

# **Wind Tunnel Market by Solution (Products, Services), Alignment (Horizontal, Vertical), Application (Aerospace & Defense, Transportation, Racing Championship, Construction, Adventure Skydiving, Simulation), Air Speed, and Region - Global Forecast to 2023**

<https://marketpublishers.com/r/W5D55E2FB05EN.html>

Date: May 2018

Pages: 172

Price: US\$ 5,650.00 (Single User License)

ID: W5D55E2FB05EN

## **Abstracts**

“The wind tunnel market is projected to grow at a CAGR of 2.01% during the forecast period”

The wind tunnel market is estimated to be USD 2.61 billion in 2018 and is projected to reach USD 2.88 billion by 2023, at a CAGR of 2.01% between 2018 and 2023. The growth of the wind tunnel market can be attributed to the increased demand for UAVs from the commercial and military sectors, development of new generation high-speed aircraft, railways, and missiles, and increased investments for the development of autonomous electric vehicles across the globe. The increasing use of wind tunnels in the construction sector and wind energy installations is also leading to the growth of the wind tunnel market across the globe.

“The aerospace & defense segment projected to lead the wind tunnel market during the forecast period”

The aerospace & defense segment expected to lead the wind tunnel market during the forecast period. The growth of the aerospace & defense application segment of the wind tunnel market can be attributed to the increased use of wind tunnels for testing aircraft used for aerospace & defense application as these aircraft are generally exposed to critical climatic conditions.

“Europe is expected to lead the wind tunnel market, whereas Asia Pacific is projected to grow at the highest rate during the forecast period”

Europe is expected to lead the wind tunnel market during the forecast period. The growth of the Europe wind tunnel market can be attributed to increased investments in R&D activities for the development of new and advanced systems for the aerospace sector, which, in turn, leads to their testing using wind tunnels. Moreover, the key automobile manufacturers have their design centers located in the European region, which further leads to the increased use of wind tunnels for testing new automobiles designed.

The wind tunnel market in the Asia Pacific region is expected to grow at the highest rate during the forecast period. This growth can be attributed to the growing demand for aerodynamic testing of supersonic aircraft and missiles and the growth of the automobile industry in the region.

Break-up of profile of primary participants for this report:

By Company Type: Tier 1 – 35%, Tier 2 – 45% and Tier 3 – 20%

By Designation: C level – 35%, Director level – 25%, Others – 40%

By Region: North America - 30%, Europe – 20%, Asia Pacific – 30%, RoW – 20%

Prominent players profiled in the wind tunnel testing services market include NASA (US), Boeing (US), Lockheed Martin (US), ETW (Europe), CSTB (France), FKFS (Germany), DNW (Netherlands), RTA (Austria), Mitsubishi Heavy Industries (Japan), Horiba (Japan), BMT (UK), FORCE Technology (Denmark), and Aerodyn Wind Tunnel (US), among others. Some major manufacturers include Aerolab (US), Aiolos (Canada), Foran (Brazil), Aerodium Technologies (Latvia), and Skyventure (Canada) among others.

Research Coverage:

The study segments the wind tunnel market on the basis of application, solution, alignment, airspeed, and region. The report provides in-depth market intelligence

regarding market dynamics and major factors that influence the growth of the global wind tunnel market (drivers, restraints, opportunities, and industry-specific challenges), along with analyzing micromarkets with respect to individual growth trends, prospects, and their contribution to the wind tunnel market.

Reasons to buy this report:

From an insight perspective, this research report has focused on various levels of analysis—industry analysis (industry trends), supply chain analysis, and company profiles, which together comprise and discuss the basic views on the competitive landscape; emerging and high-growth segments of the wind tunnel market; high-growth regions; and market drivers, restraints, and opportunities.

The report provides insights on the following pointers:

**Market Penetration:** Comprehensive information on wind tunnels offered by the top players in the global wind tunnel market

**Product Development/Innovation:** Detailed insights on upcoming technologies, research & development activities, and new product launches in the wind tunnel market

**Market Development:** Comprehensive information about lucrative emerging markets

**Market Diversification:** Exhaustive information about new products, untapped geographies, recent developments, and investments in the global wind tunnel market

**Competitive Assessment:** In-depth assessment of strategies, products, and manufacturing capabilities of the leading players in the global wind tunnel market

## Contents

### 1 INTRODUCTION

- 1.1 OBJECTIVES OF THE STUDY
- 1.2 MARKET DEFINITION
- 1.3 STUDY SCOPE
  - 1.3.1 MARKETS COVERED
  - 1.3.2 REGIONAL SCOPE
  - 1.3.3 YEARS CONSIDERED FOR THE STUDY
- 1.4 CURRENCY AND PRICING
- 1.5 LIMITATIONS
- 1.6 MARKET STAKEHOLDERS

### 2 RESEARCH METHODOLOGY

- 2.1 RESEARCH DATA
  - 2.1.1 SECONDARY DATA
    - 2.1.1.1 Secondary sources
  - 2.1.2 PRIMARY DATA
    - 2.1.2.1 Key data from primary sources
    - 2.1.2.2 Breakdown of primaries
- 2.2 MARKET SIZE ESTIMATION
  - 2.2.1 BOTTOM-UP APPROACH
  - 2.2.2 TOP-DOWN APPROACH
- 2.3 MARKET BREAKDOWN AND DATA TRIANGULATION
- 2.4 RESEARCH ASSUMPTIONS AND LIMITATIONS

### 3 EXECUTIVE SUMMARY

### 4 PREMIUM INSIGHTS

- 4.1 ATTRACTIVE OPPORTUNITIES IN THE WIND TUNNEL MARKET
- 4.2 WIND TUNNEL MARKET, BY SOLUTION
- 4.3 EUROPE WIND TUNNEL MARKET
- 4.4 WIND TUNNEL MARKET, BY AEROSPACE & DEFENSE APPLICATION
- 4.5 WIND TUNNEL MARKET, BY AIRCRAFT SUBSEGMENT

### 5 MARKET OVERVIEW

*Wind Tunnel Market by Solution (Products, Services), Alignment (Horizontal, Vertical), Application (Aerospace...*

## 5.1 INTRODUCTION

## 5.2 MARKET DYNAMICS

### 5.2.1 DRIVERS

5.2.1.1 Increased demand for UAVs across the globe

5.2.1.2 Development of new generation high speed aircraft and missiles

5.2.1.3 Increased investments for the development of electric vehicles

### 5.2.2 RESTRAINTS

5.2.2.1 High costs involved in the installation and maintenance of wind tunnels

5.2.2.2 Replacement of wind tunnel testing with computational fluid dynamics (CFD) testing

5.2.2.3 Restrictions imposed by FIA on wind tunnel testing hours

### 5.2.3 OPPORTUNITIES

5.2.3.1 Use of wind tunnels for adventure sports and military training

5.2.3.2 Use of wind tunnels in the construction and wind energy industries

### 5.2.4 CHALLENGES

5.2.4.1 Issues with correct measurement of airflow and accurate calibration of sensors

## 6 INDUSTRY TRENDS

### 6.1 INTRODUCTION

### 6.2 INDUSTRY TRENDS

6.2.1 WIND TUNNEL INTEGRATION WITH COMPUTATIONAL FLUID DYNAMICS (CFD)

6.2.2 WIRELESS DATA ACQUISITION

6.2.3 MINIATURIZED WIND TUNNEL SYSTEMS FOR SIMULATION AND TESTING

6.2.4 FLEXIBLE WIND TUNNEL WALLS

6.2.5 AUTOMATED WIND TUNNELS

6.2.6 BIG DATA ANALYTICS & MACHINE LEARNING APPLICATION IN WIND TUNNELS

6.2.7 DEVELOPMENT OF THE FASTEST WIND TUNNELS FOR TESTING WEAPONS

6.2.8 HIGH SPEED DATA ACQUISITION ANALYSIS

6.2.9 REAL-TIME ROBOTIC FLOW VISUALIZATION

6.2.10 REMOTE HEALTH MONITORING AND KEY PERFORMANCE INDICATORS TRACKING TOOLS

### 6.3 INNOVATIONS AND PATENT REGISTRATION

### 6.4 KEY TREND ANALYSIS IN THE WIND TUNNEL MARKET

## **7 WIND TUNNEL MARKET, BY SOLUTION**

### **7.1 INTRODUCTION**

### **7.2 SERVICES**

#### **7.2.1 TESTING FACILITY SERVICES**

#### **7.2.2 WIND TUNNEL MAINTENANCE SERVICES**

### **7.3 PRODUCTS**

#### **7.3.1 HARDWARE**

##### **7.3.1.1 Motor and fan assembly**

##### **7.3.1.2 Data acquisition components**

##### **7.3.1.3 Vanes**

##### **7.3.1.4 Diffuser**

##### **7.3.1.5 Test section and control room**

##### **7.3.1.6 Others**

#### **7.3.2 SOFTWARE**

## **8 WIND TUNNEL MARKET, BY AIRSPEED**

### **8.1 INTRODUCTION**

### **8.2 SUBSONIC**

### **8.3 TRANSONIC**

### **8.4 SUPERSONIC**

### **8.5 HYPERSONIC**

## **9 WIND TUNNEL MARKET, BY ALIGNMENT**

### **9.1 INTRODUCTION**

### **9.2 HORIZONTAL**

#### **9.2.1 OPEN CIRCUIT**

#### **9.2.2 CLOSED CIRCUIT**

#### **9.2.3 RECIRCULATION**

### **9.3 VERTICAL**

#### **9.3.1 OPEN**

#### **9.3.2 WALL-TO-WALL**

#### **9.3.3 RECIRCULATION/SINGLE LOOP**

## **10 WIND TUNNEL MARKET, BY APPLICATION**

## 10.1 INTRODUCTION

## 10.2 AEROSPACE & DEFENSE

### 10.2.1 AIRCRAFT

#### 10.2.1.1 Commercial

#### 10.2.1.2 Military

### 10.2.2 ROCKETS & MISSILES

#### 10.2.2.1 Military

#### 10.2.2.2 Space launch vehicles

## 10.3 TRANSPORTATION

### 10.3.1 AUTOMOTIVE

#### 10.3.1.1 Climatic wind tunnels

#### 10.3.1.2 Aeroacoustics wind tunnels

#### 10.3.1.3 Thermal wind tunnels

### 10.3.2 HIGH-SPEED TRAINS

#### 10.3.2.1 Climatic wind tunnels

#### 10.3.2.2 Aeroacoustics wind tunnels

### 10.3.3 MARINE

#### 10.3.3.1 Aerodynamic wind tunnels

## 10.4 RACING CHAMPIONSHIP

## 10.5 BUILDING CONSTRUCTION & WIND ENERGY

## 10.6 ADVENTURE SPORTS SKYDIVING

## 10.7 TRAINING & SIMULATION

# 11 REGIONAL ANALYSIS

## 11.1 INTRODUCTION

## 11.2 NORTH AMERICA

### 11.2.1 BY COUNTRY

#### 11.2.1.1 US

#### 11.2.1.2 Canada

## 11.3 EUROPE

### 11.3.1 BY COUNTRY

#### 11.3.1.1 Russia

#### 11.3.1.2 UK

#### 11.3.1.3 Germany

#### 11.3.1.4 France

#### 11.3.1.5 Rest of Europe

## 11.4 ASIA PACIFIC

### 11.4.1 BY COUNTRY

11.4.1.1 China

11.4.1.2 India

11.4.1.3 Japan

11.4.1.4 South Korea

11.4.1.5 Rest of Asia Pacific

11.5 ROW

11.5.1 BY REGION

11.5.1.1 Middle East & Africa

11.5.1.2 Latin America

## **12 COMPETITIVE LANDSCAPE**

12.1 INTRODUCTION

12.2 RANK ANALYSIS OF THE WIND TUNNEL MARKET, 2017

12.3 KEY PLAYERS IN THE WIND TUNNEL MARKET, BY REGION, 2017

12.4 COMPETITIVE SITUATION AND TRENDS

12.4.1 CONTRACTS

12.4.2 NEW PRODUCT LAUNCHES

12.4.3 PARTNERSHIPS, COLLABORATIONS, AND AGREEMENTS

12.4.4 ACQUISITIONS

## **13 COMPANY PROFILES**

(Overview, Products and Services, Financials, Strategy & Development)\*

13.1 INTRODUCTION

13.2 BOEING

13.3 LOCKHEED MARTIN

13.4 AIOLOS

13.5 AEROLAB

13.6 HORIBA

13.7 FORSCHUNGSINSTITUT FÜR KRAFTFAHRWESEN UND  
FAHRZEUGMOTOREN STUTTGART (FKFS)

13.8 MAHLE

13.9 MITSUBISHI HEAVY INDUSTRIES

13.10 RAIL TEC ARSENAL (RTA)

13.11 CENTRE SCIENTIFIQUE ET TECHNIQUE DU BÂTIMENT (CSTB)

13.12 AUTO RESEARCH CENTER (ARC)

13.13 RUAG GROUP



13.14 EUROPEAN TRANSONIC WINDTUNNEL (ETW)

13.15 AERODYN WIND TUNNEL

13.16 DNW

13.17 BMT

13.18 FORCE TECHNOLOGY

13.19 WINDTECH CONSULTANTS

13.20 CALSPAN

13.21 INNOVATORS

13.21.1 TUNNEL TECHNOLOGIES

13.21.2 FORAN

13.21.3 SKYVENTURE

13.21.4 STOROJIRNA LITVINOV

13.21.5 EAGLE ENGINEERING CORPORATION

13.21.6 AERODIUM TECHNOLOGIES

\*Details on Overview, Products and Services, Financials, Strategy & Development might not be Captured in case of Unlisted Companies

## **14 APPENDIX**

14.1 DISCUSSION GUIDE

14.2 INTRODUCING REVENUE TREE: REAL-TIME MARKET INTELLIGENCE

14.3 KNOWLEDGE STORE: MARKETSandMARKETS' SUBSCRIPTION PORTAL

14.4 AVAILABLE CUSTOMIZATIONS

14.5 RELATED REPORTS

14.6 AUTHOR DETAILS

## List Of Tables

### LIST OF TABLES

Table 1 NORTH AMERICA: TOP CONTRACTS FOR UAVS, JANUARY 2015-JANUARY 2018

Table 2 EUROPE: TOP CONTRACTS, JANUARY 2015-JANUARY 2018

Table 3 ASIA PACIFIC: TOP CONTRACTS, JANUARY 2015-JANUARY 2018

Table 4 MIDDLE EAST: TOP CONTRACTS, JANUARY 2015-JANUARY 2018

Table 5 PRICE VARIATION IN THE INSTALLATION OF WIND TUNNELS, BY SIZE AND AIRSPEED

Table 6 FIA REDUCTION IN WIND TUNNEL TESTING HOURS

Table 7 INSTALLATION OF VERTICAL WIND TUNNELS AT SOME LOCATIONS IN 2017

Table 8 SUPERTALL BUILDINGS ACROSS THE GLOBE, BY REGION, 2016

Table 9 INNOVATIONS & PATENT REGISTRATION, 2011- 2017

Table 10 WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016-2023 (USD MILLION)

Table 11 WIND TUNNEL SERVICES MARKET SIZE, BY REGION, 2016-2023 (USD MILLION)

Table 12 WIND TUNNEL SERVICES MARKET SIZE, BY TYPE, 2016-2023 (USD MILLION)

Table 13 WIND TUNNEL PRODUCTS MARKET SIZE, BY REGION, 2015-2022 (USD MILLION)

Table 14 WIND TUNNEL PRODUCTS MARKET SIZE, BY COMPONENT, 2016-2023 (USD MILLION)

Table 15 WIND TUNNEL HARDWARE MARKET SIZE, BY REGION, 2016-2023 (USD MILLION)

Table 16 WIND TUNNEL HARDWARE MARKET SIZE, BY COMPONENT, 2016-2023 (USD MILLION)

Table 17 WIND TUNNEL SOFTWARE MARKET SIZE, BY REGION, 2016-2023 (USD MILLION)

Table 18 WIND TUNNEL MARKET SIZE, BY AIRSPEED, 2016-2023 (USD MILLION)

Table 19 SUBSONIC WIND TUNNEL MARKET SIZE, BY REGION, 2016-2023 (USD MILLION)

Table 20 TRANSONIC WIND TUNNEL MARKET SIZE, BY REGION, 2016-2023 (USD MILLION)

Table 21 SUPERSONIC WIND TUNNEL MARKET SIZE, BY REGION, 2016-2023 (USD MILLION)

Table 22 HYPERSONIC WIND TUNNEL MARKET SIZE, BY REGION, 2016-2023

(USD MILLION)

Table 23 WIND TUNNEL MARKET SIZE, BY ALIGNMENT, 2016-2023 (USD MILLION)

Table 24 HORIZONTAL WIND TUNNEL MARKET SIZE, BY TYPE, 2016-2023 (USD MILLION)

Table 25 HORIZONTAL WIND TUNNEL MARKET SIZE, BY REGION, 2016-2023 (USD MILLION)

Table 26 VERTICAL WIND TUNNEL MARKET SIZE, BY TYPE, 2016-2023 (USD MILLION)

Table 27 VERTICAL WIND TUNNEL MARKET SIZE, BY REGION, 2016-2023 (USD MILLION)

Table 28 WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016-2023 (USD MILLION)

Table 29 WIND TUNNEL MARKET IN AEROSPACE & DEFENSE, BY REGION, 2016-2023 (USD MILLION)

Table 30 WIND TUNNEL MARKET IN AEROSPACE & DEFENSE, BY TYPE, 2016-2023 (USD MILLION)

Table 31 WIND TUNNEL MARKET FOR AIRCRAFT, BY TYPE, 2016-2023 (USD MILLION)

Table 32 WIND TUNNEL MARKET FOR ROCKETS & MISSILES, BY TYPE, 2016-2023 (USD MILLION)

Table 33 WIND TUNNEL MARKET IN TRANSPORTATION, BY REGION, 2016-2023 (USD MILLION)

Table 34 WIND TUNNEL MARKET IN TRANSPORTATION, BY TYPE, 2016-2023 (USD MILLION)

Table 35 WIND TUNNEL MARKET IN RACING CHAMPIONSHIP, BY REGION, 2016-2023 (USD MILLION)

Table 36 WIND TUNNEL MARKET IN BUILDING CONSTRUCTION & WIND ENERGY, BY REGION, 2016-2023 (USD MILLION)

Table 37 WIND TUNNEL MARKET IN ADVENTURE SPORTS SKYDIVING, BY REGION, 2016-2023 (USD MILLION)

Table 38 WIND TUNNEL MARKET IN TRAINING & SIMULATION, BY REGION, 2016-2023 (USD MILLION)

Table 39 WIND TUNNEL MARKET SIZE, BY REGION, 2016–2023 (USD MILLION)

Table 40 NORTH AMERICA: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD MILLION)

Table 41 AEROSPACE & DEFENSE: NORTH AMERICA WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 42 AIRCRAFT: NORTH AMERICA WIND TUNNEL MARKET IN AEROSPACE & DEFENSE APPLICATION, BY SUBTYPE, 2016–2023 (USD MILLION)

Table 43 ROCKETS & MISSILES: NORTH AMERICA WIND TUNNEL MARKET IN AEROSPACE & DEFENSE APPLICATION, BY SUBTYPE, 2016–2023 (USD MILLION)

Table 44 TRANSPORTATION: NORTH AMERICA WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 45 NORTH AMERICA: WIND TUNNEL MARKET SIZE, BY ALIGNMENT, 2016–2023 (USD MILLION)

Table 46 VERTICAL ALIGNMENT: NORTH AMERICA WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 47 HORIZONTAL ALIGNMENT: NORTH AMERICA WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 48 NORTH AMERICA: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD MILLION)

Table 49 PRODUCTS: NORTH AMERICA WIND TUNNEL MARKET SIZE, BY COMPONENT, 2016–2023 (USD MILLION)

Table 50 HARDWARE: NORTH AMERICA WIND TUNNEL MARKET FOR PRODUCTS, BY TYPE, 2016–2023 (USD MILLION)

Table 51 SERVICES: NORTH AMERICA WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 52 NORTH AMERICA: WIND TUNNEL MARKET SIZE, BY AIRSPEED, 2016–2023 (USD MILLION)

Table 53 NORTH AMERICA: WIND TUNNEL MARKET SIZE, BY COUNTRY, 2016–2023 (USD MILLION)

Table 54 US: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD MILLION)

Table 55 AEROSPACE & DEFENSE: US WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 56 US: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD MILLION)

Table 57 CANADA: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD MILLION)

Table 58 AEROSPACE & DEFENSE: CANADA WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 59 CANADA: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD MILLION)

Table 60 EUROPE: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD MILLION)

Table 61 AEROSPACE & DEFENSE: EUROPE WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 62 AIRCRAFT: EUROPE WIND TUNNEL MARKET IN AEROSPACE &

DEFENSE APPLICATION, BY SUBTYPE, 2016–2023 (USD MILLION)

Table 63 ROCKETS & MISSILES: EUROPE WIND TUNNEL MARKET IN

AEROSPACE & DEFENSE APPLICATION, BY TYPE, 2016–2023 (USD MILLION)

Table 64 EUROPE: WIND TUNNEL MARKET SIZE, BY ALIGNMENT, 2016–2023  
(USD MILLION)

Table 65 VERTICAL ALIGNMENT: EUROPE WIND TUNNEL MARKET SIZE, BY  
TYPE, 2016–2023 (USD MILLION)

Table 66 HORIZONTAL ALIGNMENT: EUROPE WIND TUNNEL MARKET SIZE, BY  
TYPE, 2016–2023 (USD MILLION)

Table 67 EUROPE: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD  
MILLION)

Table 68 PRODUCTS: EUROPE WIND TUNNEL MARKET SIZE, BY COMPONENT,  
2016–2023 (USD MILLION)

Table 69 HARDWARE: EUROPE WIND TUNNEL PRODUCTS MARKET SIZE, BY  
TYPE, 2016–2023 (USD MILLION)

Table 70 SERVICES: EUROPE WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023  
(USD MILLION)

Table 71 EUROPE: WIND TUNNEL MARKET SIZE, BY AIRSPEED, 2016–2023 (USD  
MILLION)

Table 72 EUROPE: WIND TUNNEL MARKET SIZE, BY COUNTRY, 2016–2023 (USD  
MILLION)

Table 73 RUSSIA: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023  
(USD MILLION)

Table 74 AEROSPACE & DEFENSE: RUSSIA WIND TUNNEL MARKET SIZE, BY  
TYPE, 2016–2023 (USD MILLION)

Table 75 RUSSIA: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD  
MILLION)

Table 76 UK: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD  
MILLION)

Table 77 AEROSPACE & DEFENSE: UK WIND TUNNEL MARKET SIZE, BY TYPE,  
2016–2023 (USD MILLION)

Table 78 UK: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD  
MILLION)

Table 79 GERMANY: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023  
(USD MILLION)

Table 80 AEROSPACE & DEFENSE: GERMANY WIND TUNNEL MARKET SIZE, BY  
TYPE, 2016–2023 (USD MILLION)

Table 81 GERMANY: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023  
(USD MILLION)

Table 82 FRANCE: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD MILLION)

Table 83 AEROSPACE & DEFENSE: FRANCE WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 84 FRANCE: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD MILLION)

Table 85 REST OF EUROPE: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD MILLION)

Table 86 AEROSPACE & DEFENSE: REST OF EUROPE WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 87 REST OF EUROPE: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD MILLION)

Table 88 ASIA PACIFIC: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD MILLION)

Table 89 AEROSPACE & DEFENSE: ASIA PACIFIC WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 90 AIRCRAFT: ASIA PACIFIC WIND TUNNEL MARKET IN AEROSPACE & DEFENSE APPLICATION, BY SUBTYPE, 2016–2023 (USD MILLION)

Table 91 ROCKETS & MISSILES: ASIA PACIFIC WIND TUNNEL MARKET IN AEROSPACE & DEFENSE APPLICATION, BY SUBTYPE, 2016–2023 (USD MILLION)

Table 92 TRANSPORTATION: ASIA PACIFIC WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 93 ASIA PACIFIC: WIND TUNNEL MARKET SIZE, BY ALIGNMENT, 2016–2023 (USD MILLION)

Table 94 VERTICAL ALIGNMENT: ASIA PACIFIC WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 95 HORIZONTAL ALIGNMENT: ASIA PACIFIC WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 96 ASIA PACIFIC: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD MILLION)

Table 97 PRODUCTS: ASIA PACIFIC WIND TUNNEL MARKET SIZE, BY COMPONENT, 2016–2023 (USD MILLION)

Table 98 HARDWARE: ASIA PACIFIC WIND TUNNEL PRODUCTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 99 SERVICES: ASIA PACIFIC WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 100 ASIA PACIFIC: WIND TUNNEL MARKET SIZE, BY AIRSPEED, 2016–2023 (USD MILLION)

Table 101 ASIA PACIFIC: WIND TUNNEL MARKET SIZE, BY COUNTRY, 2016–2023



(USD MILLION)

Table 102 CHINA: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023

(USD MILLION)

Table 103 AEROSPACE & DEFENSE: CHINA WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 104 CHINA: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD MILLION)

Table 105 INDIA: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD MILLION)

Table 106 AEROSPACE & DEFENSE: INDIA WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 107 INDIA: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD MILLION)

Table 108 JAPAN: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD MILLION)

Table 109 AEROSPACE & DEFENSE: JAPAN WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 110 JAPAN: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD MILLION)

Table 111 SOUTH KOREA: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD MILLION)

Table 112 AEROSPACE & DEFENSE: SOUTH KOREA WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 113 SOUTH KOREA: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD MILLION)

Table 114 REST OF ASIA PACIFIC: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD MILLION)

Table 115 AEROSPACE & DEFENSE: REST OF ASIA PACIFIC WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 116 REST OF ASIA PACIFIC: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD MILLION)

Table 117 REST OF THE WORLD: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD MILLION)

Table 118 AEROSPACE & DEFENSE: REST OF THE WORLD WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 119 AIRCRAFT: REST OF THE WORLD WIND TUNNEL MARKET IN AEROSPACE & DEFENSE APPLICATION, BY SUBTYPE, 2016–2023 (USD MILLION)

Table 120 ROCKETS & MISSILES: REST OF THE WORLD WIND TUNNEL MARKET IN AEROSPACE & DEFENSE APPLICATION, BY SUBTYPE, 2016–2023 (USD

MILLION)

Table 121 REST OF THE WORLD: WIND TUNNEL MARKET SIZE, BY ALIGNMENT, 2016–2023 (USD MILLION)

Table 122 VERTICAL ALIGNMENT: REST OF THE WORLD WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 123 HORIZONTAL ALIGNMENT: REST OF THE WORLD WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 124 REST OF THE WORLD: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD MILLION)

Table 125 PRODUCTS: REST OF THE WORLD WIND TUNNEL MARKET SIZE, BY COMPONENT, 2016–2023 (USD MILLION)

Table 126 HARDWARE: REST OF THE WORLD WIND TUNNEL PRODUCTS MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 127 SERVICES: REST OF THE WORLD WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 128 REST OF THE WORLD: WIND TUNNEL MARKET SIZE, BY AIRSPEED, 2016–2023 (USD MILLION)

Table 129 REST OF THE WORLD: WIND TUNNEL MARKET SIZE, BY REGION, 2016–2023 (USD MILLION)

Table 130 MIDDLE EAST & AFRICA: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD MILLION)

Table 131 AEROSPACE & DEFENSE: MIDDLE EAST & AFRICA WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 132 MIDDLE EAST & AFRICA: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD MILLION)

Table 133 LATIN AMERICA: WIND TUNNEL MARKET SIZE, BY APPLICATION, 2016–2023 (USD MILLION)

Table 134 AEROSPACE & DEFENSE: LATIN AMERICA WIND TUNNEL MARKET SIZE, BY TYPE, 2016–2023 (USD MILLION)

Table 135 LATIN AMERICA: WIND TUNNEL MARKET SIZE, BY SOLUTION, 2016–2023 (USD MILLION)

Table 136 CONTRACTS, 2014–2017

Table 137 NEW PRODUCT LAUNCHES, 2014–2017

Table 138 PARTNERSHIPS, COLLABORATIONS, AND AGREEMENTS, 2014–2017

Table 139 ACQUISITIONS, 2014–2017



## List Of Figures

### LIST OF FIGURES

Figure 1 RESEARCH FLOW

Figure 2 RESEARCH DESIGN: WIND TUNNEL MARKET

Figure 3 BREAKDOWN OF PRIMARY INTERVIEWS: BY COMPANY TYPE, DESIGNATION, AND REGION

Figure 4 MARKET SIZE ESTIMATION METHODOLOGY: BOTTOM-UP APPROACH

Figure 5 MARKET SIZE ESTIMATION METHODOLOGY: TOP-DOWN APPROACH

Figure 6 DATA TRIANGULATION

Figure 7 ASSUMPTIONS AND LIMITATIONS OF THE RESEARCH STUDY

Figure 8 WIND TUNNEL MARKET, BY SOLUTION, 2018 & 2023 (USD BILLION)

Figure 9 WIND TUNNEL MARKET, BY ALIGNMENT, 2018 & 2023 (USD BILLION)

Figure 10 WIND TUNNEL MARKET, BY APPLICATION, 2018 & 2023 (USD BILLION)

Figure 11 WIND TUNNEL MARKET, BY AIRSPEED, 2018 & 2023 (USD BILLION)

Figure 12 THE EUROPEAN REGION IS EXPECTED TO LEAD THE WIND TUNNEL MARKET IN 2018, AND THE ASIA PACIFIC WIND TUNNEL MARKET IS PROJECTED TO GROW AT THE HIGHEST CAGR FROM 2018 TO 2023

Figure 13 DEVELOPMENT OF HIGH-SPEED VEHICLES AND INCREASED DEMAND FOR UAVS ACROSS THE GLOBE ARE PROJECTED TO DRIVE THE GROWTH OF THE WIND TUNNEL MARKET FROM 2018 TO 2023

Figure 14 THE DIFFUSER PRODUCTS SUBSEGMENT AND THE TESTING FACILITY SERVICES SUBSEGMENT TO ACCOUNT FOR THE LARGEST SHARES OF THE SOLUTION SEGMENT OF THE WIND TUNNEL MARKET IN 2018

Figure 15 THE SUBSONIC AIRSPEED SEGMENT AND GERMANY ARE ESTIMATED TO ACCOUNT FOR THE LARGEST SHARE OF THE EUROPE WIND TUNNEL MARKET IN 2018

Figure 16 THE AIRCRAFT SUBSEGMENT IS PROJECTED TO LEAD THE AEROSPACE & DEFENSE APPLICATION SEGMENT OF THE WIND TUNNEL MARKET FROM 2018 TO 2023

Figure 17 THE MILITARY AIRCRAFT SUBSEGMENT IS PROJECTED TO LEAD THE AEROSPACE & DEFENSE APPLICATION SEGMENT OF THE WIND TUNNEL MARKET FROM 2018 TO 2023

Figure 18 WIND TUNNEL MARKET: DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES

Figure 19 TECHNOLOGICAL ADVANCEMENTS IN THE WIND TUNNEL MARKET

Figure 20 THE SERVICES SOLUTION SEGMENT IS PROJECTED TO LEAD THE WIND TUNNEL MARKET FROM 2018 TO 2023

Figure 21 THE SUBSONIC AIRSPEED SEGMENT IS PROJECTED TO LEAD THE WIND TUNNEL MARKET FROM 2018 TO 2023

Figure 22 THE HORIZONTAL ALIGNMENT SEGMENT IS PROJECTED TO LEAD THE WIND TUNNEL MARKET FROM 2018 TO 2023

Figure 23 THE AEROSPACE & DEFENSE APPLICATION SEGMENT IS PROJECTED TO LEAD THE WIND TUNNEL MARKET FROM 2018 TO 2023

Figure 24 EUROPE IS ESTIMATED TO ACCOUNT FOR THE LARGEST SHARE OF THE WIND TUNNEL MARKET IN 2018

Figure 25 NORTH AMERICA WIND TUNNEL MARKET SNAPSHOT

Figure 26 EUROPE WIND TUNNEL MARKET SNAPSHOT

Figure 27 ASIA PACIFIC WIND TUNNEL MARKET SNAPSHOT

Figure 28 ROW WIND TUNNEL MARKET SNAPSHOT

Figure 29 COMPANIES ADOPTED NEW PRODUCT LAUNCHES AND PARTNERSHIPS, AGREEMENTS, AND COLLABORATIONS AS THE KEY GROWTH STRATEGIES FROM OCTOBER 2014 TO DECEMBER 2017

Figure 30 REVENUE AND PRODUCT-BASED RANK ANALYSIS OF THE TOP PLAYERS IN THE WIND TUNNEL MARKET , 2017

Figure 31 BOEING: COMPANY SNAPSHOT

Figure 32 LOCKHEED MARTIN: COMPANY SNAPSHOT

Figure 33 LOCKHEED MARTIN: SWOT ANALYSIS

Figure 34 HORIBA: COMPANY SNAPSHOT

Figure 35 MAHLE: COMPANY SNAPSHOT

Figure 36 MITSUBISHI HEAVY INDUSTRIES: COMPANY SNAPSHOT

Figure 37 RUAG GROUP: COMPANY SNAPSHOT

Figure 38 BMT: COMPANY SNAPSHOT

Figure 39 FORCE TECHNOLOGY: COMPANY SNAPSHOT

## I would like to order

Product name: Wind Tunnel Market by Solution (Products, Services), Alignment (Horizontal, Vertical), Application (Aerospace & Defense, Transportation, Racing Championship, Construction, Adventure Skydiving, Simulation), Air Speed, and Region - Global Forecast to 2023

Product link: <https://marketpublishers.com/r/W5D55E2FB05EN.html>

Price: US\$ 5,650.00 (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/W5D55E2FB05EN.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