-0.17 亿元，同比下降 118.4%；2023 年 Q1 公司实现营收 15.5 亿元，同比增长 121.7%，实现归母净利润 0.86 亿元，同比增长 370.8%，Q1 业绩超预期。

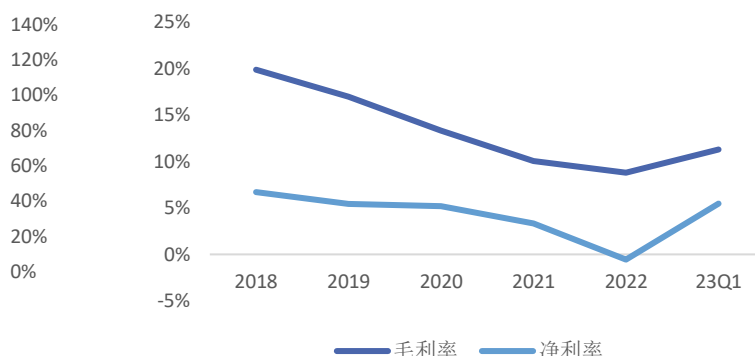
汇兑损失影响 22 年利润，23 年盈利能力触底回升。公司 2022 年亏损主要系：1) 公司因进口银粉而持有的外币贷款产生汇兑损失约 1 亿元，2) 受行业整体利润空间缩减的影响，导电银浆产品毛利率水平有限；3) 当期中介机构服务费进入当期管理费用；4) 公司计提的信用减值损失增加。随着 TOPCon 产能逐步释放，预计公司 2023 年银浆业务有望量利齐升。

图表：2018-2023 公司营业收入情况



资料来源：公司公告，Wind，HTI

图表：2018-2023 公司毛利率、净利率情况



资料来源：Wind，HTI

行业概况

N 型浆料提高银浆单耗，预计 2022-2024 年全球银浆行业复合增速为 18%。2022 年 N 型电池的产能不断落地。我们预计 2022-2024 年全球光伏装机量分布为 278GW/355GW/470GW，按 1.2 的容配比计算，分别对应全球电池片需求量 334GW/426GW/564GW，N 型电池占比在 2024 年有望超过 70%。对应银浆市场需求从 4,010 吨提升至 5,567 吨（CAGR 18%）。2022 年光伏银浆国产化率接近 80%，未来仍有提升空间。

TOPCon 电池快速放量，TOPCon 浆料有望量价齐升。银耗方面，PERC 银浆耗量 6-8mg/w，而 TOPCon 银浆耗量 10-13mg/w。加工费方面：当前 Perc 正银加工费约 500 元/KG，TOPCon 加工费高出 Perc 正银 300+元/KG。TOPCon 电池有望迅速放量：TOPCon 产能从 2021 年底开始产能快速增长，2022 年底为止落地产能 80GW，2023 年规划超 300GW。随着 TOPCon 产能大规模落地，N 型银浆有望大幅增厚盈利。

HJT 低温银浆国产化率持续提升；随着 HJT 降本不断推进，低温银浆有望放量。银耗方面，PERC 银浆耗量 6-8mg/w，而 HJT 银浆耗量 20-22mg/w。加工费方面：当前 Perc 正银加工费约 500 元/KG，而 HJT 加工费高出 Perc 正银 1000+元/KG。竞争格局来看：低温浆料整体量较小，日本 KE 占半壁江山，国内苏州晶银与聚和较为领先，国产化率接近 50%。从国产化进程来看：2020 年后，低温银浆的国产化进展相当迅猛，研发和迭代速度很快。国外公司具有一定技术底蕴，但其价格相对较高，且和客户互动、产品迭代的速度相对较慢。2020 年开始国产低温银浆已经开始替代进口的份额，目前 HJT 低温主栅银浆国产化率达到 50+%，国产化率未来有望进一步提升。目前 HJT 已落地产能约 10GW，随着 HJT 降本不断推进，HJT 有望加速量产，未来低温银浆有望放量。

N 型浆料提升行业技术壁垒，龙头市占率有望持续提升。P 型电池正银行业格局相对分散，主要玩家包括聚和、帝科、贺利氏等，其中聚和市占率约四成，帝科市占率约两成。N 型电池提升了技术壁垒。各家浆料厂在 TOPCon 正面的银铝浆研发进展上体现出一定差异性，行业头部玩家帝科、聚和市占率合计占约八成。随着 N 型电池加速放量，银浆行业格局有望进一步向龙头集中。

图表：全球光伏电池用银浆市场需求（吨）

	2021	2022	2023E	2024E
新增装机量（GW）	175	278	355	470
电池片需求（GW）	210	334	426	564
perc 市占率	91.2%	87.2%	57.0%	18.0%
BSF 市占率	5%	2%	0%	0%
TOPCon 市占率	2.0%	7.5%	30%	60%
HJT 市占率	1.0%	2.5%	5%	12%
IBC 市占率	0.8%	0.8%	8.0%	10%
perc 电池片需求（GW）	192	291	243	102
BSF 电池片需求（GW）	11	7	-	-
TOPCon 电池片需求（GW）	4	25	128	338
HJT 电池片需求（GW）	2	8	21	68
IBC 电池片需求（GW）	2	3	34	56
perc 银浆单 GW 需求量（吨）	12.4	11.6	10.0	8.5
BSF 银浆单 GW 需求量（吨）	12.0	10.0	10.0	10.0
TOPCon 银浆单 GW 需求量（吨）	18.5	15.0	13.0	10.5
HJT 银浆单 GW 需求量（吨）	27.0	20.0	15.0	12.0
IBC 银浆单 GW 需求量（吨）	12.0	10.0	8.0	6.0
perc 银浆需求量（吨）	2,375	3,374	2,428	863
BSF 银浆需求量（吨）	126	67	-	-
TOPCon 银浆需求量（吨）	78	375	1,661	3,553
HJT 银浆需求量（吨）	57	167	320	812
IBC 银浆需求量（吨）	20	27	273	338
全球银浆需求量合计（吨）	2,655	4,010	4,682	5,567

资料来源：各公司公告，CPIA，PV INFO，HTI

盈利预测

光伏银浆业务

销量：银浆行业具备轻资产属性，产能单位投资额较低、扩产周期短，因此银浆企业产销量主要受下游需求驱动。我们预计公司 2023-2025 年光伏银浆出货量分别有望达到 1,384/1,786/2,232 吨。

银价：我们预计 2023-2025 年伦敦银点价格每年微涨，分别为 4,940/5,187/5,446 元/kg。

其他业务

我们预计公司其他业务 2023-2025 年收入分别为 3.48/4.69/6.14 亿元。

估值

我们预测公司 2023-2025 年营收 71.86/97.32/127.71 亿元；归母净利润分别为 3.79/6.15/8.66 亿元；EPS 分别为 3.79/6.15/8.66 元/股，当前股价对应 PE 分别为 20/12/9 倍。参考可比公司估值，考虑公司 TOPCon 产品有望迅速放量增厚利润，我们给予公司 18 倍 2024 年 PE，对应目标价 111 元，首次覆盖给予“优于大市”评级。

图表: 可比公司估值表

代码	公司	股价 6/6/2023	总市值 (亿元)	归母净利润 (亿元)			PE		
				2022	2023E	2024E	2022	2023E	2024E
601865.SH	福莱特	30.58	607	21.2	30.0	39.9	28.64	20.22	15.22
603806.SH	福斯特	29.03	541	15.8	28.4	36.6	34.25	19.04	14.80
688503.SH	聚和材料	71.49	118	3.9	5.9	8.2	30.36	20.15	14.43
均值							31.09	19.81	14.82
300842.SZ	帝科股份	78.50	79	-0.2	3.8	6.2	nm	20.76	12.79

资料来源: Wind, HTI

风险

需求不及预期、N型电池片推广不及预期、技术发展不及预期。

APPENDIX 1

图表: 财务摘要

资产负债表	2022	2023E	2024E	2025E	利润表	2022	2023E	2024E	2025E	
流动资产:					营业收入	3,767	7,186	9,732	12,771	
货币资金	866	671	624	1,039	营业成本	3,435	6,367	8,554	11,174	
交易性金融资产	47	47	47	47	毛利润	332	819	1,178	1,596	
应收票据及应收账款	1,633	2,756	3,466	4,199	税金及附加	4	7	9	12	
存货	362	698	937	1,225	销售费用	47	57	78	102	
其他流动资产	119	119	119	119	管理费用	34	32	39	51	
流动资产合计	3,028	4,292	5,194	6,629	研发费用	115	180	243	319	
固定资产	94	173	251	328	财务费用	113	57	49	64	
无形资产	18	18	18	18	营业利润	(37)	430	704	992	
其他非流动资产	215	215	215	215	利润总额	(33)	433	707	995	
资产总计	3,355	4,697	5,677	7,189	减: 所得税	(12)	54	92	129	
短期借款	1,560	1,560	1,560	1,560	净利润	(21)	379	615	866	
应付票据及应付账款	781	1,744	2,109	2,755	减: 少数股东损益	(4)	-	-	-	
其他流动负债	46	46	46	46	归母净利润	(17)	379	615	866	
非流动负债合计	23	23	23	23						
负债合计	2,410	3,373	3,738	4,384	财务指标	2022	2023E	2024E	2025E	
所有者权益(或股东权益):					盈利能力					
实收资本(或股本)	100	100	100	100	ROE	-2%	33%	38%	37%	
资本公积金	530	530	530	530	毛利率	9%	11%	12%	13%	
其它综合收益	(0)	(0)	(0)	(0)	营业利润率	(1%)	6%	7%	8%	
盈余公积金	31	31	31	31	销售净利率	(0%)	5%	6%	7%	
未分配利润	258	637	1,252	2,118	成长能力					
归属于母公司所有者权益合计	919	1,298	1,913	2,779	营业收入增长率	34%	91%	35%	31%	
少数股东权益	26	26	26	26	营业利润增长率	(140%)	(1,276%)	64%	41%	
所有者权益合计	945	1,324	1,939	2,805	净利润增长率	(118%)	(2,286%)	62%	41%	
负债和所有者权益总计	3,355	4,697	5,677	7,189						
					每股指标与估值	2022	2023E	2024E	2025E	
现金流量表	2022	2023E	2024E	2025E	每股指标					
经营活动产生的现金流量净额	(197)	(57)	81	559	EPS	-	0.17	3.79	6.15	8.66
投资活动产生的现金流量净额	(41)	(80)	(80)	(80)	估值					
筹资活动产生的现金流量净额	279	-	-	-	P/E	-	444.47	20.33	12.52	8.89
汇率变动对现金的影响	(0)	-	-	-	P/B	8.15	5.82	3.97	2.74	
现金及现金等价物净增加额	41	(137)	1	479	P/S	2.04	1.07	0.79	0.60	
期初现金及现金等价物余额	197	238	100	102						
期末现金及现金等价物余额	238	100	102	581						

资料来源: HTI

APPENDIX 2

Summary

DK is the world's leading supplier of photovoltaic silver paste, and TOPCon silver paste is about to usher in a double increase in volume and profit.

DK's Performance was under pressure in 2022, and the silver paste business will usher in both volume and profit in 2023.

The competitiveness of TOPCon silver paste products continues to improve, and the introduction of domestic silver powder is expected to increase profits.

Continue to improve the layout of the industrial chain and optimize the industrial structure.

Valuation: We predict that the company's 23-25 annual revenue will be 7.186/9.732/12.771 billion yuan; the net profit attributable to the parent will be 3.79/6.15/8.66 million yuan; the EPS will be 3.79/6.15/8.66 yuan/share respectively, and the current stock price corresponds to PE 20/12/9 times respectively. Considering that the company's TOPCon products are expected to rapidly increase in volume and increase profits, we value the company with 18x 2024 PER, and initiate the coverage with the OUTPERFORM rating and a target price of Rmb111.

Risks: The demand is lower than expected, the promotion of N-type cells is lower than expected, and the technology development is lower than expected.

附录 APPENDIX

重要信息披露

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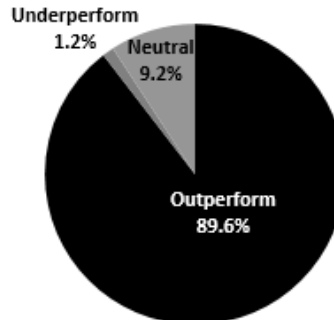
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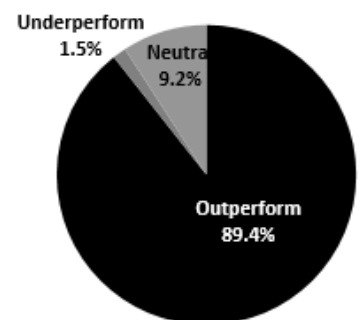
Outperform: The stock's total return over the next 12-18 months is expected to exceed the return of its relevant broad market benchmark, as indicated below.

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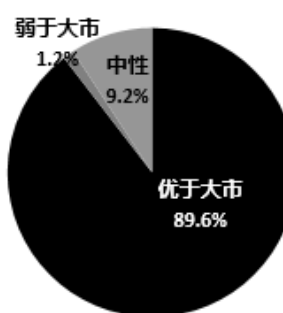
Most Recent Full Quarter



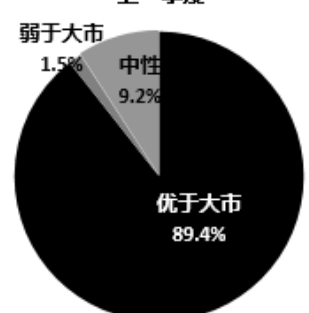
Prior Full Quarter



最新季度



上一季度



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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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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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