

Spray Drying Equipment Market by Type (Rotary Atomizer, Nozzle Atomizer, Fluidized, Centrifugal, Closed Loop), Cycle, Flow Type (Co-Current, Counter Current and Mixed), Operating Principle, Capacity, Drying Stage, Application - Global Forecast to 2027

<https://marketpublishers.com/r/S52E5194316EN.html>

Date: December 2022

Pages: 249

Price: US\$ 4,950.00 (Single User License)

ID: S52E5194316EN

Abstracts

According to MarketsandMarkets, the global spray drying equipment market size is estimated to be valued at USD 5.1 billion in 2022 and is projected to reach USD 6.8 billion by 2027, recording a CAGR of 5.9% in terms of value.

Spray drying equipment is defined as processing equipment that converts a mixture from liquid to powder form. The stages of the spray drying process include feed preparation, atomization, drying, and separation of the powder from moist gas. The technique is used in various applications, including food, pharmaceutical, feed, chemicals, and others, such as (ceramics materials, agriculture, and pollution control). Spray drying is the most preferred technique due to its ease of usage and short run time. With respect to the food industry, spray dryers are used in the processing of fruits, juices, milk powder, salt, and beverages.

“By application, there is an increased use of spray drying equipment for encapsulation in food & beverage, driving the growth of the spray drying equipment market”

Spray drying is one of the simplest, fastest, and most scalable encapsulation techniques. For the development of food formulations containing high-cost active ingredients, novel technologies such as nano spray drying have emerged. The incorporation of active ingredients via drying technologies has been the focus of bioactive compound encapsulation. The particle size of the encapsulated final products has been classified as nanocapsules for sizes of 100–1,000 nm, microcapsules for sizes

of 1–1,000 m, and millimeters for encapsulated particles larger than 1 mm. As a result, it is widely used in the food & beverage industry to encapsulate valuable active ingredients.

“By product type, Rotary atomizers to lead the market in terms of market share”

Rotary atomizers convert feed into fine droplets by spraying them through a high-speed rotating perforated disc, which is known as rotary disc atomization. These atomizers are driven by high-velocity liquid discharge from the edge of a disc. The spinning disc utilizes the shearing action of the air at the outer edge of the disc to break the liquid feed into a spray that leaves the disc in a horizontal direction. Rotary atomizers produce fine to coarse droplets, ranging from 30–120 micrometers. They are generally more expensive than nozzle atomizers but do not clog the outlets and can produce uniformly sized droplets.

CMT Atomizers introduced a new generation of rotary atomizers with high-speed gearboxes in January 2022. This new atomizer completes the range of technologies now offered by CMT Atomizers, which includes all possible variants such as air drive, belt drive, direct drive with high-speed motor air cooled, direct drive with high-speed motor liquid cooled, and gearbox drive.

“The European region is projected to grow at the highest market share during the forecast period”

Spray drying equipment is used in the pharmaceutical industry in Europe to process both primary pharmaceuticals, such as Active Pharmaceutical Ingredients (API) and final pharmaceutical formulations. Europe also accounts for a larger market share for aseptic spray drying for parenteral drug products, which involves a continuous production process. The drugs are approved by the European Medicines Agency (EMA) and the World Health Organization (WHO), which have laid down the regulatory requirements. This type of drug formulation involves the spray drying technique for testing and commercial production, which is projected to drive the growth of the spray drying equipment market in Europe. The spray dryers preferred and installed in Europe are usually larger in size and used for commercial purposes due to the large-scale industrial production of related products.

Spray drying processes in Europe are also applied in the food and feed industries. Europe exports its food ingredients and dairy products mostly to the other regions. A comparatively small amount of cheese, butter, and Whole Milk Powder (WMP) from

selected destinations is imported into the European Union (EU), and a large share of these imports come from countries in Europe, such as Switzerland and Italy.

The break-up of Primaries:

By Value Chain Side: Demand Side-41%, Supply Side-59%

By Designation: CXOs-31%, Managers – 24%, and Executives- 45%

By Region: Europe - 25%, Asia Pacific – 15%, North America - 45%, RoW – 5%, South America-10%

Leading players profiled in this report:

GEA Group (Germany)

SPX Flow (US)

Shandong Tianli Drying Technology and Equipment (China)

B?CHI Labortechnik (Switzerland)

European SprayDry Technologies (UK)

Dedert Corporation (US)

Changzhou Lemar Drying Engineering (China)

AcmeFil Engineering Systems Pvt. Ltd (India)

New AVM Systech (India)

Advanced Drying Systems (India)

LabPLant (UK)

Swenson Technology, Inc. (US)

Yamato Scientific America (US)

Tetra Pak international S.A. (Switzerland)

G Larsson Starch Technology AB (Sweden)

Hemraj Engineering (India) LLP (India)

Saka Engineering Systems Pvt. Ltd. (India)

SiccaDania Group (Denmark)

Freund Vector Corporation (US)

Sanovo Technology Group (Denmark)

Raj Process Equipment & Systems Pvt. Ltd. (India)

Shachi Engineering (India)

Spray Tech Systems (India)

Shree Sai Equipment & Services (India)

Shanghai Pilotech Instrument & Equipment Co. Ltd.(China)

Research Coverage:

The report segments the spray drying equipment market on the basis of product type, cycle type, drying stage, flow type, capacity, operating principle, application, and region. In terms of insights, this report has focused on various levels of analyses—the competitive landscape, end-use analysis, and company profiles, which together comprise and discuss views on the emerging & high-growth segments of the global spray drying equipment, high-growth regions, countries, government initiatives, drivers, restraints, opportunities, and challenges.

Reasons to buy this report:

To get a comprehensive overview of the spray drying equipment market

To gain wide-ranging information about the top players in this industry, their product portfolios, and key strategies adopted by them

To gain insights into the major countries/regions in which the spray drying equipment market is flourishing

Contents

1 INTRODUCTION

1.1 STUDY OBJECTIVES

1.2 MARKET DEFINITION

1.3 STUDY SCOPE

FIGURE 1 MARKET SEGMENTATION

1.3.1 INCLUSIONS AND EXCLUSIONS

1.3.2 REGIONS COVERED

1.4 YEARS CONSIDERED

1.5 CURRENCY CONSIDERED

TABLE 1 USD EXCHANGE RATES CONSIDERED, 2017–2021

1.6 STAKEHOLDERS

1.7 SUMMARY OF CHANGES

2 RESEARCH METHODOLOGY

2.1 RESEARCH DATA

FIGURE 2 SPRAY DRYING EQUIPMENT MARKET: RESEARCH DESIGN

2.1.1 SECONDARY DATA

2.1.1.1 Key data from secondary sources

2.1.2 PRIMARY DATA

2.1.2.1 Key data from primary sources

2.1.2.2 Key industry insights

2.1.2.3 Breakdown of primary interviews

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

2.2 MARKET SIZE ESTIMATION

FIGURE 4 SPRAY DRYING EQUIPMENT MARKET ESTIMATION, BY SIZE (SUPPLY SIDE)

FIGURE 5 SPRAY DRYING EQUIPMENT MARKET ESTIMATION (DEMAND SIDE)

2.2.1 MARKET SIZE ESTIMATION: BOTTOM-UP APPROACH

FIGURE 6 SPRAY DRYING EQUIPMENT MARKET ESTIMATION: BOTTOM-UP APPROACH

2.2.2 MARKET SIZE ESTIMATION METHODOLOGY: TOP-DOWN APPROACH

FIGURE 7 SPRAY DRYING EQUIPMENT MARKET ESTIMATION: TOP-DOWN APPROACH

2.3 DATA TRIANGULATION

FIGURE 8 DATA TRIANGULATION

2.4 ASSUMPTIONS

2.5 RESEARCH LIMITATIONS AND ASSOCIATED RISKS

3 EXECUTIVE SUMMARY

TABLE 2 SPRAY DRYING EQUIPMENT MARKET SHARE SNAPSHOT, 2022 VS. 2027 (USD MILLION)

FIGURE 9 ROTARY ATOMIZER SPRAY DRYERS SEGMENT TO BE LARGEST MARKET DURING FORECAST PERIOD

FIGURE 10 FOOD & BEVERAGES SEGMENT TO BE MOST ATTRACTIVE APPLICATION IN 2022

FIGURE 11 CLOSED CYCLE SEGMENT TO RECORD HIGHER CAGR DURING FORECAST PERIOD

FIGURE 12 CO-CURRENT FLOW TYPE TO OCCUPY MAJOR SHARE IN 2022

FIGURE 13 SINGLE-STAGE SEGMENT TO DOMINATE MARKET BY 2027

FIGURE 14 INDIRECT HEATING SEGMENT TO RECORD HIGHER CAGR DURING FORECAST PERIOD

FIGURE 15 ASIA PACIFIC TO BE FASTEST-GROWING MARKET DURING FORECAST PERIOD

4 PREMIUM INSIGHTS

4.1 OPPORTUNITIES IN SPRAY DRYING EQUIPMENT MARKET

FIGURE 16 RISE IN CONSUMPTION OF PROCESSED AND READY-TO-EAT FOODS LED TO INCREASE IN DEMAND FOR SPRAY DRYING EQUIPMENT

4.2 SPRAY DRYING EQUIPMENT MARKET, BY TYPE AND REGION

FIGURE 17 ROTARY ATOMIZER TO DOMINATE SPRAY DRYING EQUIPMENT MARKET IN 2022

4.3 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY CYCLE TYPE AND COUNTRY

FIGURE 18 CHINA TO ACCOUNT FOR LARGEST SHARE IN 2022

4.4 SPRAY DRYING EQUIPMENT MARKET, BY KEY COUNTRY

FIGURE 19 INDIA TO BE FASTEST-GROWING MARKET DURING FORECAST PERIOD FOR SPRAY DRYING EQUIPMENT

5 MARKET OVERVIEW

5.1 INTRODUCTION

Spray Drying Equipment Market by Type (Rotary Atomizer, Nozzle Atomizer, Fluidized, Centrifugal, Closed Loop),...

5.1.1 MACROECONOMIC INDICATORS

5.1.1.1 Increase in demand for multi-functional equipment

5.1.1.2 Major Companies investing heavily in food & beverages processing equipment

FIGURE 20 PRODUCT-WISE GLOBAL SALES DATA, 2020–2021 (USD BILLION)

5.2 MARKET DYNAMICS

FIGURE 21 DRIVERS, RESTRAINTS, OPPORTUNITIES, AND CHALLENGES: SPRAY DRYING EQUIPMENT MARKET

5.2.1 DRIVERS

5.2.1.1 Increase in consumption of processed and RTE foods

FIGURE 22 INCREASING SALES FOR CONVENIENCE FOODS, 2020 (CHANGE IN SALES)

5.2.1.2 Technological innovations and advancements in spray drying equipment

TABLE 3 VARIOUS APPLICATIONS OF NANO SPRAY DRYING TECHNOLOGY

5.2.1.3 Reduced thermal damage and increased shelf life of final products

5.2.2 RESTRAINTS

5.2.2.1 High installation and operational cost

5.2.2.2 Limited use with sugar-rich products

TABLE 4 GLASS TRANSITION TEMPERATURE OF SUGAR-RICH PRODUCTS

5.2.3 OPPORTUNITIES

5.2.3.1 Increase in encapsulation applications of food products

TABLE 5 APPLICATIONS OF ENCAPSULATED OILS USING SPRAY DRYING TECHNIQUE IN FUNCTIONAL FOOD PRODUCTS

5.2.3.2 Innovative applications in pharmaceutical and ceramic industries

5.2.4 CHALLENGES

5.2.4.1 Infrastructural challenges in developing countries

5.2.4.2 Low energy efficiency of spray dryers

6 INDUSTRY TRENDS

6.1 INTRODUCTION

6.2 VALUE CHAIN ANALYSIS

FIGURE 23 VALUE CHAIN ANALYSIS

6.2.1 RESEARCH AND PRODUCT DEVELOPMENT

6.2.2 REGISTRATION

6.2.3 MANUFACTURING

6.2.4 DISTRIBUTION

6.2.5 MARKETING AND SALES

6.2.6 POST-SALES SERVICES

6.3 SUPPLY CHAIN ANALYSIS

FIGURE 24 SPRAY DRYING EQUIPMENT MARKET: SUPPLY CHAIN ANALYSIS

6.4 MARKET MAPPING AND ECOSYSTEM OF SPRAY DRYING EQUIPMENT MARKET

6.4.1 DEMAND SIDE

6.4.2 SUPPLY-SIDE

FIGURE 25 SPRAY DRYING EQUIPMENT MARKET ECOSYSTEM MAP

6.4.3 ECOSYSTEM MAP

TABLE 6 SPRAY DRYING EQUIPMENT MARKET: ECOSYSTEM

6.5 TRENDS/DISRUPTIONS IMPACTING CUSTOMERS' BUSINESSES

6.5.1 REVENUE SHIFT AND NEW REVENUE POCKETS IN SPRAY DRYING EQUIPMENT MARKET

FIGURE 26 REVENUE SHIFT IMPACTING SPRAY DRYING EQUIPMENT MARKET

6.6 TECHNOLOGY ANALYSIS

6.6.1 ELECTROSTATIC SPRAY DRYING

6.6.2 AUTOMATION

6.7 PRICING ANALYSIS

6.7.1 SELLING PRICE CHARGED BY KEY PLAYERS IN TERMS OF PRODUCT TYPE

FIGURE 27 SELLING PRICE OF KEY PLAYERS FOR SPRAY DRYING EQUIPMENT PRODUCT TYPE

TABLE 7 SELLING PRICE OF KEY PLAYERS FOR PRODUCT TYPE

FIGURE 28 AVERAGE SELLING PRICE IN KEY REGIONS, BY PRODUCT TYPE, 2019–2021 (USD)

TABLE 8 ROTARY ATOMIZER: AVERAGE SELLING PRICE, BY REGION, 2019–2021 (USD)

TABLE 9 NOZZLE ATOMIZER: AVERAGE SELLING PRICE, BY REGION, 2019–2021 (USD)

TABLE 10 FLUIDIZED: AVERAGE SELLING PRICE, BY REGION, 2019–2021 (USD)

TABLE 11 CENTRIFUGAL: AVERAGE SELLING PRICE, BY REGION, 2019–2021 (USD)

TABLE 12 CLOSED LOOP: AVERAGE SELLING PRICE, BY REGION, 2019–2021 (USD)

6.8 SPRAY DRYING EQUIPMENT MARKET: PATENT ANALYSIS

FIGURE 29 NUMBER OF PATENTS GRANTED FOR SPRAY DRYING EQUIPMENT MARKET, 2011–2021

FIGURE 30 TOP 10 COMPANIES WITH HIGHEST NUMBER OF PATENT APPLICATIONS IN LAST 10 YEARS

FIGURE 31 TOP PATENT APPLICANTS FOR SPRAY DRYING EQUIPMENT

MARKET, 2019–2022

FIGURE 32 REGIONAL ANALYSIS OF PATENTS GRANTED FOR SPRAY DRYING EQUIPMENT MARKET, 2019–2022

6.8.1 LIST OF MAJOR PATENTS

TABLE 13 LIST OF FEW PATENTS IN SPRAY DRYING EQUIPMENT MARKET, 2019–2022

6.9 TRADE ANALYSIS: SPRAY DRYING EQUIPMENT MARKET

6.9.1 EXPORT SCENARIO: SPRAY DRYING EQUIPMENT

FIGURE 33 SPRAY DRYING EQUIPMENT EXPORT, BY KEY COUNTRY, 2017–2021 (USD THOUSAND)

TABLE 14 EXPORT DATA OF SPRAY DRYING EQUIPMENT FOR KEY COUNTRIES, 2021 (USD THOUSAND)

6.9.2 IMPORT SCENARIO: SPRAY DRYING EQUIPMENT

FIGURE 34 SPRAY DRYING EQUIPMENT IMPORT, BY KEY COUNTRY, 2017–2021 (USD THOUSAND)

TABLE 15 IMPORT DATA OF SPRAY DRYING EQUIPMENT FOR KEY COUNTRIES, 2021 (VALUE)

6.10 KEY CONFERENCES AND EVENTS, 2022–2023

TABLE 16 KEY CONFERENCES AND EVENTS IN SPRAY DRYING EQUIPMENT MARKET

6.11 TARIFF AND REGULATORY LANDSCAPE

6.11.1 REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 17 NORTH AMERICA: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 18 EUROPE: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 19 ASIA PACIFIC: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

TABLE 20 REST OF THE WORLD: LIST OF REGULATORY BODIES, GOVERNMENT AGENCIES, AND OTHER ORGANIZATIONS

6.11.2 REGULATORY FRAMEWORK

6.11.2.1 International organization for standardization

6.11.2.2 North America

6.11.2.2.1 USFDA

6.11.2.3 Europe

6.12 PORTER'S FIVE FORCES ANALYSIS

TABLE 21 SPRAY DRYING EQUIPMENT MARKET: PORTER'S FIVE FORCES ANALYSIS

- 6.12.1 DEGREE OF COMPETITION
- 6.12.2 BARGAINING POWER OF SUPPLIERS
- 6.12.3 BARGAINING POWER OF BUYERS
- 6.12.4 THREAT FROM SUBSTITUTES
- 6.12.5 THREAT FROM NEW ENTRANTS
- 6.13 KEY STAKEHOLDERS AND BUYING CRITERIA
 - 6.13.1 KEY STAKEHOLDERS IN BUYING PROCESS
- FIGURE 35 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP END USERS
- TABLE 22 INFLUENCE OF STAKEHOLDERS ON BUYING PROCESS FOR TOP END USERS
- 6.13.2 BUYING CRITERIA
- FIGURE 36 KEY CRITERIA FOR SELECTING SUPPLIERS/VENDORS
- TABLE 23 KEY CRITERIA FOR SELECTING SUPPLIERS/VENDORS
- 6.14 CASE STUDIES: SPRAY DRYING EQUIPMENT MARKET
 - 6.14.1 SHACHI ENGINEERING: COLOURTEX
 - 6.14.2 SHACHI ENGINEERING: ZEST AROMA

7 SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE

7.1 INTRODUCTION

FIGURE 37 SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022 VS. 2027 (USD MILLION)

TABLE 24 SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 25 SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

7.2 ROTARY ATOMIZER

7.2.1 ABILITY TO PRODUCE FINE AND SMALL GRANULES FROM COARSE DROPLETS DRIVES MARKET

TABLE 26 ROTARY ATOMIZER: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 27 ROTARY ATOMIZER: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

7.3 NOZZLE ATOMIZER

7.3.1 FLEXIBILITY TO CHANGE NOZZLE SIZE AS PER REQUIREMENTS OF FINAL PRODUCTS ENCOURAGES PREFERENCE FOR NOZZLE ATOMIZER AMONG CUSTOMERS

TABLE 28 NOZZLE ATOMIZER: SPRAY DRYING EQUIPMENT MARKET, BY

Spray Drying Equipment Market by Type (Rotary Atomizer, Nozzle Atomizer, Fluidized, Centrifugal, Closed Loop),...

REGION, 2017–2021 (USD MILLION)

TABLE 29 NOZZLE ATOMIZER: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

7.4 FLUIDIZED

7.4.1 FLUIDIZED SPRAY DRYERS CONSIDERED TO BE SUITABLE FOR HEAT-SENSITIVE PRODUCTS

TABLE 30 FLUIDIZED SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 31 FLUIDIZED SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

7.5 CENTRIFUGAL

7.5.1 CENTRIFUGAL SPRAY DRYERS USED TO REDUCE DRYING TIME OF FINAL POWDERED PRODUCTS

TABLE 32 CENTRIFUGAL SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 33 CENTRIFUGAL SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

7.6 CLOSED LOOP

7.6.1 SAFE APPLICATION OF CLOSED LOOP SPRAY DRYERS IN MANUFACTURING OF FLAMMABLE AND TOXIC PRODUCTS TO DRIVE MARKET

TABLE 34 CLOSED LOOP SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 35 CLOSED LOOP SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

8 SPRAY DRYING EQUIPMENT MARKET, BY APPLICATION

8.1 INTRODUCTION

TABLE 36 SOME PATENTS FOR SPRAY DRYING TECHNOLOGY IN VARIOUS SEGMENTS

FIGURE 38 SPRAY DRYING EQUIPMENT MARKET, BY APPLICATION, 2022 VS. 2027 (USD MILLION)

TABLE 37 SPRAY DRYING EQUIPMENT MARKET, BY APPLICATION, 2017–2021 (USD MILLION)

TABLE 38 SPRAY DRYING EQUIPMENT MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

8.2 FOOD & BEVERAGES

8.2.1 INCREASE IN ENCAPSULATION TECHNIQUE FOR DEVELOPMENT OF FOOD FORMULATION TO DRIVE DEMAND IN FOOD INDUSTRY

TABLE 39 FOOD & BEVERAGES: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 40 FOOD & BEVERAGES: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

8.3 PHARMACEUTICALS

8.3.1 ADOPTION OF NOVEL DRUG ENCAPSULATION TO DRIVE DEMAND FOR SPRAY DRYING

TABLE 41 PHARMACEUTICALS: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 42 PHARMACEUTICALS: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

8.4 CHEMICALS

8.4.1 PRODUCTION OF DYES USED IN FABRICS AND METAL INDUSTRIES DRIVES DEMAND FOR SPRAY DRYING EQUIPMENT

TABLE 43 CHEMICALS: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 44 CHEMICALS: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

8.5 ANIMAL FEED

8.5.1 SPRAY DRYING EQUIPMENT USED TO PRODUCE COARSE GRAIN FOR FEED PRODUCTS BY TAKING OUT MOISTURE FROM LIQUID FEEDS

TABLE 45 ANIMAL FEED: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 46 ANIMAL FEED: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

8.6 FERTILIZERS

8.6.1 INCREASED SOLUBILITY OF FOLIAR FERTILIZER WITH HELP OF SPRAY DRYING DRIVES MARKET

TABLE 47 FERTILIZERS: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 48 FERTILIZERS: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

8.7 PAPER INDUSTRY

8.7.1 APPLICATION OF SPRAY DRYERS FOR WASTEWATER FREE PAPER PRODUCTION DRIVES MARKET

TABLE 49 PAPER INDUSTRY: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 50 PAPER INDUSTRY: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

8.8 CONSTRUCTION INDUSTRY

8.8.1 USE OF ROTARY ATOMIZER SPRAY DRYING EQUIPMENT IN CEMENT PRODUCTION TO DRIVE MARKET

TABLE 51 CONSTRUCTION INDUSTRY: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 52 CONSTRUCTION INDUSTRY: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

8.9 OTHER APPLICATIONS

TABLE 53 OTHER APPLICATIONS: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 54 OTHER APPLICATIONS: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

9 SPRAY DRYING EQUIPMENT MARKET, BY CAPACITY

9.1 INTRODUCTION

FIGURE 39 SPRAY DRYING EQUIPMENT MARKET, BY CAPACITY, 2022 VS. 2027 (USD MILLION)

TABLE 55 SPRAY DRYING EQUIPMENT MARKET, BY CAPACITY, 2017–2021 (USD MILLION)

TABLE 56 SPRAY DRYING EQUIPMENT MARKET, BY CAPACITY, 2022–2027 (USD MILLION)

9.2 LOW CAPACITY (LESS THAN 100 KG/HR)

9.2.1 COST-EFFECTIVENESS OF LOW-CAPACITY SPRAY DRYERS FOR USE IN R&D LABORATORIES DRIVES MARKET

TABLE 57 LOW CAPACITY SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 58 LOW CAPACITY SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

9.3 MEDIUM CAPACITY (100–1,000 KG/HR)

9.3.1 HIGH RETURN ON INVESTMENT IN LONG TERM ENCOURAGES SMALL-SCALE PROCESSED FOOD & BEVERAGES MANUFACTURERS TO USE MEDIUM CAPACITY SPRAY DRYERS

TABLE 59 MEDIUM CAPACITY SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 60 MEDIUM CAPACITY SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

9.4 HIGH CAPACITY (MORE THAN 1,000 KG/HR)

9.4.1 HIGH INVESTMENT RETURN AND OUTPUT TO DRIVE GROWTH IN

CONSTRUCTION INDUSTRY

TABLE 61 HIGH CAPACITY SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 62 HIGH CAPACITY SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

10 SPRAY DRYING EQUIPMENT MARKET, BY CYCLE TYPE

10.1 INTRODUCTION

FIGURE 40 SPRAY DRYING EQUIPMENT MARKET, BY CYCLE TYPE, 2022 VS. 2027 (USD MILLION)

TABLE 63 SPRAY DRYING EQUIPMENT MARKET, BY CYCLE TYPE, 2017–2021 (USD MILLION)

TABLE 64 SPRAY DRYING EQUIPMENT MARKET, BY CYCLE TYPE, 2022–2027 (USD MILLION)

10.2 OPEN CYCLE

10.2.1 COST-EFFECTIVENESS FINDS APPLICATION IN MAJORITY OF NON-REACTIVE PRODUCTS

TABLE 65 OPEN CYCLE: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 66 OPEN CYCLE: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

10.3 CLOSED CYCLE

10.3.1 PRECISE SPRAY DRYING OF HEAT-SENSITIVE AND REACTIVE SUBSTANCES DRIVES MARKET

TABLE 67 CLOSED CYCLE: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 68 CLOSED CYCLE: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

11 SPRAY DRYING EQUIPMENT MARKET, BY DRYING STAGE

11.1 INTRODUCTION

FIGURE 41 SPRAY DRYING EQUIPMENT MARKET, BY DRYING STAGE, 2022 VS. 2027 (USD MILLION)

TABLE 69 SPRAY DRYING EQUIPMENT MARKET, BY DRYING STAGE, 2017–2021 (USD MILLION)

TABLE 70 SPRAY DRYING EQUIPMENT MARKET, BY DRYING STAGE, 2022–2027 (USD MILLION)

11.2 SINGLE-STAGE

11.2.1 MILK POWDERS AND PRODUCTS REQUIRING HIGH HEAT FOR DRYING INCREASE DEMAND

TABLE 71 SINGLE-STAGE: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 72 SINGLE-STAGE: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

11.3 TWO-STAGE

11.3.1 TWO-STAGE SPRAY DRYERS USE FLUID BED TO RETAIN SOME MOISTURE IN FINAL DRIED PRODUCTS

TABLE 73 TWO-STAGE: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 74 TWO-STAGE: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

11.4 MULTISTAGE

11.4.1 PRODUCTS DERIVED FROM OILS AND DISPERSION LIQUIDS REQUIRING MORE THAN ONE STAGE TO OBTAIN DESIRED DRYNESS ENCOURAGE DEMAND

TABLE 75 MULTISTAGE: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 76 MULTISTAGE: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

12 SPRAY DRYING EQUIPMENT MARKET, BY FLOW TYPE

12.1 INTRODUCTION

FIGURE 42 SPRAY DRYING EQUIPMENT MARKET, BY FLOW TYPE, 2022 VS. 2027 (USD MILLION)

TABLE 77 SPRAY DRYING EQUIPMENT MARKET, BY FLOW TYPE, 2017–2021 (USD MILLION)

TABLE 78 SPRAY DRYING EQUIPMENT MARKET, BY FLOW TYPE, 2022–2027 (USD MILLION)

12.2 CO-CURRENT

12.2.1 ABILITY TO REDUCE THERMAL DEGRADATION OF FINAL PRODUCT INCREASES DEMAND FOR CO-CURRENT SPRAY DRYERS

TABLE 79 CO-CURRENT SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 80 CO-CURRENT SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

12.3 COUNTER-CURRENT

12.3.1 PRODUCTION OF DETERGENTS AND CERAMICS FOR IMPROVED HEAT UTILIZATION TO SAVE ENERGY COSTS

TABLE 81 COUNTER-CURRENT SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 82 COUNTER-CURRENT SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

12.4 MIXED

12.4.1 MIXED FLOW SPRAY DRYERS USE BOTH COUNTER-CURRENT AND CO-CURRENT MECHANISMS TO OBTAIN MAXIMUM DRYING OF FINAL PRODUCT

TABLE 83 MIXED SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 84 MIXED SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

13 SPRAY DRYING EQUIPMENT MARKET, BY OPERATING PRINCIPLE

13.1 INTRODUCTION

FIGURE 43 SPRAY DRYING EQUIPMENT MARKET, BY OPERATING PRINCIPLE, 2022 VS. 2027 (USD MILLION)

TABLE 85 SPRAY DRYING EQUIPMENT MARKET, BY OPERATING PRINCIPLE, 2017–2021 (USD MILLION)

TABLE 86 SPRAY DRYING EQUIPMENT MARKET, BY OPERATING PRINCIPLE, 2022–2027 (USD MILLION)

13.2 DIRECT HEATING

13.2.1 HIGH EFFICIENCY OF DIRECT HEATING MAKES IT PREFERABLE FOR NON-SENSITIVE BY-PRODUCTS

TABLE 87 DIRECT HEATING: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 88 DIRECT HEATING: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

13.3 INDIRECT HEATING

13.3.1 REDUCTION OF CONTAMINANTS IN FOOD, FEED, AND PHARMACEUTICAL PRODUCTS THROUGH APPLICATION OF INDIRECT HEATING DRIVES MARKET

TABLE 89 INDIRECT HEATING: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 90 INDIRECT HEATING: SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

14 SPRAY DRYING EQUIPMENT MARKET, BY REGION

14.1 INTRODUCTION

FIGURE 44 SPRAY DRYING EQUIPMENT MARKET SHARE (VALUE), BY KEY COUNTRY, 2022

TABLE 91 SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2017–2021 (USD MILLION)

TABLE 92 SPRAY DRYING EQUIPMENT MARKET, BY REGION, 2022–2027 (USD MILLION)

14.2 NORTH AMERICA

FIGURE 45 NORTH AMERICA SPRAY DRYING EQUIPMENT MARKET: SNAPSHOT

TABLE 93 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY COUNTRY, 2017–2021 (USD MILLION)

TABLE 94 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY COUNTRY, 2022–2027 (USD MILLION)

TABLE 95 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 96 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

TABLE 97 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY DRYING STAGE, 2017–2021 (USD MILLION)

TABLE 98 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY DRYING STAGE, 2022–2027 (USD MILLION)

TABLE 99 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY CYCLE TYPE, 2017–2021 (USD MILLION)

TABLE 100 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY CYCLE TYPE, 2022–2027 (USD MILLION)

TABLE 101 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY OPERATING PRINCIPLE, 2017–2021 (USD MILLION)

TABLE 102 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY OPERATING PRINCIPLE, 2022–2027 (USD MILLION)

TABLE 103 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY FLOW TYPE, 2017–2021 (USD MILLION)

TABLE 104 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY FLOW TYPE, 2022–2027 (USD MILLION)

TABLE 105 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY CAPACITY, 2017–2021 (USD MILLION)

TABLE 106 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY CAPACITY, 2022–2027 (USD MILLION)

TABLE 107 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY APPLICATION, 2017–2021 (USD MILLION)

TABLE 108 NORTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

14.2.1 US

14.2.1.1 Increase in use of spray drying technology in food & beverages industry to drive market

TABLE 109 US: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 110 US: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.2.2 CANADA

14.2.2.1 Use of spray drying equipment in drug and pharmaceutical industry in Canada for production of powdered drugs and medicines

TABLE 111 CANADA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 112 CANADA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.2.3 MEXICO

14.2.3.1 Production of milk concentrates to drive growth of spray drying equipment market in Mexico

TABLE 113 MEXICO: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 114 MEXICO: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.3 EUROPE

TABLE 115 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY COUNTRY, 2017–2021 (USD MILLION)

TABLE 116 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY COUNTRY, 2022–2027 (USD MILLION)

TABLE 117 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 118 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

TABLE 119 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY DRYING STAGE, 2017–2021 (USD MILLION)

TABLE 120 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY DRYING STAGE, 2022–2027 (USD MILLION)

TABLE 121 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY CYCLE TYPE,

2017–2021 (USD MILLION)

TABLE 122 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY CYCLE TYPE, 2022–2027 (USD MILLION)

TABLE 123 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY OPERATING PRINCIPLE, 2017–2021 (USD MILLION)

TABLE 124 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY OPERATING PRINCIPLE, 2022–2027 (USD MILLION)

TABLE 125 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY FLOW TYPE, 2017–2021 (USD MILLION)

TABLE 126 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY FLOW TYPE, 2022–2027 (USD MILLION)

TABLE 127 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY CAPACITY, 2017–2021 (USD MILLION)

TABLE 128 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY CAPACITY, 2022–2027 (USD MILLION)

TABLE 129 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY APPLICATION, 2017–2021 (USD MILLION)

TABLE 130 EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

14.3.1 GERMANY

14.3.1.1 Innovation to reduce energy and production costs of powdered products in spray drying technologies to drive market

TABLE 131 GERMANY: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 132 GERMANY: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.3.2 FRANCE

14.3.2.1 High demand for cosmetics powders across regions to drive growth

TABLE 133 FRANCE: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 134 FRANCE: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.3.3 UK

14.3.3.1 Production of coffee mixes to cater to requirements of customers to drive demand for spray drying equipment in market

TABLE 135 UK: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 136 UK: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.3.4 ITALY

14.3.4.1 Use of spray drying equipment for production of customized set of APIs in pharmaceutical sector offers growth potential for manufacturers

TABLE 137 ITALY: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 138 ITALY: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.3.5 SPAIN

14.3.5.1 Increased investments in establishment of spray dryer plants across ceramic and pharmaceutical industry to drive growth

TABLE 139 SPAIN: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 140 SPAIN: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.3.6 REST OF EUROPE

TABLE 141 REST OF EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 142 REST OF EUROPE: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.4 ASIA PACIFIC

FIGURE 46 ASIA PACIFIC SPRAY DRYING EQUIPMENT MARKET: SNAPSHOT

TABLE 143 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY COUNTRY, 2017–2021 (USD MILLION)

TABLE 144 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY COUNTRY, 2022–2027 (USD MILLION)

TABLE 145 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 146 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

TABLE 147 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY DRYING STAGE, 2017–2021 (USD MILLION)

TABLE 148 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY DRYING STAGE, 2022–2027 (USD MILLION)

TABLE 149 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY CYCLE TYPE, 2017–2021 (USD MILLION)

TABLE 150 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY CYCLE TYPE, 2022–2027 (USD MILLION)

TABLE 151 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY OPERATING PRINCIPLE, 2017–2021 (USD MILLION)

TABLE 152 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY OPERATING PRINCIPLE, 2022–2027 (USD MILLION)

TABLE 153 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY FLOW TYPE, 2017–2021 (USD MILLION)

TABLE 154 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY FLOW TYPE, 2022–2027 (USD MILLION)

TABLE 155 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY CAPACITY, 2017–2021 (USD MILLION)

TABLE 156 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY CAPACITY, 2022–2027 (USD MILLION)

TABLE 157 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY APPLICATION, 2017–2021 (USD MILLION)

TABLE 158 ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

14.4.1 CHINA

14.4.1.1 High demand for baby foods among domestic consumers to drive market growth in China

TABLE 159 CHINA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 160 CHINA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.4.2 JAPAN

14.4.2.1 Expansion of Japanese dairy industry to drive market growth

TABLE 161 JAPAN: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 162 JAPAN: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.4.3 INDIA

14.4.3.1 Increased consumption of processed and RTE foods placed India among emerging regions

TABLE 163 INDIA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 164 INDIA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.4.4 SOUTH KOREA

14.4.4.1 Development of spray drying labs in industrial and chemical sectors to drive demand for spray drying equipment

TABLE 165 SOUTH KOREA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 166 SOUTH KOREA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.4.5 AUSTRALIA

14.4.5.1 Spray drying equipment witnesses high demand in resins and polymers industries

TABLE 167 AUSTRALIA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 168 AUSTRALIA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.4.6 REST OF ASIA PACIFIC

TABLE 169 REST OF ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 170 REST OF ASIA PACIFIC: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.5 REST OF THE WORLD

TABLE 171 ROW: SPRAY DRYING EQUIPMENT MARKET, BY COUNTRY, 2017–2021 (USD MILLION)

TABLE 172 ROW: SPRAY DRYING EQUIPMENT MARKET, BY COUNTRY, 2022–2027 (USD MILLION)

TABLE 173 ROW: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 174 ROW: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

TABLE 175 ROW: SPRAY DRYING EQUIPMENT MARKET, BY DRYING STAGE, 2017–2021 (USD MILLION)

TABLE 176 ROW: SPRAY DRYING EQUIPMENT MARKET, BY DRYING STAGE, 2022–2027 (USD MILLION)

TABLE 177 ROW: SPRAY DRYING EQUIPMENT MARKET, BY CYCLE TYPE, 2017–2021 (USD MILLION)

TABLE 178 ROW: SPRAY DRYING EQUIPMENT MARKET, BY CYCLE TYPE, 2022–2027 (USD MILLION)

TABLE 179 ROW: SPRAY DRYING EQUIPMENT MARKET, BY OPERATING PRINCIPLE, 2017–2021 (USD MILLION)

TABLE 180 ROW: SPRAY DRYING EQUIPMENT MARKET, BY OPERATING PRINCIPLE, 2022–2027 (USD MILLION)

TABLE 181 ROW: SPRAY DRYING EQUIPMENT MARKET, BY FLOW TYPE, 2017–2021 (USD MILLION)

TABLE 182 ROW: SPRAY DRYING EQUIPMENT MARKET, BY FLOW TYPE, 2022–2027 (USD MILLION)

TABLE 183 ROW: SPRAY DRYING EQUIPMENT MARKET, BY CAPACITY, 2017–2021 (USD MILLION)

TABLE 184 ROW: SPRAY DRYING EQUIPMENT MARKET, BY CAPACITY, 2022–2027 (USD MILLION)

TABLE 185 ROW: SPRAY DRYING EQUIPMENT MARKET, BY APPLICATION, 2017–2021 (USD MILLION)

TABLE 186 ROW: SPRAY DRYING EQUIPMENT MARKET, BY APPLICATION, 2022–2027 (USD MILLION)

14.5.1 SOUTH AMERICA

14.5.1.1 Increase in consumption of dairy products to offer growth potential for spray drying equipment manufacturers in this sector

TABLE 187 SOUTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 188 SOUTH AMERICA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.5.2 MIDDLE EAST

14.5.2.1 Increase in consumption of convenience food and processed food products to drive market

TABLE 189 MIDDLE EAST: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 190 MIDDLE EAST: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

14.5.3 AFRICA

14.5.3.1 Use of spray drying equipment to produce agrochemicals drives growth in food industry

TABLE 191 AFRICA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2017–2021 (USD MILLION)

TABLE 192 AFRICA: SPRAY DRYING EQUIPMENT MARKET, BY PRODUCT TYPE, 2022–2027 (USD MILLION)

15 COMPETITIVE LANDSCAPE

15.1 OVERVIEW

15.2 MARKET SHARE ANALYSIS

TABLE 193 SPRAY DRYING EQUIPMENT MARKET SHARE (CONSOLIDATED)

15.3 KEY PLAYER STRATEGIES

15.4 SEGMENTAL REVENUE ANALYSIS OF KEY PLAYERS

FIGURE 47 SEGMENTAL REVENUE ANALYSIS OF KEY PLAYERS IN MARKET, 2019–2021 (USD MILLION)

15.5 COMPANY EVALUATION QUADRANT (KEY PLAYERS)

15.5.1 STARS

15.5.2 PERVASIVE PLAYERS

15.5.3 EMERGING LEADERS

15.5.4 PARTICIPANTS

FIGURE 48 SPRAY DRYING EQUIPMENT MARKET, COMPANY EVALUATION QUADRANT, 2022 (OVERALL MARKET)

15.5.5 PRODUCT FOOTPRINT

TABLE 194 COMPANY BY PRODUCT SOURCE FOOTPRINT

TABLE 195 COMPANY PRODUCT TYPE FOOTPRINT

TABLE 196 COMPANY REGIONAL FOOTPRINT

TABLE 197 OVERALL COMPANY FOOTPRINT

15.6 SPRAY DRYING EQUIPMENT MARKET, STARTUP/SME EVALUATION QUADRANT

15.6.1 PROGRESSIVE COMPANIES

15.6.2 STARTING BLOCKS

15.6.3 RESPONSIVE COMPANIES

15.6.4 DYNAMIC COMPANIES

FIGURE 49 SPRAY DRYING EQUIPMENT MARKET, COMPANY EVALUATION QUADRANT, 2022 (STARTUP/SME)

15.6.5 COMPETITIVE BENCHMARKING

TABLE 198 SPRAY DRYING EQUIPMENT MARKET: DETAILED LIST OF KEY STARTUP/SME

TABLE 199 SPRAY DRYING EQUIPMENT MARKET: COMPETITIVE BENCHMARKING OF KEY STARTUP/SME

15.7 COMPETITIVE SCENARIO

15.7.1 PRODUCT LAUNCHES

TABLE 200 SPRAY DRYING EQUIPMENT MARKET: PRODUCT LAUNCHES, JULY 2019–JUNE 2022

15.7.2 DEALS

TABLE 201 SPRAY DRYING EQUIPMENT MARKET: DEALS, FEBRUARY 2019–AUGUST 2022

TABLE 202 SPRAY DRYING EQUIPMENT MARKET: OTHERS, DECEMBER 2018–JANUARY 2022

16 COMPANY PROFILES

16.1 GEA GROUP

(Business overview, Products offered, Recent developments, Deals, MNM view, Key

Spray Drying Equipment Market by Type (Rotary Atomizer, Nozzle Atomizer, Fluidized, Centrifugal, Closed Loop),...

strengths, Strategic undertaken, and Weaknesses and competitive threats)*

TABLE 203 GEA GROUP: BUSINESS OVERVIEW

FIGURE 50 GEA GROUP: COMPANY SNAPSHOT

TABLE 204 GEA GROUP: DEALS

TABLE 205 GEA GROUP: OTHERS

16.2 SPX FLOW

TABLE 206 SPX FLOW: BUSINESS OVERVIEW

FIGURE 51 SPX FLOW: COMPANY SNAPSHOT

TABLE 207 SPX FLOW: DEALS

16.3 SHANDONG TIANLI DRYING TECHNOLOGY AND EQUIPMENT

TABLE 208 SHANDONG TIANLI DRYING TECHNOLOGY AND EQUIPMENT:
BUSINESS OVERVIEW

16.4 B?CHI LABORTECHNIK

TABLE 209 B?CHI LABORTECHNIK: BUSINESS OVERVIEW

TABLE 210 B?CHI LABORTECHNIK: PRODUCT LAUNCHES

TABLE 211 B?CHI LABORTECHNIK: OTHERS

16.5 EUROPEAN SPRAYDRY TECHNOLOGIES

TABLE 212 EUROPEAN SPRAYDRY TECHNOLOGIES: BUSINESS OVERVIEW

16.6 TETRA PAK INTERNATIONAL S.A.

TABLE 213 TETRA PAK INTERNATIONAL S.A.: BUSINESS OVERVIEW

TABLE 214 TETRA PAK INTERNATIONAL S.A.: DEALS

16.7 DEDERT CORPORATION

TABLE 215 DEDERT CORPORATION: BUSINESS OVERVIEW

TABLE 216 DEDERT CORPORATION: DEALS

16.8 CHANGZHOU LEMAR DRYING ENGINEERING

TABLE 217 CHANGZHOU LEMAR DRYING ENGINEERING: BUSINESS OVERVIEW

16.9 ACMEFIL ENGINEERING SYSTEMS PVT. LTD

TABLE 218 ACMEFIL ENGINEERING SYSTEMS PVT. LTD.: BUSINESS OVERVIEW

16.10 NEW AVM SYSTECH

TABLE 219 NEW AVM SYSTECH: BUSINESS OVERVIEW

16.11 ADVANCED DRYING SYSTEMS

TABLE 220 ADVANCED DRYING SYSTEMS: BUSINESS OVERVIEW

16.12 LABPLANT

TABLE 221 LABPLANT: BUSINESS OVERVIEW

16.13 SWENSON TECHNOLOGY, INC.

TABLE 222 SWENSON TECHNOLOGY, INC.: BUSINESS OVERVIEW

16.14 YAMATO SCIENTIFIC AMERICA

TABLE 223 YAMATO SCIENTIFIC AMERICA: BUSINESS OVERVIEW

TABLE 224 YAMATO SCIENTIFIC AMERICA: OTHERS

16.15 G LARSSON STARCH TECHNOLOGY AB

TABLE 225 G LARSSON STARCH TECHNOLOGY AB: BUSINESS OVERVIEW

TABLE 226 G LARSSON STARCH TECHNOLOGY AB: DEALS

16.16 HEMRAJ ENGINEERING (INDIA) LLP

TABLE 227 HEMRAJ ENGINEERING (INDIA) LLP: BUSINESS OVERVIEW

TABLE 228 HEMRAJ ENGINEERING (INDIA) LLP: DEALS

16.17 SAKA ENGINEERING SYSTEMS PRIVATE LIMITED

TABLE 229 SAKA ENGINEERING SYSTEMS PVT. LTD.: BUSINESS OVERVIEW

16.18 FREUND VECTOR CORPORATION

TABLE 230 FREUND VECTOR CORPORATION: BUSINESS OVERVIEW

16.19 SANOVO TECHNOLOGY GROUP

TABLE 231 SANOVO TECHNOLOGY GROUP: BUSINESS OVERVIEW

16.20 SICCADANIA GROUP

TABLE 232 SICCADANIA GROUP: BUSINESS OVERVIEW

TABLE 233 SICCADANIA GROUP: DEALS

16.21 RAJ PROCESS EQUIPMENT AND SYSTEMS PRIVATE LTD.**16.22 SHACHI ENGINEERING****16.23 SPRAY TECH SYSTEMS****16.24 SHREE SAI EQUIPMENT & SERVICES****16.25 SHANGHAI PILOTECH INSTRUMENT & EQUIPMENT CO. LTD.**

*Details on Business overview, Products offered, Recent developments, Deals, MNM view, Key strengths, Strategic undertaken, and Weaknesses and competitive threats might not be captured in case of unlisted companies.

17 ADJACENT MARKETS**17.1 INTRODUCTION****17.2 LIMITATIONS****17.3 DAIRY PROCESSING EQUIPMENT MARKET****17.3.1 MARKET DEFINITION****17.3.2 MARKET OVERVIEW****17.3.3 DAIRY PROCESSING EQUIPMENT MARKET, BY TYPE**TABLE 234 DAIRY PROCESSING EQUIPMENT MARKET, BY TYPE, 2016–2020
(USD MILLION)TABLE 235 DAIRY PROCESSING EQUIPMENT MARKET, BY TYPE, 2021–2026
(USD MILLION)**17.3.4 DAIRY PROCESSING EQUIPMENT MARKET, BY REGION**TABLE 236 DAIRY PROCESSING EQUIPMENT MARKET, BY REGION, 2016–2020
(USD MILLION)

TABLE 237 DAIRY PROCESSING EQUIPMENT MARKET, BY REGION, 2021–2026
(USD MILLION)

17.4 BEVERAGE PROCESSING EQUIPMENT MARKET

17.4.1 MARKET DEFINITION

17.4.2 MARKET OVERVIEW

17.4.3 BEVERAGE PROCESSING EQUIPMENT MARKET, BY BEVERAGE TYPE

TABLE 238 BEVERAGE PROCESSING EQUIPMENT MARKET, BY BEVERAGE
TYPE, 2017–2025 (USD MILLION)

17.4.4 BEVERAGE PROCESSING EQUIPMENT MARKET, BY REGION

TABLE 239 BEVERAGE PROCESSING EQUIPMENT MARKET, BY REGION,
2017–2025 (USD MILLION)

18 APPENDIX

18.1 DISCUSSION GUIDE

18.2 KNOWLEDGESTORE: MARKETSandMARKETS' SUBSCRIPTION PORTAL

18.3 CUSTOMIZATION OPTIONS

18.4 RELATED REPORTS

18.5 AUTHOR DETAILS

I would like to order

Product name: Spray Drying Equipment Market by Type (Rotary Atomizer, Nozzle Atomizer, Fluidized, Centrifugal, Closed Loop), Cycle, Flow Type (Co-Current, Counter Current and Mixed), Operating Principle, Capacity, Drying Stage, Application - Global Forecast to 2027

Product link: <https://marketpublishers.com/r/S52E5194316EN.html>

Price: US\$ 4,950.00 (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/S52E5194316EN.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