

电新与火电 Power Equipment & New Energy & Thermal Power

银浆：N型浆料量价齐升，银浆龙头显著受益

Silver paste: The volume and price of N-type paste will rise, and leading silver paste manufacturers will benefit

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热点速评 Flash Analysis

(Please see APPENDIX 1 for English summary)

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非常迅猛，研发和迭代速度非常快。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。

投资建议：建议关注银浆龙头聚和材料、帝科股份、苏州固锝。

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。

表 1 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：CPIA, PV Infolink, HTI

APPENDIX 1

Summary

N-type paste improve the unit consumption of silver paste, the global silver paste industry is expected to grow at a compound rate of 18% in 2022-2024.

TOPCon cells are rapidly increasing in volume and TOPCon pastes are increasing in volume and price.

The localization rate of low-temperature silver paste continues to rise; with HJT gradually reduce the cost, low-temperature silver paste is expected to rise in volume.

N-type paste enhance the technical barriers of the industry, the leading enterprises' market share is expected to continue to improve.

Suggestions: We suggest to focus on silver paste leaders such as Polyco, Quintiq and Suzhou Gutech.

Risks: Demand not as expected, N-type cell promotion not as expected, technology development not as expected.

附录 APPENDIX

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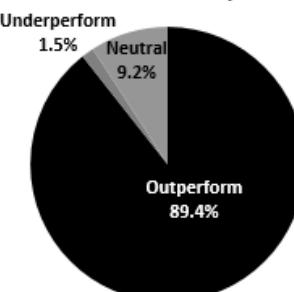
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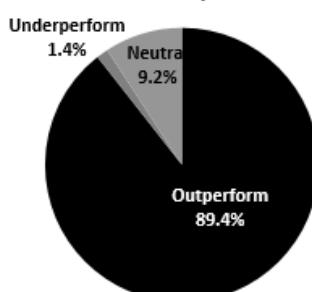
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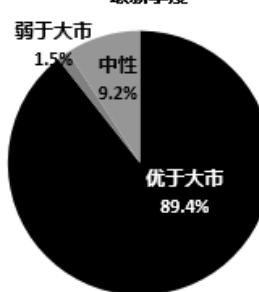
Most Recent Full Quarter



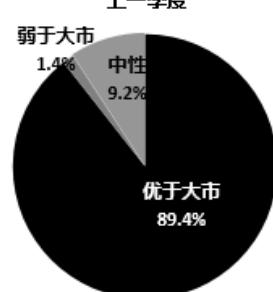
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