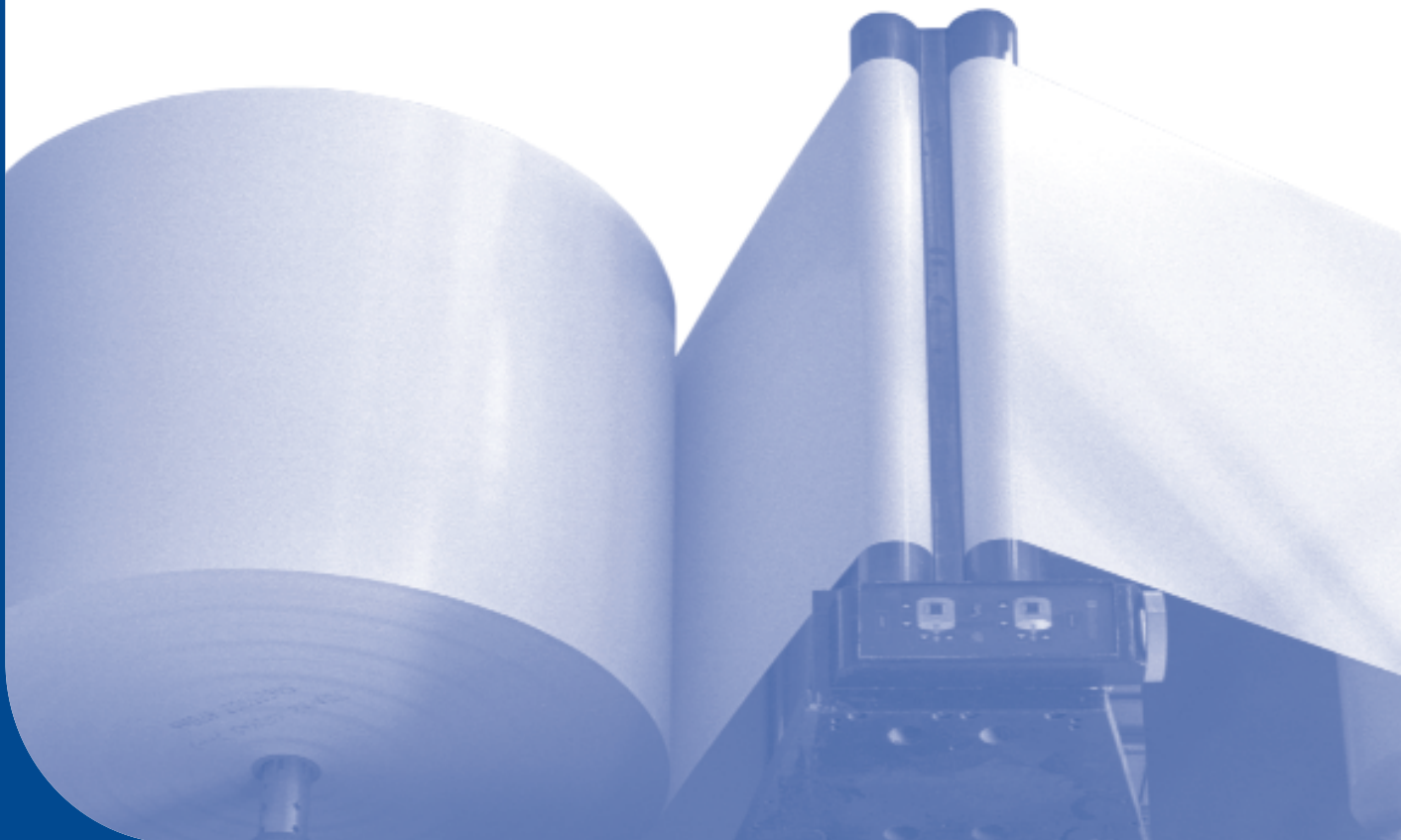




WORLD GRAPHIC PAPERS

FEBRUARY 2023



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Table of Contents

	Page
Introduction	10
Forecast Summary	11
Headline Forecasts	19
1. Demand	21
1.1. <i>PW Papers Demand: Forecast Cycle</i>	21
1.2. <i>Newsprint Demand: Forecast Cycle</i>	24
2. Trade	27
3. Supply	29
3.1.1. <i>Machine Closures – PW Papers</i>	29
3.1.2. <i>Machine Additions – PW Papers</i>	30
3.1.3. <i>Machine Capacity Changes – Newsprint</i>	30
3.2. <i>Individual Machine/Mill Capacity Changes</i>	31
3.3. <i>EMGE Base Capacity Projections by Country</i>	38
4. Supply-Demand Balance	45
4.1. <i>Forecast Operating Ratios – Global Graphic Papers</i>	46
5. LEADING SUPPLIERS – 2023	47
5.1. <i>Leading Suppliers – Printing & Writing</i>	47
5.2. <i>Leading Suppliers – Coated Woodfree</i>	50
5.3. <i>Leading Suppliers – Uncoated Woodfree</i>	51
5.4. <i>Leading Suppliers – Coated Mechanical</i>	52
5.5. <i>Leading Suppliers – Uncoated Mechanical</i>	53
5.6. <i>Leading Suppliers – Coated Papers</i>	54
5.7. <i>Leading Suppliers – Woodfree Papers</i>	55
5.8. <i>Leading Suppliers – Magazine Paper Suppliers</i>	56
5.9. <i>Leading Suppliers – Newsprint Suppliers</i>	57
5.10. <i>Leading Suppliers – World Total</i>	58
6. Coated Woodfree - Forecasts	59
6.1. <i>Demand - Coated Woodfree</i>	59
6.2. <i>Trade flows - Coated Woodfree</i>	60
6.3. <i>Output - Coated Woodfree</i>	60
6.4. <i>Capacity Assumptions - Coated Woodfree</i>	62
6.5. <i>Capacity and Operating Rates - Coated Woodfree</i>	63

Table of Contents (continued)

7. Uncoated Woodfree – Forecasts	65
7.1. <i>Demand - Uncoated Woodfree</i>	65
7.2. <i>Trade flows - Uncoated Woodfree</i>	66
7.3. <i>Output - Uncoated Woodfree</i>	66
7.4. <i>Capacity Assumptions - Uncoated Woodfree</i>	68
7.5. <i>Capacity and Operating Rates - Uncoated Woodfree</i>	69
8. Coated Mechanical - Forecasts	71
8.1. <i>Demand - Coated Mechanical</i>	71
8.2. <i>Trade flows - Coated Mechanical</i>	72
8.3. <i>Output - Coated Mechanical</i>	72
8.4. <i>Capacity Assumptions - Coated Mechanical</i>	74
8.5. <i>Capacity and Operating Rates - Coated Mechanical</i>	75
9. Unc. Mechanical – Forecasts	77
9.1. <i>Demand - Uncoated Mechanical</i>	77
9.2. <i>Trade flows - Uncoated Mechanical</i>	78
9.3. <i>Output - Uncoated Mechanical</i>	78
9.4. <i>Capacity Assumptions - Uncoated Mechanical</i>	80
9.5. <i>Capacity and Operating Rates - Uncoated Mechanical</i>	81
10. Newsprint - Forecasts	83
10.1. <i>Demand - Newsprint</i>	83
10.2. <i>Trade flows – Newsprint</i>	84
10.3. <i>Output – Newsprint</i>	84
10.4. <i>Capacity Assumptions - Newsprint</i>	86
10.5. <i>Capacity and Operating Rates - Newsprint</i>	87
Appendices – PW Papers	89
A.1.1. <i>Demand, Trade, Output and Capacity Forecasts, PW</i>	89
A.1.2. <i>Capacity Assumptions – PW Papers</i>	92
A.1.3. <i>Capacity and Operating Rates – PW Papers</i>	93
A.1.4. <i>Country Data World-wide, Total PW Papers</i>	95

List of Figures

	<i>Page</i>
1. <i>World Paper Demand Growth (3mma)</i>	10
2. <i>A Decade of Global Machine Closures & Conversions</i>	14
3. <i>World PW Paper Demand (Historical & Forecast)</i>	22
4. <i>World PW Paper Demand Growth Forecast</i>	22
5. <i>World PW Paper Demand vs. Capacity Growth (2021-26)</i>	23
6. <i>World PW Paper Demand by Region (2021-26)</i>	23
7. <i>World Newsprint Demand vs. Capacity Growth (2021-26)</i>	25
8. <i>Global Newsprint Demand by Region (2021-26)</i>	25
9. <i>World Newsprint Demand Growth Forecast</i>	26
10. <i>Historical & Forecast Newsprint Demand - World</i>	26
11. <i>Net Trade - World PW Paper - Regional</i>	27
12. <i>Net Trade – World Newsprint - Regional</i>	27
13. <i>Operating Rates (Forecast vs. Base) - PW Paper</i>	45
14. <i>Operating Rates (Forecast vs. Base) - Newsprint</i>	45
15. <i>Global PW Paper Suppliers (1990-2023)</i>	48
16. <i>World Demand-Supply, Coated Woodfree</i>	61
17. <i>Operating Rates, Forecast vs. Base, Coated Woodfree</i>	62
18. <i>World Demand-Supply, Uncoated Woodfree</i>	67
19. <i>Operating Rates, Forecast vs. Base, Uncoated Woodfree</i>	68
20. <i>World Demand-Supply, Coated Mechanical</i>	73
21. <i>Operating Rates, Forecast vs. Base, Coated Mechanical</i>	74
22. <i>World Demand-Supply, Uncoated Mechanical</i>	79
23. <i>Operating Rates, Forecast vs. Base, Uncoated Mechanical</i>	80
24. <i>World Demand-Supply, Newsprint</i>	85
25. <i>Operating Rates, Forecast vs. Base, Newsprint</i>	86
26. <i>World Demand-Supply, PW Papers</i>	91
27. <i>Operating Rates, Forecast vs. Base, PW Papers</i>	92

List of Tables

	Page
1. <i>World Graphic Paper Market Summary</i>	19
2. <i>Demand Forecast, World by Region, Total PW Papers</i>	21
3. <i>Demand Forecast, World by Region, Newsprint</i>	24
4. <i>Trade Forecast, World by Region, Total PW Papers</i>	28
5. <i>Trade Forecast, World by Region, Newsprint</i>	28
6. <i>Major PW Paper Capacity Reductions</i>	29
7. <i>Major PW Paper Capacity Additions</i>	30
8. <i>Newsprint Capacity Changes</i>	30
9. <i>Machine/Mill Capacity Changes – Coated Woodfree</i>	31
10. <i>Machine/Mill Capacity Changes – Uncoated Woodfree</i>	32
11. <i>Machine/Mill Capacity Changes – Coated Mechanical</i>	34
12. <i>Machine/Mill Capacity Changes – Uncoated Mechanical</i>	35
13. <i>Machine/Mill Capacity Changes – Newsprint</i>	36
14. <i>Capacity Changes by Country, Coated Woodfree</i>	38
15. <i>Capacity Changes by Country, Uncoated Woodfree</i>	39
16. <i>Capacity Changes by Country, Coated Mechanical</i>	41
17. <i>Capacity Changes by Country, Uncoated Mechanical</i>	42
18. <i>Capacity Changes by Country, Newsprint</i>	43
19. <i>Graphic Paper Operating Rates Forecast by Grade</i>	45
20. <i>Operating Rates Forecast by Region - PW Paper</i>	46
21. <i>Forecast Operating Ratios by Region - Newsprint</i>	46
22. <i>Leading Suppliers - 2023 Capacity, PW Papers</i>	47
23. <i>Leading PW Paper Suppliers - World And Regions</i>	49
24. <i>Leading Suppliers - 2023 Capacity, Coated Woodfree</i>	50
25. <i>Leading Suppliers - 2023 Capacity, Uncoated Woodfree</i>	51
26. <i>Leading Suppliers – 2023 Capacity, Coated Mechanical</i>	52
27. <i>Leading Suppliers - 2023 Capacity, Uncoated Mechanical</i>	53
28. <i>Leading Suppliers - 2023 Capacity, Total Coated</i>	54
29. <i>Leading Suppliers - 2023 Capacity, Woodfree Papers</i>	55
30. <i>Leading Suppliers - 2023 Capacity, Magazine Papers</i>	56
31. <i>Leading Suppliers - 2023 Capacity, Newsprint</i>	57
32. <i>Leading Paper Suppliers – Total</i>	58
33. <i>Demand Forecast, World by Region, Coated Woodfree</i>	59
34. <i>Trade Forecast, World by Region, Coated Woodfree</i>	60
35. <i>Output Forecast, World by Region, Coated Woodfree</i>	60

List of Tables (continued)

36. <i>EMGE Capacity Assumptions, Coated Woodfree</i>	62
37. <i>Base Capacity, by Region, Coated Woodfree</i>	63
38. <i>Base Operating Rates, by Region, Coated Woodfree</i>	63
39. <i>Forecast Capacity, by Region, Ctd Woodfree</i>	64
40. <i>Forecast Operating Rates, by Region, Coated Woodfree</i>	64
41. <i>Demand Forecast, World by Region, Uncoated Woodfree</i>	65
42. <i>Trade Forecast, World by Region, Uncoated Woodfree</i>	66
43. <i>Output Forecast, World by Region, Uncoated Woodfree</i>	66
44. <i>EMGE Capacity Assumptions, Uncoated Woodfree</i>	68
45. <i>Base Capacity, by Region, Uncoated Woodfree</i>	69
46. <i>Base Operating Rates, by Region, Uncoated Woodfree</i>	69
47. <i>Forecast Capacity, by Region, Uncoated Woodfree</i>	70
48. <i>Forecast Operating Rates, by Region, Uncoated Woodfree</i>	70
49. <i>Demand Forecast, World by Region, Coated Mechanical</i>	71
50. <i>Trade Forecast, World by Region, Coated Mechanical</i>	72
51. <i>Output Forecast, World by Region, Coated Mechanical</i>	72
52. <i>EMGE Capacity Assumptions, Coated Mechanical</i>	74
53. <i>Base Capacity, by Region, Coated Mechanical</i>	75
54. <i>Base Operating Rates, by Region, Coated Mechanical</i>	75
55. <i>Forecast Capacity, by Region, Coated Mechanical</i>	76
56. <i>Forecast Operating Rates, by Region, Coated Mechanical</i>	76
57. <i>Demand Forecast, World by Region, Uncoated Mechanical</i>	77
58. <i>Trade Forecast, World by Region, Uncoated Mechanical</i>	78
59. <i>Output Forecast, World by Region, Uncoated Mechanical</i>	78
60. <i>EMGE Capacity Assumptions, Uncoated Mechanical</i>	80
61. <i>Base Capacity, by Region, Uncoated Mechanical</i>	81
62. <i>Base Operating Rates, by Region, Uncoated Mechanical</i>	81
63. <i>Forecast Capacity, by Region, Uncoated Mechanical</i>	82
64. <i>Forecast Operating Rates, by Region, Uncoated Mechanical</i>	82
65. <i>Demand Forecast, World by Region, Newsprint</i>	83
66. <i>Trade Forecast, World by Region, Newsprint</i>	84
67. <i>Output Forecast, World by Region, Newsprint</i>	84
68. <i>EMGE Capacity Assumptions, Newsprint</i>	86
69. <i>Base Capacity, by Region, Newsprint</i>	87
70. <i>Base Operating Rates, by Region, Newsprint</i>	87
71. <i>Forecast Capacity, by Region, Newsprint</i>	88
72. <i>Forecast Operating Rates, by Region, Newsprint</i>	88

List of Tables (continued)

73. Demand Forecast, World by Region, Total PW	89
74. Trade Forecast, World by Region, Total PW Papers	90
75. Output Forecast, World by Region, PW Papers	90
76. EMGE Capacity Assumptions, PW Papers	92
77. Base Capacity, by Region, PW Papers	93
78. Base Operating Rates, by Region, PW Papers	93
79. Forecast Capacity, by Region, PW Papers	94
80. Forecast Operating Rates, by Region, PW Papers	94
81. Demand, Trade, Output & Capacity, Total PW Papers	95

Sources and Acknowledgement

The EMGE WORLD GRAPHIC PAPERS (WGP) report contains data and 5-year forecasts for paper demand, supply and trade around the world.

To compile these reports, we have used an extensive range of sources, including all published information available to EMGE & Co. Ltd. In addition to published data, we have referred to much industry data, which companies have been willing to share with us non-confidentially. Furthermore, we have applied our own market research resources to gather additional information.

The EMGE databases are updated daily. We publish these long-term forecasts twice a year (Spring/Summer and Autumn/Winter), with new data and revised 5-year forecasts.

The forecast timescale in this report is 2021 to 2026.

Definitions

Paper activity data are based on Volumes as sold, measured in metric tonnes (data have been converted from short tons to metric tonnes where appropriate).

The grades referred to in this study encompass Graphic Paper grades as described below in their respective definitions (*some regional differences in definition do exist*).

Coated Woodfree (CWF) - includes coated Woodfree printing & writing papers (<10% mechanical pulp), generally in the basis weight range 80-300gsm; both 1 & 2-side coated free in sheets & reels are included.

Uncoated Woodfree (UWF) - includes uncoated Woodfree printing & writing papers (<10% mechanical pulp), generally in the basis weight range 60-150gsm; in folio sheets, reels and cut-size, covering both bulk grades and uncoated specialities.

Coated Mechanical (CM) - includes offset and gravure coated woodcontaining printing & writing papers (>10% mechanical pulp), generally in the basis weight range 54-80gsm; but also includes ultra-lightweight coated & heavyweight coated woodcontaining (as well as LWC & MWC) in sheets & reels.

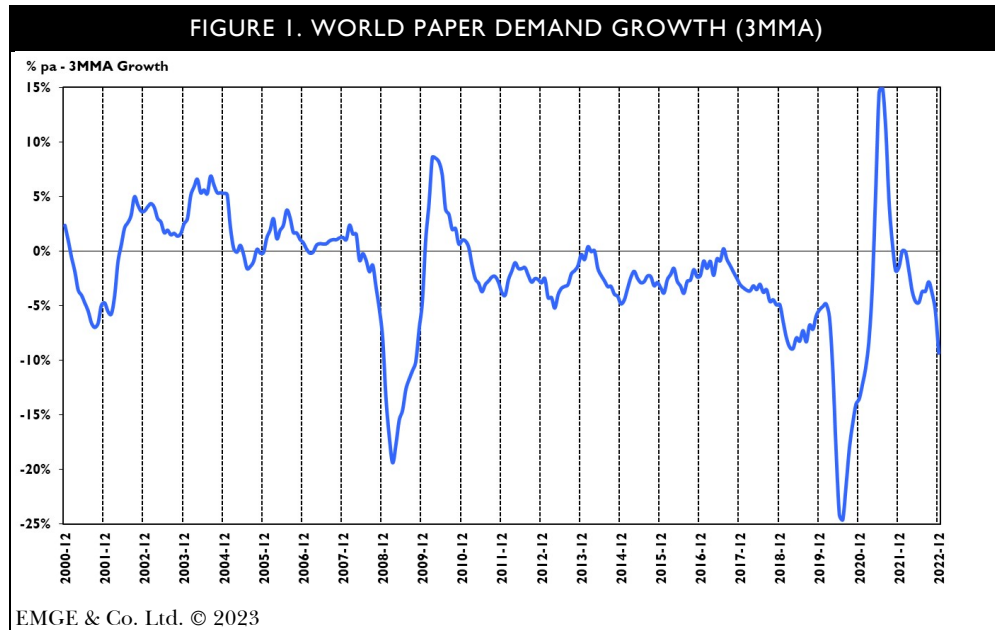
Uncoated Mechanical (UM) - includes offset and gravure uncoated woodcontaining printing & writing papers, generally in the basis weight range >54gsm (e.g. SC Magazine), but including Directory, Improved Newsprint and other lightweight grades.

Newsprint - encompasses Standard Newsprint, between 40 – 48.8 gsm, up to brightness 59° ISO (*some regional differences in definition do exist*).

Coated =	Coated Mechanical + Coated Woodfree
Woodfree =	Uncoated Woodfree + Coated Woodfree
Printing & Writing (PW) =	Uncoated Mechanical + Coated Mechanical + Coated Woodfree + Uncoated Woodfree
Graphic Paper =	Printing & Writing + Newsprint
Demand / Consumption -	Calculated as Production + Imports - Exports
Production / Output -	Paper mill saleable production
Trade -	Net Exports, i.e. Production - Consumption
Capacity -	Annual Machine Capacity (technical, not market, conditions)
Operating Ratio -	Theoretical Ratio of Production to Capacity
PM -	Paper Machine
tpa –	Tonnes per annum (capacity)

Details of Country groupings in the Regional Tables are shown in the Country Data Worldwide section.

Introduction



EMGE's WORLD GRAPHIC PAPERS (WGP) report provides a unique and comprehensive database of world markets, assessing the current situation and the market outlook to create an objective update of the prospects for world Graphic Paper markets – i.e. **Coated Woodfree, Uncoated Woodfree, Coated Mechanical, Uncoated Mechanical** (including Improved Newsprint) and (Standard) **Newsprint**.

The report analyses the latest data and developments in the markets, reviews demand prospects and provides updated forecasts of **Demand, Trade, Output, Capacity** and **Operating Ratios**, by paper grade, for each region and globally. The forecast timescale is 2021 to 2026.

We also provide **country-by-country data** for 2021. In addition, WGP incorporates the latest capacity changes, investments and M&A activity. The report provides detailed rankings of **Leading Suppliers**, by paper grade, region and total. Great care has been taken to assess machine capacity in detail. The capacity data used are based on announced, financed and confirmed plans, as well as some assumptions and forecasts made by EMGE (e.g. unspecified closures). The report provides additional information on all announced plans, whether decided or not (see tables of Machine Investment Listings).

EMGE & Co. Ltd. (FEBRUARY 2023)

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Publication Papers & Prices



Regions: Germany
UK
USA

Paper Grades: Newsprint, LWC, SC

Information: Prices
Market Analysis
Demand
Capacity Changes
Supply/Demand Balance

Time Period: 3 Years Ahead



Regions: Global

Paper Grades: Newsprint

Information: Market Analysis
Demand
Capacity Changes
Supply/Demand Balance
Leading Suppliers List

Time Period: 5 Years Ahead
Relevant History



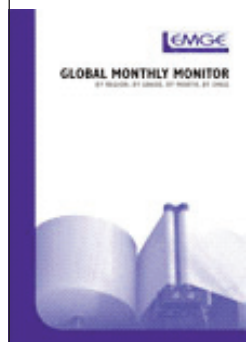
Regions: Global

Paper Grades: Newsprint

Information: Latest Pricing
Demand
Capacity Changes
Supply/Demand Balance
Market Analysis

Time Period: Current Month

Monthly Monitors

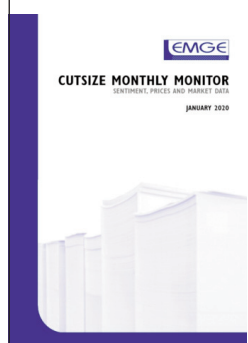


Regions: Global

Paper Grades: Coated Woodfree
Uncoated Woodfree
Coated Mechanical
Uncoated Mechanical

Information: Demand & Drivers
Shipments
Capacity
Supply/Demand Balance
Prices

Time Period: Current Month
Recent History



Regions: Western Europe

Paper Grades: UWF Cut Size

Information: Prices
Inventories
Demand
Delivery Times
Capacity Changes
Supply/Demand Balance

Time Period: Current Month
Recent History

Long-Term Forecasts



Regions: Global

Paper Grades: Coated Woodfree
Uncoated Woodfree
Coated Mechanical
Uncoated Mechanical

Information: Market Analysis
Demand
Capacity Changes
Supply/Demand Balance
Leading Suppliers List

Time Period: 5 Years Ahead
Relevant History



Regions: Western Europe
Eastern Europe
Russia

Paper Grades: Coated Woodfree
Uncoated Woodfree

Information: Market Analysis
Demand
Capacity Changes
Supply/Demand Balance
Leading Suppliers List

Time Period: 5 Years Ahead
Relevant History