

Semiconductor Wafer Polishing and Grinding Equipment - Global Market Outlook (2017-2026)

<https://marketpublishers.com/r/SF9B54E9C7EEN.html>

Date: December 2018

Pages: 148

Price: US\$ 4,150.00 (Single User License)

ID: SF9B54E9C7EEN

Abstracts

According to Statistics MRC, the Global Semiconductor Wafer Polishing and Grinding Equipment Market is expected to grow at a CAGR of 8.1% during the forecast period. Some of the factors such as increasing incentive and discounts for long-term customers and rising demand for semiconductors are driving the market growth. However, huge equipments costs are hindering the market growth.

Based on end user, foundries segment witnessed steady growth during the forecast period. Foundries are the major end-users of the semiconductor fabrication due to the steady adoption of fabless business model. By geography, Asia Pacific holds the largest market share during the forecast period. Countries such as China, South Korea, and Japan consisting large number of semiconductor foundries and steady acceptance of fabless business model will further increase the growth of the market in this region.

Some of the key players profiled in the Semiconductor Wafer Polishing and Grinding Equipment Market include TOKYO SEIMITSU, Revasum, Logomatic, Logitech, Lapmaster, Entrepix, EBARA and Applied Materials.

Equipments Covered:

Deposition

Etching and Cleaning

Ion Implant

Lithography

Other Equipments

Types Covered:

Semiconductor Wafer Grinding Equipment

Semiconductor Wafer Polishing Equipment

Applications Covered:

150 mm

200 mm

300 mm

End Users Covered:

Memory manufacturers

Interlevel Dielectric Material (IDM)

Foundries

Other End Users

Regions Covered:

North America

US

Canada

Mexico

Europe

Germany

UK

Italy

France

Spain

Rest of Europe

Asia Pacific

Japan

China

India

Australia

New Zealand

South Korea

Rest of Asia Pacific

South America

Argentina

Brazil

Chile

Rest of South America

Middle East & Africa

Saudi Arabia

UAE

Qatar

South Africa

Rest of Middle East & Africa

What our report offers:

Market share assessments for the regional and country level segments

Strategic recommendations for the new entrants

Market forecasts for a minimum of 9 years of all the mentioned segments, sub segments and the regional markets

Market Trends (Drivers, Constraints, Opportunities, Threats, Challenges, Investment Opportunities, and recommendations)

Strategic analysis: Drivers and Constraints, Product/Technology Analysis, Porter's five forces analysis, SWOT analysis etc.

Strategic recommendations in key business segments based on the market estimations

Competitive landscaping mapping the key common trends

Company profiling with detailed strategies, financials, and recent developments

Supply chain trends mapping the latest technological advancements

Free Customization Offerings:

All the customers of this report will be entitled to receive one of the following free customization options:

Company Profiling

Comprehensive profiling of additional market players (up to 3)

SWOT Analysis of key players (up to 3)

Regional Segmentation

Market estimations, Forecasts and CAGR of any prominent country as per the client's interest (Note: Depends on feasibility check)

Competitive Benchmarking

Benchmarking of key players based on product portfolio, geographical presence, and strategic alliances

Contents

1 EXECUTIVE SUMMARY

2 PREFACE

- 2.1 Abstract
- 2.2 Stake Holders
- 2.3 Research Scope
- 2.4 Research Methodology
 - 2.4.1 Data Mining
 - 2.4.2 Data Analysis
 - 2.4.3 Data Validation
 - 2.4.4 Research Approach
- 2.5 Research Sources
 - 2.5.1 Primary Research Sources
 - 2.5.2 Secondary Research Sources
 - 2.5.3 Assumptions

3 MARKET TREND ANALYSIS

- 3.1 Introduction
- 3.2 Drivers
- 3.3 Restraints
- 3.4 Opportunities
- 3.5 Threats
- 3.6 Application Analysis
- 3.7 End User Analysis
- 3.8 Emerging Markets
- 3.9 Futuristic Market Scenario

4 PORTERS FIVE FORCE ANALYSIS

- 4.1 Bargaining power of suppliers
- 4.2 Bargaining power of buyers
- 4.3 Threat of substitutes
- 4.4 Threat of new entrants
- 4.5 Competitive rivalry

5 GLOBAL SEMICONDUCTOR WAFER POLISHING AND GRINDING EQUIPMENT MARKET, BY EQUIPMENT

- 5.1 Introduction
- 5.2 Deposition
- 5.3 Etching and Cleaning
- 5.4 Ion Implant
- 5.5 Lithography
- 5.6 Other Equipments

6 GLOBAL SEMICONDUCTOR WAFER POLISHING AND GRINDING EQUIPMENT MARKET, BY TYPE

- 6.1 Introduction
- 6.2 Semiconductor Wafer Grinding Equipment
- 6.3 Semiconductor Wafer Polishing Equipment

7 GLOBAL SEMICONDUCTOR WAFER POLISHING AND GRINDING EQUIPMENT MARKET, BY APPLICATION

- 7.1 Introduction
- 7.2 150 mm
- 7.3 200 mm
- 7.4 300 mm

8 GLOBAL SEMICONDUCTOR WAFER POLISHING AND GRINDING EQUIPMENT MARKET, BY END USER

- 8.1 Introduction
- 8.2 Memory manufacturers
- 8.3 Interlevel Dielectric Material (IDM)
- 8.4 Foundries
- 8.5 Other End Users

9 GLOBAL SEMICONDUCTOR WAFER POLISHING AND GRINDING EQUIPMENT MARKET, BY GEOGRAPHY

- 9.1 Introduction
- 9.2 North America

9.2.1 US

9.2.2 Canada

9.2.3 Mexico

9.3 Europe

9.3.1 Germany

9.3.2 UK

9.3.3 Italy

9.3.4 France

9.3.5 Spain

9.3.6 Rest of Europe

9.4 Asia Pacific

9.4.1 Japan

9.4.2 China

9.4.3 India

9.4.4 Australia

9.4.5 New Zealand

9.4.6 South Korea

9.4.7 Rest of Asia Pacific

9.5 South America

9.5.1 Argentina

9.5.2 Brazil

9.5.3 Chile

9.5.4 Rest of South America

9.6 Middle East & Africa

9.6.1 Saudi Arabia

9.6.2 UAE

9.6.3 Qatar

9.6.4 South Africa

9.6.5 Rest of Middle East & Africa

10 KEY DEVELOPMENTS

10.1 Agreements, Partnerships, Collaborations and Joint Ventures

10.2 Acquisitions & Mergers

10.3 New Product Launch

10.4 Expansions

10.5 Other Key Strategies

11 COMPANY PROFILING

11.1 TOKYO SEIMITSU

11.2 Revasum

11.3 Logomatic

11.4 Logitech

11.5 Lapmaster

11.6 Entrepix

11.7 EBARA

11.8 Applied Materials

List Of Tables

LIST OF TABLES

Table 1 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Region (2016-2026) (US \$MN)

Table 2 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Equipment (2016-2026) (US \$MN)

Table 3 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Deposition (2016-2026) (US \$MN)

Table 4 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Etching and Cleaning (2016-2026) (US \$MN)

Table 5 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Ion Implant (2016-2026) (US \$MN)

Table 6 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Lithography (2016-2026) (US \$MN)

Table 7 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Other Equipment (2016-2026) (US \$MN)

Table 8 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Type (2016-2026) (US \$MN)

Table 9 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Semiconductor Wafer Grinding Equipment (2016-2026) (US \$MN)

Table 10 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Semiconductor Wafer Polishing Equipment (2016-2026) (US \$MN)

Table 11 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Application (2016-2026) (US \$MN)

Table 12 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By 150 mm (2016-2026) (US \$MN)

Table 13 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By 200 mm (2016-2026) (US \$MN)

Table 14 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By 300 mm (2016-2026) (US \$MN)

Table 15 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By End User (2016-2026) (US \$MN)

Table 16 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Memory manufacturers (2016-2026) (US \$MN)

Table 17 Global Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Interlevel Dielectric Material (IDM) (2016-2026) (US \$MN)

Table 18 Global Semiconductor Wafer Polishing and Grinding Equipment Market

Outlook, By Foundries (2016-2026) (US \$MN)

Table 19 Global Semiconductor Wafer Polishing and Grinding Equipment Market

Outlook, By Other End Users (2016-2026) (US \$MN)

Table 20 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Country (2016-2026) (US \$MN)

Table 21 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Equipment (2016-2026) (US \$MN)

Table 22 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Deposition (2016-2026) (US \$MN)

Table 23 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Etching and Cleaning (2016-2026) (US \$MN)

Table 24 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Ion Implant (2016-2026) (US \$MN)

Table 25 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Lithography (2016-2026) (US \$MN)

Table 26 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Other Equipment (2016-2026) (US \$MN)

Table 27 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Type (2016-2026) (US \$MN)

Table 28 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Semiconductor Wafer Grinding Equipment (2016-2026) (US \$MN)

Table 29 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Semiconductor Wafer Polishing Equipment (2016-2026) (US \$MN)

Table 30 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Application (2016-2026) (US \$MN)

Table 31 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By 150 mm (2016-2026) (US \$MN)

Table 32 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By 200 mm (2016-2026) (US \$MN)

Table 33 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By 300 mm (2016-2026) (US \$MN)

Table 34 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By End User (2016-2026) (US \$MN)

Table 35 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Memory manufacturers (2016-2026) (US \$MN)

Table 36 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Interlevel Dielectric Material (IDM) (2016-2026) (US \$MN)

Table 37 North America Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Foundries (2016-2026) (US \$MN)

Table 38 North America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Other End Users (2016-2026) (US \$MN)

Table 39 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Country (2016-2026) (US \$MN)

Table 40 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Equipment (2016-2026) (US \$MN)

Table 41 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Deposition (2016-2026) (US \$MN)

Table 42 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Etching and Cleaning (2016-2026) (US \$MN)

Table 43 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Ion Implant (2016-2026) (US \$MN)

Table 44 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Lithography (2016-2026) (US \$MN)

Table 45 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Other Equipment (2016-2026) (US \$MN)

Table 46 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Type (2016-2026) (US \$MN)

Table 47 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Semiconductor Wafer Grinding Equipment (2016-2026) (US \$MN)

Table 48 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Semiconductor Wafer Polishing Equipment (2016-2026) (US \$MN)

Table 49 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Application (2016-2026) (US \$MN)

Table 50 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By 150 mm (2016-2026) (US \$MN)

Table 51 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By 200 mm (2016-2026) (US \$MN)

Table 52 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By 300 mm (2016-2026) (US \$MN)

Table 53 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By End User (2016-2026) (US \$MN)

Table 54 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Memory manufacturers (2016-2026) (US \$MN)

Table 55 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Interlevel Dielectric Material (IDM) (2016-2026) (US \$MN)

Table 56 Europe Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Foundries (2016-2026) (US \$MN)

Table 57 Europe Semiconductor Wafer Polishing and Grinding Equipment Market

Outlook, By Other End Users (2016-2026) (US \$MN)

Table 58 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Country (2016-2026) (US \$MN)

Table 59 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Equipment (2016-2026) (US \$MN)

Table 60 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Deposition (2016-2026) (US \$MN)

Table 61 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Etching and Cleaning (2016-2026) (US \$MN)

Table 62 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Ion Implant (2016-2026) (US \$MN)

Table 63 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Lithography (2016-2026) (US \$MN)

Table 64 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Other Equipment (2016-2026) (US \$MN)

Table 65 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Type (2016-2026) (US \$MN)

Table 66 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Semiconductor Wafer Grinding Equipment (2016-2026) (US \$MN)

Table 67 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Semiconductor Wafer Polishing Equipment (2016-2026) (US \$MN)

Table 68 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Application (2016-2026) (US \$MN)

Table 69 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By 150 mm (2016-2026) (US \$MN)

Table 70 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By 200 mm (2016-2026) (US \$MN)

Table 71 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By 300 mm (2016-2026) (US \$MN)

Table 72 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By End User (2016-2026) (US \$MN)

Table 73 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Memory manufacturers (2016-2026) (US \$MN)

Table 74 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Interlevel Dielectric Material (IDM) (2016-2026) (US \$MN)

Table 75 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Foundries (2016-2026) (US \$MN)

Table 76 Asia Pacific Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Other End Users (2016-2026) (US \$MN)

Table 77 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Country (2016-2026) (US \$MN)

Table 78 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Equipment (2016-2026) (US \$MN)

Table 79 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Deposition (2016-2026) (US \$MN)

Table 80 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Etching and Cleaning (2016-2026) (US \$MN)

Table 81 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Ion Implant (2016-2026) (US \$MN)

Table 82 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Lithography (2016-2026) (US \$MN)

Table 83 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Other Equipment (2016-2026) (US \$MN)

Table 84 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Type (2016-2026) (US \$MN)

Table 85 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Semiconductor Wafer Grinding Equipment (2016-2026) (US \$MN)

Table 86 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Semiconductor Wafer Polishing Equipment (2016-2026) (US \$MN)

Table 87 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Application (2016-2026) (US \$MN)

Table 88 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By 150 mm (2016-2026) (US \$MN)

Table 89 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By 200 mm (2016-2026) (US \$MN)

Table 90 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By 300 mm (2016-2026) (US \$MN)

Table 91 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By End User (2016-2026) (US \$MN)

Table 92 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Memory manufacturers (2016-2026) (US \$MN)

Table 93 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Interlevel Dielectric Material (IDM) (2016-2026) (US \$MN)

Table 94 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Foundries (2016-2026) (US \$MN)

Table 95 South America Semiconductor Wafer Polishing and Grinding Equipment Market Outlook, By Other End Users (2016-2026) (US \$MN)

Table 96 Middle East & Africa Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Country (2016-2026) (US \$MN)

Table 97 Middle East & Africa Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Equipment (2016-2026) (US \$MN)

Table 98 Middle East & Africa Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Deposition (2016-2026) (US \$MN)

Table 99 Middle East & Africa Semiconductor Wafer Polishing and Grinding Equipment

Market Outlook, By Etching and Cleaning (2016-2026) (US \$MN)

Table 100 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By Ion Implant (2016-2026) (US \$MN)

Table 101 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By Lithography (2016-2026) (US \$MN)

Table 102 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By Other Equipment (2016-2026) (US \$MN)

Table 103 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By Type (2016-2026) (US \$MN)

Table 104 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By Semiconductor Wafer Grinding Equipment (2016-2026)
(US \$MN)

Table 105 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By Semiconductor Wafer Polishing Equipment (2016-2026)
(US \$MN)

Table 106 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By Application (2016-2026) (US \$MN)

Table 107 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By 150 mm (2016-2026) (US \$MN)

Table 108 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By 200 mm (2016-2026) (US \$MN)

Table 109 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By 300 mm (2016-2026) (US \$MN)

Table 110 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By End User (2016-2026) (US \$MN)

Table 111 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By Memory manufacturers (2016-2026) (US \$MN)

Table 112 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By Interlevel Dielectric Material (IDM) (2016-2026) (US
\$MN)

Table 113 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By Foundries (2016-2026) (US \$MN)

Table 114 Middle East & Africa Semiconductor Wafer Polishing and Grinding

Equipment Market Outlook, By Other End Users (2016-2026) (US \$MN)

I would like to order

Product name: Semiconductor Wafer Polishing and Grinding Equipment - Global Market Outlook (2017-2026)

Product link: <https://marketpublishers.com/r/SF9B54E9C7EEN.html>

Price: US\$ 4,150.00 (Single User License / Electronic Delivery)

If you want to order Corporate License or Hard Copy, please, contact our Customer Service:

info@marketpublishers.com

Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/SF9B54E9C7EEN.html>

To pay by Wire Transfer, please, fill in your contact details in the form below:

First name:
Last name:
Email:
Company:
Address:
City:
Zip code:
Country:
Tel:
Fax:
Your message:

****All fields are required**

Customer signature _____

Please, note that by ordering from marketpublishers.com you are agreeing to our Terms & Conditions at <https://marketpublishers.com/docs/terms.html>

To place an order via fax simply print this form, fill in the information below and fax the completed form to +44 20 7900 3970

