

# Global Aerospace Turbine Parts Industry Market Analysis & Forecast 2018-2023

<https://marketpublishers.com/r/G85F8685D98EN.html>

Date: April 2018

Pages: 101

Price: US\$ 3,040.00 (Single User License)

ID: G85F8685D98EN

## Abstracts

In the Global Aerospace Turbine Parts Industry Market Analysis & Forecast 2018-2023, the revenue is valued at USD XX million in 2017 and is expected to reach USD XX million by the end of 2023, growing at a CAGR of XX% between 2018 and 2023. The production is estimated at XX million in 2017 and is forecasted to reach XX million by the end of 2023, growing at a CAGR of XX% between 2018 and 2023.

It covers Regional Segment Analysis, Type, Application, Major Manufactures, Industry Chain Analysis, Competitive Insights and Macroeconomic Analysis.

Global Aerospace Turbine Parts Market: Regional Segment Analysis

North America

Europe

China

Japan

Southeast Asia

India

The Major players reported in the market include:

company 1

company 2

company 3

company 4

company 5

company 6

company 7

company 8

company 9

## Global Aerospace Turbine Parts Market: Product Segment Analysis

Type 1

Type 2

Type 3

## Global Aerospace Turbine Parts Market: Application Segment Analysis

Application 1

Application 2

Application 3

## Reasons for Buying this Report

This report provides pin-point analysis for changing competitive dynamics

It provides a forward looking perspective on different factors driving or restraining market growth

It provides a six-year forecast assessed on the basis of how the market is predicted to grow

It helps in understanding the key product segments and their future

It provides pin point analysis of changing competition dynamics and keeps you ahead of competitors

It helps in making informed business decisions by having complete insights of market and by making in-depth analysis of market segments

## Contents

### Global Aerospace Turbine Parts Industry Market Analysis & Forecast 2018-2023

#### **CHAPTER 1 AEROSPACE TURBINE PARTS MARKET OVERVIEW**

- 1.1 Product Overview and Scope of Aerospace Turbine Parts
- 1.2 Aerospace Turbine Parts Market Segmentation by Type in 2016
  - 1.2.1 Global Production Market Share of Aerospace Turbine Parts by Type in 2016
  - 1.2.1 Type
  - 1.2.2 Type
  - 1.2.3 Type
- 1.3 Aerospace Turbine Parts Market Segmentation by Application in 2016
  - 1.3.1 Aerospace Turbine Parts Consumption Market Share by Application in 2016
  - 1.3.2 Application
  - 1.3.3 Application
  - 1.3.4 Application
- 1.4 Aerospace Turbine Parts Market Segmentation by Regions
  - 1.4.1 North America
  - 1.4.2 China
  - 1.4.3 Europe
  - 1.4.4 Southeast Asia
  - 1.4.5 Japan
  - 1.4.6 India
- 1.5 Global Market Size (Value) of Aerospace Turbine Parts (2013-2023)
  - 1.5.1 Global Product Sales and Growth Rate (2013-2023)
  - 1.5.2 Global Product Revenue and Growth Rate (2013-2023)

#### **CHAPTER 2 GLOBAL ECONOMIC IMPACT ON AEROSPACE TURBINE PARTS INDUSTRY**

- 2.1 Global Macroeconomic Environment Analysis
  - 2.1.1 Global Macroeconomic Analysis
  - 2.1.2 Global Macroeconomic Environment Development Trend
- 2.2 Global Macroeconomic Environment Analysis by Regions

#### **CHAPTER 3 GLOBAL AEROSPACE TURBINE PARTS MARKET COMPETITION BY MANUFACTURERS**

- 3.1 Global Aerospace Turbine Parts Production and Share by Manufacturers (2016 and 2017)
- 3.2 Global Aerospace Turbine Parts Revenue and Share by Manufacturers (2016 and 2017)
- 3.3 Global Aerospace Turbine Parts Average Price by Manufacturers (2016 and 2017)
- 3.4 Manufacturers Aerospace Turbine Parts Manufacturing Base Distribution, Production Area and Product Type
- 3.5 Aerospace Turbine Parts Market Competitive Situation and Trends
  - 3.5.1 Aerospace Turbine Parts Market Concentration Rate
  - 3.5.2 Aerospace Turbine Parts Market Share of Top 3 and Top 5 Manufacturers
  - 3.5.3 Mergers & Acquisitions, Expansion

## **CHAPTER 4 GLOBAL AEROSPACE TURBINE PARTS PRODUCTION, REVENUE (VALUE) BY REGION (2013-2018)**

- 4.1 Global Aerospace Turbine Parts Production by Region (2013-2018)
- 4.2 Global Aerospace Turbine Parts Production Market Share by Region (2013-2018)
- 4.3 Global Aerospace Turbine Parts Revenue (Value) and Market Share by Region (2013-2018)
- 4.4 Global Aerospace Turbine Parts Production, Revenue, Price and Gross Margin (2013-2018)
- 4.5 North America Aerospace Turbine Parts Production, Revenue, Price and Gross Margin (2013-2018)
  - 4.5.1 North America Aerospace Turbine Parts Production and Market Share by Manufacturers
  - 4.5.2 North America Aerospace Turbine Parts Production and Market Share by Type
  - 4.5.3 North America Aerospace Turbine Parts Production and Market Share by Application
- 4.6 Europe Aerospace Turbine Parts Production, Revenue, Price and Gross Margin (2013-2018)
  - 4.6.1 Europe Aerospace Turbine Parts Production and Market Share by Manufacturers
  - 4.6.2 Europe Aerospace Turbine Parts Production and Market Share by Type
  - 4.6.3 Europe Aerospace Turbine Parts Production and Market Share by Application
- 4.7 China Aerospace Turbine Parts Production, Revenue, Price and Gross Margin (2013-2018)
  - 4.7.1 China Aerospace Turbine Parts Production and Market Share by Manufacturers
  - 4.7.2 China Aerospace Turbine Parts Production and Market Share by Type
  - 4.7.3 China Aerospace Turbine Parts Production and Market Share by Application
- 4.8 Japan Aerospace Turbine Parts Production, Revenue, Price and Gross Margin

(2013-2018)

4.8.1 Japan Aerospace Turbine Parts Production and Market Share by Manufacturers

4.8.2 Japan Aerospace Turbine Parts Production and Market Share by Type

4.8.3 Japan Aerospace Turbine Parts Production and Market Share by Application

4.9 Southeast Asia Aerospace Turbine Parts Production, Revenue, Price and Gross Margin (2013-2018)

4.9.1 Southeast Asia Aerospace Turbine Parts Production and Market Share by Manufacturers

4.9.2 Southeast Asia Aerospace Turbine Parts Production and Market Share by Type

4.9.3 Southeast Asia Aerospace Turbine Parts Production and Market Share by Application

4.10 India Aerospace Turbine Parts Production, Revenue, Price and Gross Margin (2013-2018)

4.10.1 India Aerospace Turbine Parts Production and Market Share by Manufacturers

4.10.2 India Aerospace Turbine Parts Production and Market Share by Type

4.10.3 India Aerospace Turbine Parts Production and Market Share by Application

## **CHAPTER 5 GLOBAL AEROSPACE TURBINE PARTS SUPPLY (PRODUCTION), CONSUMPTION, EXPORT, IMPORT BY REGIONS (2013-2018)**

5.1 Global Aerospace Turbine Parts Consumption by Regions (2013-2018)

5.2 North America Aerospace Turbine Parts Production, Consumption, Export, Import by Regions (2013-2018)

5.3 Europe Aerospace Turbine Parts Production, Consumption, Export, Import by Regions (2013-2018)

5.4 China Aerospace Turbine Parts Production, Consumption, Export, Import by Regions (2013-2018)

5.5 Japan Aerospace Turbine Parts Production, Consumption, Export, Import by Regions (2013-2018)

5.6 Southeast Asia Aerospace Turbine Parts Production, Consumption, Export, Import by Regions (2013-2018)

5.7 India Aerospace Turbine Parts Production, Consumption, Export, Import by Regions (2013-2018)

## **CHAPTER 6 GLOBAL AEROSPACE TURBINE PARTS PRODUCTION, REVENUE (VALUE), PRICE TREND BY TYPE**

6.1 Global Aerospace Turbine Parts Production and Market Share by Type (2013-2018)

6.2 Global Aerospace Turbine Parts Revenue and Market Share by Type (2013-2018)

6.3 Global Aerospace Turbine Parts Price by Type (2013-2018)

6.4 Global Aerospace Turbine Parts Production Growth by Type (2013-2018)

## **CHAPTER 7 GLOBAL AEROSPACE TURBINE PARTS MARKET ANALYSIS BY APPLICATION**

7.1 Global Aerospace Turbine Parts Consumption and Market Share by Application (2013-2018)

7.2 Global Aerospace Turbine Parts Revenue and Market Share by Type (2013-2018)

7.3 Global Aerospace Turbine Parts Consumption Growth Rate by Application (2013-2018)

7.4 Market Drivers and Opportunities

7.4.1 Potential Applications

7.4.2 Emerging Markets/Countries

## **CHAPTER 8 GLOBAL AEROSPACE TURBINE PARTS MANUFACTURERS ANALYSIS**

8.1 company

8.1.1 Company Basic Information, Manufacturing Base and Competitors

8.1.2 Product Type, Application and Specification

8.1.3 Production, Revenue, Price and Gross Margin (2013-2018)

8.1.4 Business Overview

8.2 company

8.2.1 Company Basic Information, Manufacturing Base and Competitors

8.2.2 Product Type, Application and Specification

8.2.3 Production, Revenue, Price and Gross Margin (2013-2018)

8.2.4 Business Overview

8.3 company

8.3.1 Company Basic Information, Manufacturing Base and Competitors

8.3.2 Product Type, Application and Specification

8.3.3 Production, Revenue, Price and Gross Margin (2013-2018)

8.3.4 Business Overview

8.4 company

8.4.1 Company Basic Information, Manufacturing Base and Competitors

8.4.2 Product Type, Application and Specification

8.4.3 Production, Revenue, Price and Gross Margin (2013-2018)

8.4.4 Business Overview

8.5 company

- 8.5.1 Company Basic Information, Manufacturing Base and Competitors
- 8.5.2 Product Type, Application and Specification
- 8.5.3 Production, Revenue, Price and Gross Margin (2013-2018)
- 8.5.4 Business Overview
- 8.6 company
  - 8.6.1 Company Basic Information, Manufacturing Base and Competitors
  - 8.6.2 Product Type, Application and Specification
  - 8.6.3 Production, Revenue, Price and Gross Margin (2013-2018)
  - 8.6.4 Business Overview
- 8.7 company
  - 8.7.1 Company Basic Information, Manufacturing Base and Competitors
  - 8.7.2 Product Type, Application and Specification
  - 8.7.3 Production, Revenue, Price and Gross Margin (2013-2018)
  - 8.7.4 Business Overview
- 8.8 company
  - 8.8.1 Company Basic Information, Manufacturing Base and Competitors
  - 8.8.2 Product Type, Application and Specification
  - 8.8.3 Production, Revenue, Price and Gross Margin (2013-2018)
  - 8.8.4 Business Overview
- 8.9 company
  - 8.9.1 Company Basic Information, Manufacturing Base and Competitors
  - 8.9.2 Product Type, Application and Specification
  - 8.9.3 Production, Revenue, Price and Gross Margin (2013-2018)
  - 8.9.4 Business Overview
- ...

## **CHAPTER 9 AEROSPACE TURBINE PARTS MANUFACTURING COST ANALYSIS**

- 9.1 Aerospace Turbine Parts Key Raw Materials Analysis
  - 9.1.1 Key Raw Materials
  - 9.1.2 Price Trend of Key Raw Materials
  - 9.1.3 Key Suppliers of Raw Materials
  - 9.1.4 Market Concentration Rate of Raw Materials
- 9.2 Proportion of Manufacturing Cost Structure
  - 9.2.1 Raw Materials
  - 9.2.2 Labor Cost
  - 9.2.3 Manufacturing Expenses
- 9.3 Manufacturing Process Analysis of Aerospace Turbine Parts



## **CHAPTER 10 INDUSTRIAL CHAIN, SOURCING STRATEGY AND DOWNSTREAM BUYERS**

- 10.1 Aerospace Turbine Parts Industrial Chain Analysis
- 10.2 Upstream Raw Materials Sourcing
- 10.3 Raw Materials Sources of Aerospace Turbine Parts Major Manufacturers in 2016
- 10.4 Downstream Buyers

## **CHAPTER 11 MARKETING STRATEGY ANALYSIS, DISTRIBUTORS/TRADERS**

- 11.1 Marketing Channel
  - 11.1.1 Direct Marketing
  - 11.1.2 Indirect Marketing
  - 11.1.3 Marketing Channel Development Trend
- 11.2 Market Positioning
  - 11.2.1 Pricing Strategy
  - 11.2.2 Brand Strategy
  - 11.2.3 Target Client
- 11.3 Distributors/Traders List

## **CHAPTER 12 MARKET EFFECT FACTORS ANALYSIS**

- 12.1 Technology Progress/Risk
  - 12.1.1 Substitutes Threat
  - 12.1.2 Technology Progress in Related Industry
- 12.2 Consumer Needs/Customer Preference Change
- 12.3 Economic/Political Environmental Change

## **CHAPTER 13 GLOBAL AEROSPACE TURBINE PARTS MARKET FORECAST (2018-2023)**

- 13.1 Global Aerospace Turbine Parts Production, Revenue Forecast (2018-2023)
- 13.2 Global Aerospace Turbine Parts Production, Consumption Forecast by Regions (2018-2023)
- 13.3 Global Aerospace Turbine Parts Production Forecast by Type (2018-2023)
- 13.4 Global Aerospace Turbine Parts Consumption Forecast by Application (2018-2023)
- 13.5 Aerospace Turbine Parts Price Forecast (2018-2023)

## CHAPTER 14 APPENDIX

## List Of Tables

### LIST OF TABLES AND FIGURES

Figure Picture of Aerospace Turbine Parts  
Figure Global Production Market Share of Aerospace Turbine Parts by Type 2016  
Figure Product Picture of Type I  
Table Major Manufacturers of Type I  
Figure Product Picture of Type II  
Table Major Manufacturers of Type II  
Figure Product Picture of Type III  
Table Major Manufacturers of Type III  
Table Aerospace Turbine Parts Consumption Market Share by Application in 2016  
Figure Application 1 Examples  
Figure Application 2 Examples  
Figure Application 3 Examples  
Figure North America Aerospace Turbine Parts Revenue (Million USD) and Growth Rate (2013-2023)  
Figure Europe Aerospace Turbine Parts Revenue (Million USD) and Growth Rate (2013-2023)  
Figure China Aerospace Turbine Parts Revenue (Million USD) and Growth Rate (2013-2023)  
Figure Japan Aerospace Turbine Parts Revenue (Million USD) and Growth Rate (2013-2023)  
Figure Southeast Asia Aerospace Turbine Parts Revenue (Million USD) and Growth Rate (2013-2023)  
Figure India Aerospace Turbine Parts Revenue (Million USD) and Growth Rate (2013-2023)  
Figure Global Aerospace Turbine Parts Revenue (Million USD) and Growth Rate (2013-2023)  
Table Global Aerospace Turbine Parts Capacity of Key Manufacturers (2016 and 2017)  
Table Global Aerospace Turbine Parts Capacity Market Share by Manufacturers (2016 and 2017)  
Figure Global Aerospace Turbine Parts Capacity of Key Manufacturers in 2016  
Figure Global Aerospace Turbine Parts Capacity of Key Manufacturers in 2017  
Table Global Aerospace Turbine Parts Production of Key Manufacturers (2016 and 2017)  
Table Global Aerospace Turbine Parts Production Share by Manufacturers (2016 and 2017)

Figure 2015 Aerospace Turbine Parts Production Share by Manufacturers

Figure 2016 Aerospace Turbine Parts Production Share by Manufacturers

Table Global Aerospace Turbine Parts Revenue (Million USD) by Manufacturers (2016 and 2017)

Table Global Aerospace Turbine Parts Revenue Share by Manufacturers (2016 and 2017)

Table 2015 Global Aerospace Turbine Parts Revenue Share by Manufacturers

Table 2016 Global Aerospace Turbine Parts Revenue Share by Manufacturers

Table Global Market Aerospace Turbine Parts Average Price of Key Manufacturers (2016 and 2017)

Figure Global Market Aerospace Turbine Parts Average Price of Key Manufacturers in 2016

Table Manufacturers Aerospace Turbine Parts Manufacturing Base Distribution and Sales Area

Table Manufacturers Aerospace Turbine Parts Product Type

Figure Aerospace Turbine Parts Market Share of Top 3 Manufacturers

Figure Aerospace Turbine Parts Market Share of Top 5 Manufacturers

Table Global Aerospace Turbine Parts Capacity by Regions (2013-2018)

Figure Global Aerospace Turbine Parts Capacity Market Share by Regions (2013-2018)

Figure Global Aerospace Turbine Parts Capacity Market Share by Regions (2013-2018)

Figure 2015 Global Aerospace Turbine Parts Capacity Market Share by Regions

Table Global Aerospace Turbine Parts Production by Regions (2013-2018)

Figure Global Aerospace Turbine Parts Production and Market Share by Regions (2013-2018)

Figure Global Aerospace Turbine Parts Production Market Share by Regions (2013-2018)

Figure 2015 Global Aerospace Turbine Parts Production Market Share by Regions

Table Global Aerospace Turbine Parts Revenue by Regions (2013-2018)

Table Global Aerospace Turbine Parts Revenue Market Share by Regions (2013-2018)

Table 2015 Global Aerospace Turbine Parts Revenue Market Share by Regions

Table Global Aerospace Turbine Parts Production, Revenue, Price and Gross Margin (2013-2018)

Table North America Aerospace Turbine Parts Production, Revenue, Price and Gross Margin (2013-2018)

Table Europe Aerospace Turbine Parts Production, Revenue, Price and Gross Margin (2013-2018)

Table China Aerospace Turbine Parts Production, Revenue, Price and Gross Margin (2013-2018)

Table Japan Aerospace Turbine Parts Production, Revenue, Price and Gross Margin

(2013-2018)

Table Southeast Asia Aerospace Turbine Parts Production, Revenue, Price and Gross Margin (2013-2018)

Table India Aerospace Turbine Parts Production, Revenue, Price and Gross Margin (2013-2018)

Table Global Aerospace Turbine Parts Consumption Market by Regions (2013-2018)

Table Global Aerospace Turbine Parts Consumption Market Share by Regions (2013-2018)

Figure Global Aerospace Turbine Parts Consumption Market Share by Regions (2013-2018)

Figure 2015 Global Aerospace Turbine Parts Consumption Market Share by Regions

Table North America Aerospace Turbine Parts Production, Consumption, Import & Export (2013-2018)

Table Europe Aerospace Turbine Parts Production, Consumption, Import & Export (2013-2018)

Table China Aerospace Turbine Parts Production, Consumption, Import & Export (2013-2018)

Table Japan Aerospace Turbine Parts Production, Consumption, Import & Export (2013-2018)

Table Southeast Asia Aerospace Turbine Parts Production, Consumption, Import & Export (2013-2018)

Table India Aerospace Turbine Parts Production, Consumption, Import & Export (2013-2018)

Table Global Aerospace Turbine Parts Production by Type (2013-2018)

Table Global Aerospace Turbine Parts Production Share by Type (2013-2018)

Figure Production Market Share of Aerospace Turbine Parts by Type (2013-2018)

Figure 2015 Production Market Share of Aerospace Turbine Parts by Type

Table Global Aerospace Turbine Parts Revenue by Type (2013-2018)

Table Global Aerospace Turbine Parts Revenue Share by Type (2013-2018)

Figure Production Revenue Share of Aerospace Turbine Parts by Type (2013-2018)

Figure 2015 Revenue Market Share of Aerospace Turbine Parts by Type

Table Global Aerospace Turbine Parts Price by Type (2013-2018)

Figure Global Aerospace Turbine Parts Production Growth by Type (2013-2018)

Table Global Aerospace Turbine Parts Consumption by Application (2013-2018)

Table Global Aerospace Turbine Parts Consumption Market Share by Application (2013-2018)

Figure Global Aerospace Turbine Parts Consumption Market Share by Application in 2016

Table Global Aerospace Turbine Parts Consumption Growth Rate by Application

(2013-2018)

Figure Global Aerospace Turbine Parts Consumption Growth Rate by Application  
(2013-2018)

Table company 1 Basic Information, Manufacturing Base, Production Area and Its  
Competitors

Table company 1 Aerospace Turbine Parts Production, Revenue, Price and Gross  
Margin (2013-2018)

Table company 1 Aerospace Turbine Parts Market Share (2013-2018)

Table company 2 Basic Information, Manufacturing Base, Production Area and Its  
Competitors

Table company 2 Aerospace Turbine Parts Production, Revenue, Price and Gross  
Margin (2013-2018)

Table company 2 Aerospace Turbine Parts Market Share (2013-2018)

Table company 3 Basic Information, Manufacturing Base, Production Area and Its  
Competitors

Table company 3 Aerospace Turbine Parts Production, Revenue, Price and Gross  
Margin (2013-2018)

Table company 3 Aerospace Turbine Parts Market Share (2013-2018)

Table company 4 Basic Information, Manufacturing Base, Production Area and Its  
Competitors

Table company 4 Aerospace Turbine Parts Production, Revenue, Price and Gross  
Margin (2013-2018)

Table company 4 Aerospace Turbine Parts Market Share (2013-2018)

Table company 5 Basic Information, Manufacturing Base, Production Area and Its  
Competitors

Table company 5 Aerospace Turbine Parts Production, Revenue, Price and Gross  
Margin (2013-2018)

Table company 5 Aerospace Turbine Parts Market Share (2013-2018)

Table company 6 Basic Information, Manufacturing Base, Production Area and Its  
Competitors

Table company 6 Aerospace Turbine Parts Production, Revenue, Price and Gross  
Margin (2013-2018)

Table company 6 Aerospace Turbine Parts Market Share (2013-2018)

Table company 7 Basic Information, Manufacturing Base, Production Area and Its  
Competitors

Table company 7 Aerospace Turbine Parts Production, Revenue, Price and Gross  
Margin (2013-2018)

Table company 7 Aerospace Turbine Parts Market Share (2013-2018)

Table company 8 Basic Information, Manufacturing Base, Production Area and Its

## Competitors

Table company 8 Aerospace Turbine Parts Production, Revenue, Price and Gross Margin (2013-2018)

Table company 8 Aerospace Turbine Parts Market Share (2013-2018)

Table company 9 Basic Information, Manufacturing Base, Production Area and Its Competitors

Table company 9 Aerospace Turbine Parts Production, Revenue, Price and Gross Margin (2013-2018)

Table company 9 Aerospace Turbine Parts Market Share (2013-2018)

Table Production Base and Market Concentration Rate of Raw Material

Figure Price Trend of Key Raw Materials

Table Key Suppliers of Raw Materials

Figure Manufacturing Cost Structure of Aerospace Turbine Parts

Figure Manufacturing Process Analysis of Aerospace Turbine Parts

Figure Aerospace Turbine Parts Industrial Chain Analysis

Table Raw Materials Sources of Aerospace Turbine Parts Major Manufacturers in 2016

Table Major Buyers of Aerospace Turbine Parts

Table Distributors/Traders List

Figure Global Aerospace Turbine Parts Production and Growth Rate Forecast (2018-2023)

Figure Global Aerospace Turbine Parts Revenue and Growth Rate Forecast (2018-2023)

Table Global Aerospace Turbine Parts Production Forecast by Regions (2018-2023)

Table Global Aerospace Turbine Parts Consumption Forecast by Regions (2018-2023)

Table Global Aerospace Turbine Parts Production Forecast by Type (2018-2023)

Table Global Aerospace Turbine Parts Consumption Forecast by Application (2018-2023)

## I would like to order

Product name: Global Aerospace Turbine Parts Industry Market Analysis & Forecast 2018-2023

Product link: <https://marketpublishers.com/r/G85F8685D98EN.html>

Price: US\$ 3,040.00 (Single User License / Electronic Delivery)

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

[info@marketpublishers.com](mailto:info@marketpublishers.com)

## Payment

To pay by Credit Card (Visa, MasterCard, American Express, PayPal), please, click button on product page <https://marketpublishers.com/r/G85F8685D98EN.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