Archimica

Corporate Presentation

Strong. Steady. Focused on Technology.





Archimica at a Glance - Strengths

Vast Experience with the Most Challenging Reagents, Reactions and Substance Classes Known.



Made in Europe



Premium Client Attention



Agile Capacity Availability



Experienced, flexible Technology Transfer, Development and Engineering Team



Highly Flexible Manufacturing and Development



Profile

APIs/GMP Building Blocks - Process Development and Manufacturing. From Clinical to Large Commercial Scale for the Innovative and Generic Industry.

Products

APIs.

Active Pharmaceutical Ingredients.

GMP/non-GMP Building Blocks. Reagents.

Capacities

Typically:

1 to 600 mt annually.

Batch Size 25-2500 kg. synthesis steps 1-8.

Specifically:

2 to 300 mt annually.

Batch Size 50-1500 kg. Synthesis Steps 2-5.

Portfolio

Products.

Generic API Portfolio.

Services.

Custom Development and Manufacturing.

Broad Range of Substance/Therapeutic Classes.

Regulatory/Quality

Track Record of Successful Agency Inspections.
FDA (2017), AIFA (2021).

Broad Scope.

Highly Flexible Permit.
State-of-the-Art Environmental Protection.

Technology/Differentiators

Small Molecules.

Up to OEB4 Potency Level.

Vast Range of the Most Challenging Reagents and Reactions on Industrial Scale.

Company

Global Supply.

More than 50 Countries Actively Supplied.

Backed by Prime Independent Investor.



Market Presence

Customers are relying on Archimica's Products and Services for Quality Medicine Worldwide.

All Therapeutic Classes
All Substance Classes (including Anticancer APIs)

11 Active Products
24 Active Drug Master Files in 39 Countries
200 Active Customers
Supplying more than 50 Countries Worldwide

SAPTM-ERP System



Site Overview

Highly Flexible, Efficient, Experienced GMP Site - Located in Lodi, Italy, close to Milano

Plant



Staff



Total Reactor Volume: 250 m³



170 m³

Multi-Purpose

APIs and GMP intermediates



 $50 \, \mathrm{m}^3$

Large-Volume Product



 30 m^3

Anticancer Products



55% Production

Total Staff Number: 130



25% Quality



10% Engineering & Maintenance



10% Sales & Administration



Manufacturing Overview

Reactor Capacity Supported by a Vast Range of Sophisticated Ancillary Technology

Reactor Capacity



Highly Flexible Multi-Purpose Capacity. Various Materials of Construction.

Stainless Steel - Glass Line - Glass - Hastelloy - Monel - Various.

Temperature Range: -20 to 160°C. Pressure Range: 10 mbar to 6 bar.

Reactor Volume Range: 50 to 10.000 liters.

Centrifuges/Filters



Filters:

Filter Presses - Filter Dryers - Pressure Filters

Centrifuges:

Vertical Axis Top Discharge - Vertical Axis Bottom Discharge - Horizontal Axis Peeler

Dryers



Fluid Bed - Agitated Vacuum Pan -Vacuum Horizontal Agitated -Vacuum Double Cone - PlanexTM - Tray

Ancillary Equipment



Sieves - Ultra Filters - Ion Exchange Chromatography Columns



Multi-Purpose Capabilities - Broad and Flexible

Seamless from 1 kg to 100 mt-Scale - APIs and GMP Intermediates.

Scale	1-10 kg	>10-250 kg	> 1-5 mt	> 5-20 mt	> 5-100 mt	> 10-100 mt	0,1-100 mt
Plant	F5	F2B	F5B	F6B	F7	> F2A	F3B Drying
Reactor Size	0,05-0,1 m ³	0,2-0,8 m ³	3,0-4,9 m ³	3,4-10 m ³	0,7-6,6 m ³	0,8-9,7 m ³	0,1-1 m ³
Temperature Range	-20/120°C		-10/145°C				
Equipment	Reactors Distillation Pressure Filters		Fluid Bed, Double Cone Various				
Construction Materials	Stainless Steel Glass Line	Stainless Steel Hastelloy Monel Stainless Steel Glass Line					Stainless Steel Glass Line
Volume Total: 170 m ³	0,25 m ³	2,75 m³	15 m³	20 m³	60 m ³	72 m³	Volume Total 5,5 m ³



Therapeutic Areas and Substance Classes

Supporting Active Pharmaceutical Ingredient Supply for All Applications.

Therapeutic Areas



Anthrachinones

Benzodiazepinones

Benzophenones

Dibenzazepines

Fluorouracils

Heterocyclic Acidic Acids

Heterotricyclics

Nitroimidazoles

Nucleoside Analogues

Organometallic Complexes

Phospholipids, deacylated

Phtalazines

Purine Analogues
Pyrrole Derivates

Sucrose Sulfates/Complexes

Sulfanilamides Sulfonamides

Tetrazoles, Mono/Bicyclic

Ureas

Substance Classes



Anti-Alzheimer, Cognition Enhancers

Antiacidics, Antiulcers

Antiarrhythmics

Anticancers, Cytostatics

Anticonvulsants

Antidepressives/Anti-Epileptics

Anti-Bipolar Disorders

Antihistaminics, Antiallergics Antihypertensives/Vasodilators

Antiinfectives

Antiinflammatories

Antiobesities

Immunosuppressives



Reactions, Reagents and Solvents

Practically unlimited capability to perform/use the most challenging reactions, reagents and solvents on small, medium and large industrial scale under GMP - a few examples.

Reagents/Reactions



Solvents



1-500 mt/a

SO₃·Py (sulfur trioxide/pyridine)

CISO₃H (chlorosulfonic acid)

CrO₃ (chromium trioxide)

Ac₂O (acetic anhydride)

HOAc (acetic acid)

Py (pyridine)

AlCl₃ (aluminium chloride)

POCl₃ (phosphorous

oxychloride)

1-100 mt/a

NH₂OH (hydroxylamine)

NaOCN (sodium cyanate)

Natural source materials

(lecithin, aloine)

1-20 mt/a

N₂H₄ (hydrazine)

NH₃ (ammonia)

HCHO (acetaldehyde)

HCOOH (formic acid)

HF/HCI/HBr (hydrogen halides)

KCN (potassium cyanide)

CH₃N (trimethylamine)

F₂/Cl₂/Br₂ (halogen gases)

H₂ (hydrogen)

CH₂O (ethylene oxide)

Styrene oxide

Dess-Martin Periodinane

R-SO₂Cl (sulfonyl chlorides)

Ag/Au/Cu-salts (precious metals)

1-500 mt/a

Dimethylacetamide

Ethanol

Acetone

Cyclohexane

Isopropanol

Methanol

1-100 mt/a

Methylene chloride

1,2-Dichloropropane

Tetrachloromethane

Dimethylformamide



Generic API Portfolio

Archimica Continuous API Supply Worldwide.

Active Pharmaceutical Ingredients (APIs)



Anticancer

Cytarabine (nucleoside analogue)

Hydroxyurea (modified urea)

Antirheumatic

Diacerein (anthraquinone)

Anti-Alzheimer/Cognition Enhancer

Glycerophosphoryl-choline (GPC) (deacetylated phospholipid)

Glycerophosphoryl-ethanolamine (GPE) (deacetylated phospholipid)

Antipsychotic

Mianserin (tetracyclic)

Oxcarbazepine (dibenzazepine)

Antiacidic/Antiulcer

Sucralfate (saccharose sulfate)

Antiinfective

Sulfathiazole (sulfonamide)



Generic API Portfolio

Archimica Continuous API Supply Worldwide.

Products on Request - Active Pharmaceutical Ingredients (APIs)



More than additional 20 Active Pharmaceutical Ingredients (APIs) available from Archimica's Experience - including Customer-Specific Development - a selection

Amtolmetin Guacil

Aurothiomalate Sodium

Azanidazole

Bromfenac

Capecitabine

Citicoline

Dihydralazine sulfate

Disopyramide

Fludarabine

Hydralazine hydrochloride

Iodocasein

Lithium Carbonate

Pentetrazole

Pirenzepine Dihydrochloride

Sulfapyridine

Thenfadil

Tolmetin

Vidarabine



Quality System, Inspections, Certificates

Sucessfully Inspected and Accepted Worldwide.

Quality System



Inspections



Certificates



Quality System Based on EU GMP part II, ICH Q7.

Quality Processes Handled via TrackwiseTM.

Deviations, Out-of-Specifications (OOS), CAPA, Change Control.

US/EU Drug Master Files.

24 Active Drug Master Files in 39 Countries and 4 active CEP.

FDA (USA).

Last Inspection April 2017.

AIFA (Italy).

Last Inspection December 2021.

KFDA (Korea).

Last Inspection October 2011.

Veterinary Ministry of Health. Last Inspection June 2019.

GMP Certificate (Human).

IT-API/104/H/2020.

GMP Certificate (Veterinary).

NBF/31/2020/V.

FFI Number

3002874947

DUNS Number.

429351620



Infrastructure - Operating Permits

Integrated Responsibility for Environment, Health and Safety.

Environment & Health



Safety



Residual Thermal Oxidizer.

All Waste Gas Streams.

Waste Water Treatment on Site.

Backed by External Partners.

Solvent Recovery.

Backed by Flexible Tank Farms.

IPPC-based Authorization.

Integrated Pollution Prevention and Control.

Highly flexible and broad permit for all technologies, reagents and solvents.

Compliance with IED Directive 2010/75/UE.

Best Available Technology.

Compliance with Directive 105/15 2012/18/EU.

Seveso Directive.

Prevention and Control of On-Shore Major Accident Hazards involving Dangerous Substances.



History

Archimica's Evolution - 75 Years of Continuity of Supply into the World's Pharmaceutical Market.

1947) 1984	2008	2012	2016	2019
Foundation of Istituto Chemioterapico Italiano (I.C.I.)	Foundation of Prime European Therapeuticals	Mandarin Capital Partners becomes	Clessidra, an Italian Financial Fund	AMRI acquires Euticals Group	Livia acquires Lodi Site, it becomes Archimica
,	S.p.A (Euticals)	Majority Euticals Shareholder	becomes Majority Euticals Shareholder	•	LIVIA I NTERNATIONAL VENTURES & I NVESTMENT ACTIVITIES www.livia-group.com



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