



F PLUS HEALTHCARE TECHNOLOGIES

Brilliant science discovers the cure;
Our engineering ensures the world can actually hold it in their hands.

www.fplushealthcare.com



F Plus Healthcare Technologies

In a world that changes on a dime, you need a partner that thinks ten steps ahead.

COMPREHENSIVE PHARMACEUTICAL MACHINERY AND
TURNKEY SOLUTIONS TAILORED FOR EVERY STAGE OF
YOUR PRODUCTION.





About F Plus Healthcare Technologies

We provide a unified manufacturing ecosystem that covers the entire lifecycle from **initial processing to final packaging**. Whether you are scaling OSD, Topicals, or complex Bio-similars, we provide the technical synergy required to turn a manufacturing floor into a competitive advantage.

Choosing 'F Plus' means moving beyond the constraints of "standard" equipment as we don't do "one-size-fits-all."

We empower our partners to innovate beyond the horizon of 'standards', making life-saving medicine more accessible to the world for **now & beyond**.



Turnkey Partner
From Concept to
commissioning



Global Reach
Serving Clients worldwide

**200+ Strong force of
'Plus Team'**



For Now & Beyond





-4 MEGA FACTORIES-

State of the art world-class facilities engineered to the highest global standards, our factories are more than just production floors, they are the beating heart of pharmaceutical innovation. Every square foot is a testament to our relentless pursuit of perfection, where cutting-edge infrastructure, advanced automation, and human expertise converge to create machinery that the world's leading pharmaceutical companies trust.

This recognition stands as a powerful affirmation of our unwavering commitment to excellence underscoring not only the superior quality of our products, but also the operational mastery that continues to redefine industry standards for efficiency, precision, and on-time delivery.



F+ INDIAN BY HEART GLOBAL BY SPIRIT

WE ARE THE FASTEST GROWING INDIAN PHARMACEUTICAL EQUIPMENT BRAND

1225+

MACHINES INSTALLED

35+

COUNTRIES SERVED

12+

YEARS IN BUSINESS

OUR NETWORK PARTNERS

SPREAD ACROSS WORLDWIDE STRATEGIC LOCATIONS

South East Asia

-  Vietnam
-  Malaysia
-  Indonesia
-  Philippines
-  Thailand
-  Singapore

Middle East & Africa

-  UAE
-  Saudi Arabia
-  Jordan
-  Lebanon
-  Morocco
-  Tunisia
-  Algeria
-  Uganda
-  Syria
-  Egypt

ASIA & OTHERS

-  Russia
-  Bangladesh
-  Nepal
-  Sri Lanka
-  Mexico
-  Argentina

4.0 AND IIOT

INDUSTRY 4.0 READY-EQUIPMENT WITH
SMART DATA INTEGRATION, CONNECTIVITY
AND ANALYTICS CAPABILITIES

AUTOMATION PARTNERS



Business Verticals

COMPREHENSIVE PHARMACEUTICAL MACHINERY AND TURNKEY SOLUTIONS TAILORED FOR EVERY STAGE OF PRODUCTION.



Oral Solid Dosage

Complete granulation, compression, coating and capsule filling lines designed for high-efficiency tablet and capsule production.



Oral Liquid

Integrated processing and filling solutions for syrups, suspensions, and drops with precision dosing.



Cream & Ointment

High-shear vacuum emulsification and tube filling systems for consistent semi-solid formulations.



Injectable (Sterile)

Advanced aseptic processing lines for vials, ampoules, and PFS with barrier technology integration.



Containment & Isolators

Isolator solutions for upto OEB 5 Level of containment. cRABS & cRABS for to fully comply with requirements for aseptic processing



Cleanroom Solutions

Modular GMP panels, HVAC systems, and Cleanroom equipment designed for ISO 14644 compliance and safety.



Water systems & Biosimilars / Vaccines

State-of-the-art bioreactors and downstream systems for efficient biologics and vaccine manufacturing. Water purification, storage and distribution systems



Technology Partnerships

Exclusive collaboration with global leaders for technology like Sachet/Stick Packing machine, Confectionery Manufacturing Line, and Vision Inspection Systems.



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Oral Solid Dosage (OSD)

From development to high-volume production of tablets and capsules, we engineer efficient, cGMP-compliant OSD lines designed for quality by design (QbD).

The equipment are compliant with all leading regulatory bodies including US-FDA, Eu-GMP, UK-MHRA, TGA, WHO-gmp, etc

...



INNOVATION LAB TRIAL CENTRE: ACCELERATE SCALE-UP DECISIONS

Trial-ready equipment for
1 to 5 kg experiments





INTEGRATED GRANULATION LINE

Closed-Loop, dust-free process cycle.
Compliant with OEB 4/5 level of
containment





Oral Solid Dosage | Granulation Line

Mix⁺ Series

F PLUS MIXING RANGE: THOROUGH MIXING & HOMOGENIZING

Built for effortless and
Guaranteed scale up from
0.5 Ltr to 2000Ltr





HIGH SHEAR MIXER GRANULATOR | MIX⁺ HSMG

Capacity ranging from 0.5 Ltr to 2000 Ltr.

- + **Precise Endpoint Control** for accurate granulation detection.
- + **Explosion-Proof Variants** suitable for hazardous environments.
- + **Sealed Impeller Design** preventing particle ingress.
- + **Jacketed Bowl** for temperature-sensitive formulations.
- + **Optimized Mixing System** ensuring uniform granulation and effective delumping.
- + **In-line wet milling** for breaking the wet lumps.
- + Scada software to process data acquisition in accordance with **FDA 21 CFR Part 11**





MIX⁺ Series

RIBBON MIXER | MIX⁺ RM

Scale up from 0.5 Ltr to 2000 Ltr.

- + Robust ribbon-type mixing blades ensure efficient processing of large material volumes.
- + Ideally suitable for dry mixing application
- + Non-contact type shaft sealing system with positive air / nitrogen purge arrangement, designed to prevent ingress of product and eliminate generation of black particles due to seal wear



MASS MIXER | MIX⁺ MM

Scale up from 0.5 Ltr to 2000 Ltr.

- + Heavy-duty blades ensure uniform blending, particularly for moist products
- + Horizontal design ensure that machine can be accommodated in rooms even with less height





Oral Solid Dosage | Granulation Line

FBE* Series

'F PLUS' FLUID BED EQUIPMENTS: DRYING, PROCESSING & COATING.

Built for effortless and
Guaranteed scale up from
0.5 Ltr to 2000 Ltr.





FBE⁺ Series



FBD⁺



Ensures rapid, consistent drying across batches with up to 60% reduction in drying time.
Provision for manual as well as dust-free product charging.
Tool-free assembly and smooth surfaces reduce cleaning time by up to 90%.

FBC⁺



Our versatile Fluid Bed Coater (FBC) maximizes process efficiency and flexibility, combining top-spray granulation, Wurster pellet coating and tangential coating in a single system using spray nozzle. Proven in pharmaceutical and nutraceutical applications, it delivers precise, scalable processing in a compact design.

FBP⁺



The Fluid Bed Processor (FBP) is engineered for high-performance granulation and drying, delivering top-spray granulation, wet-mass drying with exceptional safety. Advanced process control ensure reliable, scalable processing and consistent results.



ATD⁺ | AIR TRAY DRYER



- + Ideally suited for drying powders, granules, chemicals, and pharmaceutical APIs.
- + Heating is available via electric or steam (or both combined) for process flexibility.
- + Steam-operated models feature a temperature range of 30°C to 100°C.
- + Features a 5-micron pre-filter at the inlet for clean air circulation.
- + Special blower design ensures uniform air current over the entire charge.

VTD⁺ | VACUUM TRAY DRYER



- + Max shelf temperature up to 150°C when utilizing Thermic Fluid for the heating system.
- + Hollow pad-type heating shelves are easily removable for maintenance access.
- + Includes a dedicated fluid heating and circulating system (steam or electrically heated).
- + Condenser and receiver are fixed on the dryer body or can be stand-alone.
- + Halar-lined internals available for highly corrosive applications.



ROLL COMPACTOR | RC⁺

Processing range of upto 500kgs/hr with specialized PAT features & continuous monitoring of processes

- + Suitable for **Dry Granulation process.**
- + Distinct de-aeration systems
- + Automatic pressure control
- + Constant roller gap control systems for uniform output
- + Compacting Roll surface – **Corrugated / Knurled / Briquetted / Smooth / etc**
- + Roller cooling option allows for sensitive materials to be processed without any problems.





Oral Solid Dosage | Granulation Line

MILL⁺ Series

F PLUS MILLING RANGE: POWDER SIZING SOLUTION



PRECISE MILLING



FINE GRINDING



DELUMPING & SCREENING



F⁺



CO-MILL | Mill⁺ CM

Capacities ranging from 60 KGS/HR to 800 KGS/HR

- + Single equipment for **wet and dry granule sizing** using appropriate screens.
- + Efficient breakdown of dry lumps during production.
- + **Round bar** for dry milling; **square bar** for dry, wet, or grating applications.
- + Round, square, grater, conidur, and slotted hole screens available.
- + Suitable for pharmaceutical, nutraceutical, food, chemical, and cosmetic applications.





MILL⁺ DL | DELUMPER



- + Handles throughput up to 1,000 kg^a/h for efficient lump breaking in high-volume production.
- + Processes materials with particle sizes up to 250 µm and densities up to 2 kg/dm³.
- + Operates across -20°C to +60°C for reliable performance in varied conditions.

MILL⁺ HM | HAMMER MILL



- + Through the front cover, the rotor and sieve can be disassembled and installed quickly.
- + Provide a complete range of hammers, screens, and other grinding components
- + Ideal machine to reduce the material more finely and precisely



Mill⁺ CLM | COLLOID MILL



- + High-shear emulsifying, homogenizing, and superfine grinding.
- + Adjustable gap with recirculation for uniform output.
- + Stainless-steel build with easy cleaning and safe operation.

Mill⁺ CMM | COMMUNITING



- + High speed milling, granulating, pulverizing, mixing and size reduction of wet & dry material.
- + Wide range of sieve of perforated and wire-mesh.
- + Interlocked throat hopper and belt guard & Over load relay protection.

Mill⁺ MM | MULTI MILL



- + Comes equipped with both knife and impact edges for versatile milling action.
- + Models are available for R&D, pilot, and full production scale requirements.
- + Can be integrated directly into a closed-loop granulation line for seamless processing.



Oral Solid Dosage | Granulation Line

BLEND* Series

F PLUS BLENDING RANGE:

HOMOGENOUS BLENDING OF
GRANULES WITH EXTRA- GRANULAR
EXCIPIENTS

Built for effortless and
Guaranteed scale up from
0.5 LTR TO 15,000 LTR

Working Volume is between 30% - 70% of Gross
Blender Volume





BLEND⁺ Series

BIN BLENDER | BLEND⁺ BB

Capacities ranging from 0.5 LTR to 3,500 LTR

- + Ideally suited for **multi-product facilities & High potent drugs**
- + Integrate **multiple sizes of Bin** in the same Blending Column
- + Achieves the **highest level of homogeneous mixing** for consistent product quality.
- + Guarantees **bumpless rotation**, ensuring gentle and stable blending of materials.
- + VFD-based speed control provides precise, customizable blending cycles.
- + Equipped with safety guards and a limit switch for enhanced operator protection.





BLEND⁺ Series

OCTAGONAL BLENDER | BLEND⁺ OB

Capacities ranging from 0.5 LTR to 15,000 LTR

- + Designed to handle **large volume batches** and high torque loads.
- + Lower height requirement, making them suitable for standard-height cleanrooms.
- + Working volume is typically maintained between **30% to 70%** of total vessel volume.
- + Automatic product charging using **pneumatic conveying system**.
- + Load cell can be integrated for precised control on product discharge.
- + Adjustable discharge height can be provided upon request.





Oral Solid Dosage | Granulation Line

BLEND⁺ Series

DOUBLE CONE BLENDER | BLEND⁺ DCB

Capacities ranging from 1LTR to 5,000 LTR

- + Provides gentle tumbling with low shear.
- + Suitable for **Fragile, abrasive or heat-sensitive products**
- + Designed to **handle large volume batches** and high torque loads.
- + Material charging can be done through pneumatic conveying system or by using Platform and stairs.
- + Equipped with Proxy switch to stop the Blender when the safety gate is open
- + Automatic product charging using pneumatic conveying system.





V-BLENDER | BLEND⁺ VB

Capacities ranging from 1 Ltr to 5,000 Ltr



- + It helps achieve Macro-mixing by repeated splitting and converging of powder.
- + Ideal for free-flowing dry powders and granules.
- + Equipped with intensifier bar to provide necessary shear to break agglomerates

CUBE BLENDER | BLEND⁺ CB

Capacities ranging from 1 Ltr to 5,000 Ltr



- + Multiaxial movement and sliding friction ensures fast and homogeneous blending.
- + Suitable for High-density powders or material prone to clumping.



SIFT+ Series

VIBRO SIFTER | SIFT+ VB

- + **Single or Multi-Deck** options for varied separation needs.
- + High Throughput from **50 to 1000 kg/hr***.
- + **Fast, Efficient Screening** for powder processing.
- + Customisable product charging and discharge height.



ROTARY SIFTER | SIFT+ RT

- + Throughput up to **1000 kg/hr***, depending on material and screen selection.
- + Compact footprint with **quiet, vibration-free** operation.
- + Suitable for conducting safety screening of raw materials and remove any foreign element from the mix.





Material Handling & Ancillary Equipment

Transfer of powder from Point A to B in a manner with little to no product wastage



SS BINS



SS DRUMS



LIFTER



TIPPER



PRODUCT TRANSFER SYSTEM



PASTE KETTLE



WASH IN PLACE (WIP) SYSTEMS



WIP SKID



WIP TROLLEY



BIN WASHING SYSTEM



SPRAY BALL



Oral Solid Dosage | Tablet Compression

PRESS⁺ Series

TABLET COMPRESSION

BUILD FOR **PRECISE WEIGHT
CONTROL & ULTRA HIGH
VOLUME PRODUCTION**

Features automatic weight control for consistent output, is ideal for bi-layer production, includes auto lubrication for punches, and is specially designed to handle effervescent tablets efficiently.





TABLE-TOP | PRESS⁺ LAB

*It covers the complete R&D related needs for **Single and Bi-layer tablets***

- + Double-sided rotary
- + 6 Ton main compression & 2 Ton Pre compression.
- + 1st layer tablet sampling pneumatic system
- + Double-sided lubrication for upper punches
- + **Sense Force Monitoring System**

D tooling	B tooling	D+B / D+B+BB
8 stn	10 stn	6+6 / 4+4+4 stn
15,360 tabs/hr*	19,200 tabs/hr*	11,520 / 7,680 tabs/hr*
23mm Max Dia	15mm Max Dia	23 / 15 Max Dia





TABLE-TOP MODEL | PRESS⁺ LAB 2.0

Made for R&D application with full compliance to 21CFR Part 11

- + Double-sided rotary | Small footprint | Bilayer Tablets
- + 10 Ton main compression & 4 Ton Pre compression
- + **Auto Weight control (AWC) and single tablet rejection (AFR)**
- + **Load cells for main and pre-compression**
- + 21 CFR Part 11 Compliance with 15⁺ IPC

D tooling	B tooling	BB	D+B+BB	D+B
13 stn	16 stn	19 stn	5+5+5 stn	7+7 stn
27,300 tabs/hr*	33,600 tabs/hr*	39,900 tabs/hr*	10,500 tabs/hr*	14,700 tabs/hr*
25mm Max Dia	16mm Max Dia	13mm Max Dia	25/16/13 Max Dia	25/16 Max Dia





SINGLE ROTARY | PRESS⁺ SR

Low maintenance and most cost-effective tableting solution for production

- + Single-sided rotary | Interchangeable Turret
- + 10 Ton main compression & 10 Ton Pre compression
- + **Auto Weight control (AWC) and single tablet rejection (AFR)**
- + **Load cells for main and pre-compression**
- + 21 CFR Part 11 Compliance with 15" PPC and printing facility
- + Auto-lubrication system & drip-feed lubrication for punches



D tooling	B tooling	BB
20/ 30/49 stn	27/37/61 stn	27/45/75 stn
72,000/ 180,000/ 294,000 tabs/hr	97,200/ 222,000/ 366,000 tabs/hr	118,800/ 270,000/ 450,000 tabs/hr
25mm Max Dia	16mm Max Dia	13mm Max Dia



DOUBLE ROTARY | PRESS⁺ DR

A beast meant for high-volume, high accurate production needs

- + Double-sided rotary | Interchangeable Turret
- + 10 Ton main compression & 4/10 Ton Pre compression
- + **Auto Weight control (AWC) and single tablet rejection (AFR)**
- + **Load cells for main and pre-compression**
- + 21 CFR Part 11 Compliance with 15" PPC and printing facility
- + Auto-lubrication system & drip-feed lubrication for punches

D tooling	B tooling	BB
27 / 37 / 49 / 51 stn	35 / 45 / 61 / 61 stn	45 / 61 / 73 / 75 stn
155,520 / 2664,00 / 470,400 / 367,200 tabs/hr*	201,600 / 324,000 / 585,600 / 439,200 tabs/hr*	259,200 / 439,200 / 700,800 / 540,000 tabs/hr*
25mm Max Dia	16mm Max Dia	13mm Max Dia





EFFERVESCENT | PRESS⁺ EF

Efficiently designed to eliminate the challenges of effervescent compression.

- + Single-sided rotary tablet press designed especially for effervescent tablets.
- + Features 10-ton main compression force for robust tablet formation.
- + Manual hand pump lubrication system and drip feed for punches minimize maintenance.
- + Gravity feed frame included to handle low-density effervescent powder.

D tooling	B tooling	BB
27/37/49/51 stn	35/45/61/61 stn	45/61/73/75 stn
155,520/266,400/470,400/ 367,200 tabs/hr*	201,600/324,000/585,600/ 439,200 tabs/hr*	259,200/439,200/ 700,800/540,000 tabs/hr*
25mm Max Dia	16mm Max Dia	13mm Max Dia





TABLET COATING

THE BENCHMARK FOR HIGH-PERFORMANCE TABLET COATING

The Coat⁺ nozzle by Schlick enhances process efficiency and operational handling, while the integrated wash-in-place (WIP) system ensures thorough and reliable cleaning during product changeovers.





AUTOCOATER | COAT⁺

Capacities ranging from 500 grams to 1000 Kgs

- + Capable of **film, enteric, and sugar coating** in a single equipment.
- + Features **anti-bearding spray nozzle** for cleaner, consistent application.
- + Ensures automatic charging and discharging of tablets for efficient continuous operation.
- + Features interchangeable pans for flexible batch sizes and product changeover.
- + Perfect scalability to cover variety of Batch Size ranging from **500 grams to 1000 Kgs**
- + Equipped with Mass Flow meter to monitor exact flow-rate of coating solutions and hence give better control over coating process





CONTAINED COATER | COAT⁺ SAFE

High Potent Application

- + Containment Models for coating high potent drugs complying with **OEB 4 & 5 Standards**.
- + Charging and discharging of tablets using containment valves.
- + Incorporate all features provide in Standrad Coat⁺ Series
- + Up to 4 interchangeable pans possible to accomodate wide-range of batch sizes





PRECISE CONTROL OVER CRITICAL PROCESS PARAMETERS (CPP)

- + Inlet air, Exhaust air & Tablet Bed Temperature
- + Spray Rate (Coating Solution Application Rate)
- + Atomization Air Pressure
- + Relative Humidity of Process Air
- + Gun-to-Bed Distance (Spray Distance)
- + Pan Speed
- + Coating Solution Properties (Viscosity, solid content, and pH)
- + Air Flow Rate (Inlet and Exhaust)



ANTI-BEARDING SPRAY NOZZLE (ATEX VERSION NOZZLE)

WITH TOOL-LESS DESIGN FOR EASY DISMANTLING

CAPSULE FILLING LINE

ACHIEVE **MICRO-DOSING UPTO 15MG & ULTRA HIGH PRODUCTION VOLUME**

We bring to you an integrated 'Capsules & Encapsulation' solutions, with wealth of knowledge that has supported encapsulation of over 3,000 formulations worldwide.





R&D Series



R&D SOLID

*Output range from 3,000 to 25,000 capsules per hour**

- + Allows filling up to four capsule sizes using a single format part
- + Capable of filling powders, pellets, tablets, micro-tablets, capsules, soft gels, and their combinations
- + Scales seamlessly from R&D to pilot batches on the same machine



R&D LIQUID

*Output range from 1,000 to 4,000 capsules per hour**

- + Equipped with “**no-capsule-no-fill**” sensors
- + Can handle formulations with viscosity ranging from **5 to 2000 cps**
- + Built-in nitrogen / inert gas purging system
- + Enables easier filling of capsules with pastes, hot melts, and thixotropic solutions



PF SERIES

*Higher output Batch Production, fills **powder / pellets, micro tablets, capsules, soft gels and their combinations in capsules.***

MODEL	OUTPUT MAX/Hr*	Number of stations	Holes per Segment	Capsule Size	Standard Voltage	Rated Power- KW	Net Weight- KG
PF 25	25,000*	8	4	#000 - #5	220/380 / 415V 3PH 50/60Hz 3 Phase	Approx 1	1200
PF 40	40,000*	8	6			Approx 1	1300
PF 90	90,000*	10	14			Approx 1.5	2350
PF 150	150,000*	12	18			Approx 2.0	2850
PF 200	200,000*	10	26			Approx 2.0	3250





XTR SERIES - FEATURES

Higher output with greater flexibility.

Weight Accuracy

Accurate fills with a weight variation of $\pm 1\%$.

CRN Coating

Special pharma-grade coating with inherent anti-sticking properties.

Automation

Proximity sensor-based active and idle cycles for smooth operations.

Digital Gauges

German-made gauges for accurate readings.

Double-lined Oil Seals

No-contact oil seals to prevent product contact from internal and external areas.

PEEK Bushes

Food-grade materials compliant with FDA guidelines.

Two-way Mount + Wheel Mechanism

Designed to withstand and move loads up to 3.5 tonnes.

Turret Assembly

High-grade HE 30 aluminium and hardened shafts.

Servo Drive Indexer

Highly efficient drive mechanism for enhanced safety.

Power Lock Mechanism

Key + locking bush to lock CAM and timer pulleys.

360° Indicator Lights

LED strip lights for clear and powerful visual status indication.

Powder Assembly (Sliding Gate Mechanism)

Crafted with hardened CRN coating for exceptional accuracy and resistance to bending.



**XTR Series****XTR SERIES***Higher output with greater flexibility.*

MODEL	OUTPUT MAX/Hr*	Number of stations	Holes per Segment	Capsule Size	Standard Voltage	Rated Power- KW	Net Weight- KG
XTR 25	25,000*	8	4	#00, #0, #0EL, #1, #2, #3, #4, #5	220/380 / 415V 3PH 50/60HZ	Approx 4	900
XTR 40	40,000*	8	6			Approx 4	1000
XTR 90	90,000*	10	14			Approx 6	1000
XTR 200	20,00,000*	10	26			Approx 12	3000



POWDER



PELLETS



MICROTABLETS



TABLETS



CAPSULES



LIQUID



SOFTGEL CAPSULE

Filling capability inside capsules

LIQUID FILLER | LF SERIES

Works best with medium to large batches.



- ✦ Equipped with 'no-capsule-no-fill' sensors to ensure precise operation.
- ✦ Features a built-in nitrogen purging system to protect sensitive products.
- ✦ Capable of filling liquids, pellets, tablets, micro-tablets, capsules, and soft gels.

MODEL	OUTPUT	CAPSULE SIZE
LF R&D	1000 TO 4000 Capsules/hr*	00-5
LF 20	20,000 Capsules/hr*	00-5
LF 40	40,000 Capsules/hr*	00-5
LF 70	70,000 Capsules/hr*	00-5





BAND SEALER | BS SERIES

Works best with medium to large batches.

- + Loading: Features a three-drum loading and orientation system.
- + Replenishment: Provision for both manual and automatic gelatin bath replenishment.
- + Viscosity: Option for automatic viscosity control and a gelatin recycling system.
- + Drying: Improved drying through dual blowers for both suction and discharge.

MODEL	OUTPUT	CAPSULE SIZE
BS 70	70,000 Capsules/hr*	00-5
BS 40	40,000 Capsules/hr*	00-5
BS 20	20,000 Capsules/hr*	00-5



CONTAINMENT SERIES

High level containment capsule filling machine with **Wash-in-Place** system

- + HEPA filtration, RTP, glove ports, and high-precision dosing, all under controlled negative pressure.
- + Ensures safe, fully contained material transfer during both charging and discharge.
- + OEB Level 5 certified for highly potent and cytotoxic applications; seamlessly integrates with check weighers, metal detectors, and de-dusters.



CONT. PF R&D	00-5	3,000 Capsules/hr*	1-10 µg/m ²
CONT. PF 25	00-5	25,000 Capsules/hr*	1-10 µg/m ²
CONT. PF 40	00-5	40,000 Capsules/hr*	1-10 µg/m ²
CONT. PF 90	00-5	90,000 Capsules/hr*	1-10 µg/m ²



SAF Series



SAF - SL

Minimum downtime with *higher productivity*.

- + Features a semi-automatic loading station.
- + Features a semi-automatic filling station.
- + Capable of filling capsules with powders and pellets.
- + Reduces operator workload.
- + Facilitates working on a wide range of products.
- + **20,000 to 25,000 capsules per hour***.



SAF - DL

- + A semi-automatic **double loader** capsule filling machine.
- + Ideal for pilot-scale operations.
- + High versatility within a compact footprint.
- + Easy and quick capsule size and product changeover.
- + Capable of filling both powders and pellets.
- + **25,000 to 30,000 capsules per hour***.



ANCILLARY EQUIPMENT



PRODUCT TRANSFER SYSTEM



CHECK WEIGHER



DE DUSTING AND
POLISHING MACHINE



EMPTY CAPSULE SORTER
ELEVATOR



EMPTY SORTER ES - 100



MCS FCS 100 / MCS FCS 200



FILLED CAPSULE ELEVATOR
UNIT



METAL DETECTOR

PACKING PERFECTED

ENGINEERED SYSTEMS FOR CONTROLLED ENVIRONMENTS

Built on precision, driven by performance, and refined for the spaces to meets uncompromising quality to support environments that demand excellence.



FLAT FORMING & FLAT SEALING | Pack⁺ FFS

High capacity of up to **450 Blisters/min***, capable of packing **Tablet, Capsule, Vials, Ampoule**.



- + High Speed Machine With Dynamic AI
- + Programming Add-Up with 6 Servo Motor for precise Control
- + Universal brush feeder/Dedicated feeder
Servo Oscillating Feeding System

DESCRIPTION	COLD FORMING	THERMO FORMING
Base Foil Width	300 MM	300 MM
Base Foil Thickness	0.13 MM	0.25-0.35 MM
Base Foil Material	Aluminum	PVC/PVDC/ACLAR/OPAQUE/TRIPLEX
Base Foil Reel Diameter	440 MM (Max.)	
Sealing Foil Width	300 MM	
Sealing Foil Thickness	0.025 MM	0.025 MM
Sealing Foil Material	Aluminum	Aluminum / CR Foil / Laminated Paper
Sealing Foil Reel Diameter	220 MM (Max.)	
Max. Packet Forming Area	290 X 180 MM	
Max. Forming Depth	10 MM	12 MM
Machine Speed upto.	Forming Speed up to 50 strokes/Min./ (depend on packet size)	
Machine Weight	4850 KG.	
Machine Size (LXWXH)	4900 X 1050 X 2150 MM	
Electrical Requirement	415 V AC, 3 Phase, 20KW, 50 Hz, 5 Core Copper wire, 10 sq. MM	
Chilled Water Requirement	5 Liters/min at 10° C to 16° C at 3 bar	
Additional Safety	Air Dryer, Voltage Stabilizer	
Compressed Air Requirement	450 Liters/min at 6 bar	

ROTARY FORMING & ROATARY SEALING | PACK⁺ RFS

High capacity of up to 2500 tablets per minute*.



- ✦ Production capacity upto 2500 Tablets per/min
- ✦ Capacity of up to 415 ampoules / vials per minute
- ✦ Features a blister inspection system with a rejection mechanism
- ✦ Includes an autofeeder for both ampoules and vials
- ✦ Equipped with Print Registration Control (PRC) for accurate pack-to-print alignment

DESCRIPTION	THERMO FORMING
Base Film Width Max	210 MM
Base Film Thickness Max	0.25 - 0.4 MM
Base Film Material	PVC / PVDC / ACLAR / OPAQUE / TRIPLEX
Sealing Foil Width Max	206 MM
Sealing Foil Thickness Max	0.02 - 0.04
Sealing Foil Material	Aluminium / CR Foil / Laminated Paper
Pack Length	200 MM
Pack Width	100 MM
Forming Depth for Ampoule / Vial	16 MM / 20 MM
Forming Depth for Tablet / Capsule	12 MM
Max. Output	Upto 1200000 Tablet - Capsules per shift (8 Hrs.)*
Cutting Speed	Upto 200000 Ampoule - Vials per shift (8 Hrs.)* Upto 100 Strokes/min for Tablet - Capsule
Machine Dimension (L X W X H)	3200 X 1000 X 1800 MM
Electrical Input	3 Phase, 6.5 KW, 50 Hz, 5 Wire, 2.5 Sq. MM
Chilled Water Requirement	100 Liters of chilled water / hour at 16°C Temperature
Additional Safety	Air Dryer, Voltage Stabilizer
Compressed Air Requirement	Dry Air with 6 Bar continuous Pressure (15 CFM)

LAB MODEL - FLAT FORMING & ROATARY SEALING | PACK+ LAB

Calibrated Speed of upto 15 Strokes/Min.*



- ✦ Servo Based System with roller indexing
- ✦ Equipped with Scrap Winder for handling scrap
- ✦ Option to integrate embossing

DESCRIPTION	COLD FORMING	THERMO FORMING
Base Film Width	150 MM	150 MM
Base Film Thickness Max	0.13 MM	0.25-0.4 MM
Base Film Material	Aluminium	PVC/PVDC/ACLAR/OPAQUE/TRIPLEX
Base Foil Reel Diameter	440 MM-Max (Foil Reel core Dia 72-76 mm)	
Sealing Foil Width	150 MM	
Sealing Foil Thickness	0.025 MM	0.025 MM
Sealing Foil Material	Aluminum	Aluminum / CR Foil / Laminated Paper
Sealing Foil Reel Diameter	210 MM-Max (Foil Reel core Dia 72-76 mm)	
Max. Packet Forming Area	140 X 95 MM	
Max. Forming Depth	10 MM	0.025 MM
Machine Speed upto	10-15 Strokes / Min	
Machine Weight	650 KG.	
Machine Size (LXWXH)	1500 x 450 x 1350 MM	
Electrical Requirement	1 Phase, 3 KW, 50 Hz, 3 Wire, 2.5 Sq. MM	
Chilled Water Requirement	100 Liters of chilled Water / Hour at 16° C Temperature	
Additional Safety	Air Dryer, Voltage Stabilizer	
Compressed Air Requirement	Dry Air with 5 Bar continuous Pressure (20 CFM)	



STRIP PACKING | PACK⁺ STP

Suitable for **tablets**, **capsules**, **bolus**, and similar products

Handles most heat-sealable foils such as paper-poly, glassine-poly, and cellophane-laminated aluminum

Feature	4 – TRACK	6 – TRACK	8 – TRACK
Foil Reel Width	155 MM	210 MM	300 MM
Foil Reel O.D	250 MM Dia	250 MM Dia	250 MM Dia
Foil Reel Core Diameter	76 MM Dia		
Output per min. (Tablets/Min)	500 – 1200	1000 – 1500	1200 – 2000



ORAL LIQUID DOSAGE (O.L.D)

FROM FORMULATION TO FILL

Integrated solutions for **syrups, suspensions, tinctures, and nutraceutical liquids** with precision dosing and hygienic design.





LIQUID MANUFACTURING VESSEL

*Fully customizable vessel for liquid oral plants from
50L to 30,000L*

- + Multi-vessel design including sugar-melting vessel, manufacturing vessel and storage vessel
- + Transfer for sugar/glucose through vacuum
- + In-line high shear mixer for suspensions
- + Filtration system for clear/suspension syrup





LIQUID SYRUP FILLING LINE | FILL+ LF

- + High-speed production with **120 bottles/min*** | **240 bottles/min***
- + Integrated sensor system that prevents filling when a bottle is missing
- + Handles **10 ml to 1000 ml bottles**
- + Integrated line comprising of Air Jet cleaning, Filling, Capping, Induction sealing, Measuring cup placement, Labelling & Inspection machine





DRY SYRUP FILLING LINE | FILL+ DSF

- + High-speed production of **120 bottles/min*** with **tailor-made Auger screws**
- + Automatic set-up of **constant hopper level**
- + The machine works on Augermetric principle with Servo mechanism for lower maintenance and precise and noise free filling.
- + No Bottle – No Fill mechanism – To avoid spillage /wastage of powder in absence of bottle below the filling head.
- + Filling accuracy of upto **±1%**
- + **No powder spillage on bottle outer diameter.**
- + Integrated line comprising of Air Jet cleaning, Auger Filling, Capping, Induction sealing, Measuring cup placement Labelling & Inspection machine



CREAM & OINTMENT

CONSISTENT **TOPICAL**
MANUFACTURING.

Integrated solutions for creams, ointments, gel
and paste with precision **manufacturing,**
transfer and packaging solution.





CREAM & OINTMENT MANUFACTURING VESSEL

Fully customizable vessel with capacity ranging from 5 kgs to 10,000 kgs

- + Three Vessel design for Wax Phase, Water phase & Manufacturing. Additional storage vessel for holding the finished product.
- + Equipped with transfer pump like Lobe pump or metering pump to cater different product viscosity.
- Load cells integrated with the control Panel.





LINEAR TUBE FILLING MACHINE | FILL+ LTF

Servo based precise fillers capable of closing plastic, laminated and aluminium tubes.

- + Indexer mechanism integrated for rotation of disc
- + Leister Hot air technology for heating of tubes
- + Combo model available for both LAMI and ALU tubes
- + Checkweigher can be integrated after filled tube ejection
- + Cartonator integration after filling tube ejection



Single Head	Double Head	Four Head	Six Head
Fill+ TF 60	Fill+ TF 120	Fill+ TF 240	Fill+ TF 300
60 tubes/min*	120 tubes/min*	240 tubes/min*	300 tubes/min*
Suitable tube diameter from 13mm to 40mm			
Filling range from 3ml to 300 ml			



ROTARY TUBE FILLING MACHINE | FILL+ RTF

Most economical and compact automatic tube filler in the market

- + Product Level sensor, detection of reverse, jammed and un-oriented tubes
- + Heating from hopper to nozzle for balm like products
- + Available for both LAMI and ALU tubes
- + Vision system to check right packaging for SKU, illegible printing by ink-jet, bad seal, etc



OUTPUT	FILLING RANGE	TUBE SIZE
upto 50 tubes/min*	5gmTO 150gm	Max Dia: 40mm ; Length: 70mm to 180mm



INJECTABLE (STERILE)



ENGINEERED FOR ASEPTIC EXCELLENCE.

Aseptic processing for **vials, ampoules, cartridges and prefilled syringes** with isolator/RABS integration and stringent contamination control.





STERILE LIQUID MANUFACTURING VESSEL

Vessels capacity ranging from 20 Lit to 30,000 Lit

- + Pharmaceutical Applications - Vials, Ampoules, Cartridges, I.V Fluids, LVP & SVP Solution
- + Biopharmaceutical Applications - Vaccines, Human Insulins, Serums, Plasma fractions, Bacteria and cell cultures
- + Equipped with SCADA software to process data acquisition in accordance with FDA 21CFR Part 11.





Injectable (Sterile) | Liquid & Powder Filling

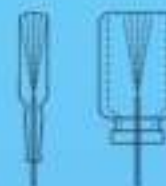
Fill+ Series

FILLING AND PACKING SOLUTION FOR AMPOULES & VIALS

From container decontamination and depyrogenation to liquid and powder filling, closing, and capping, every step of our process is designed to **minimize contamination risk** while delivering consistently high performance.

Designed for **seamless integration with isolators or other containment solutions**, the system preserves the core machine configuration while minimizing human intervention in the processing area.

Equipped with Laminar flow / RABS / Isolator.



Washing



Filling



Sealing



Inspection



Labelling



ROTARY VIAL / AMPOULE WASHING MACHINE

Ultrasonic bath followed by High pressure spray washing



- + Multi-stage washing with dedicated stations for recirculated WFI, PW, and final WFI rinsing to ensure thorough internal and external cleaning.
- + Each wash cycle is followed by compressed air blow-drying with intermittent WFI pulsing, concluding with continuous external drying for complete moisture removal.

LINEAR VIAL/AMPOULE WASHING MACHINE

Single change-parts covers wide range of Vial volumes



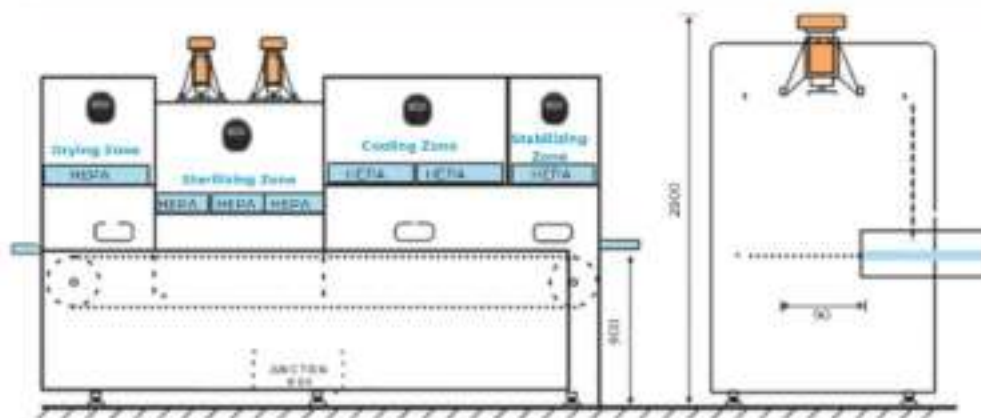
- + No changing of parts is required for washing vials from 5ml to 30ml, ensuring quick and hassle-free changeovers
- + Linear vial & ampoule washing design that minimizes downtime and improves overall operational efficiency



STERILIZATION TUNNEL | FILL+ ST

Continuous de-pyrogenation tunnel for vials of capacity 2ml to 100ml

- + Multi-zone tunnel design featuring infeed, drying, sterilizing, cooling, stabilizing, and outfeed zones to ensure controlled, validated vial processing
- + High-capacity performance delivering upto **220–240* vials/min for 15 ml vials** (26.5 mm diameter) with consistent sterilization and thermal stability

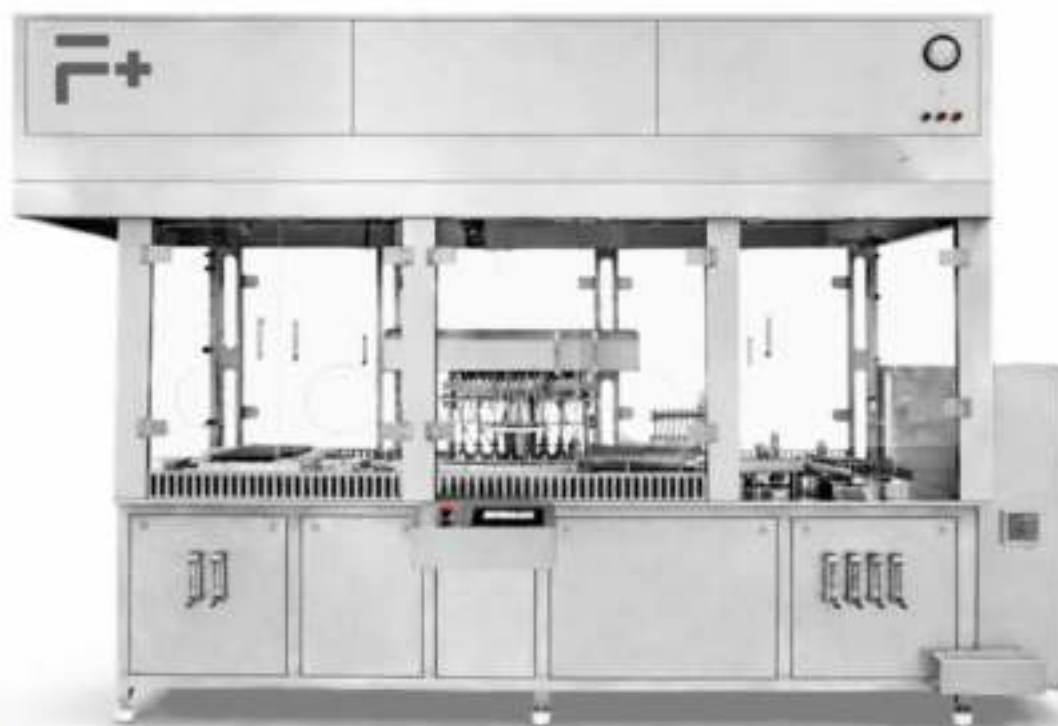




AMPOULE FILLING & SEALING MACHINE

Servo based filling with Co-eccentric nozzles allowing very quick and precise filling

- + High-speed output options of **150 | 300 | 400 | 600 ampoules per minute***, designed for scalable production
- + Wide ampoule compatibility, **handling 1 ml to 25 ml ampoules with consistent accuracy**
- + Advanced control & filling technology featuring servo-driven mechanisms, PLC with HMI, and support for rotary piston or peristaltic pumps for precise, flexible filling





VIAL FILLING MACHINE

Multi-Head Liquid Filling & Integrated Rubber Stoppering

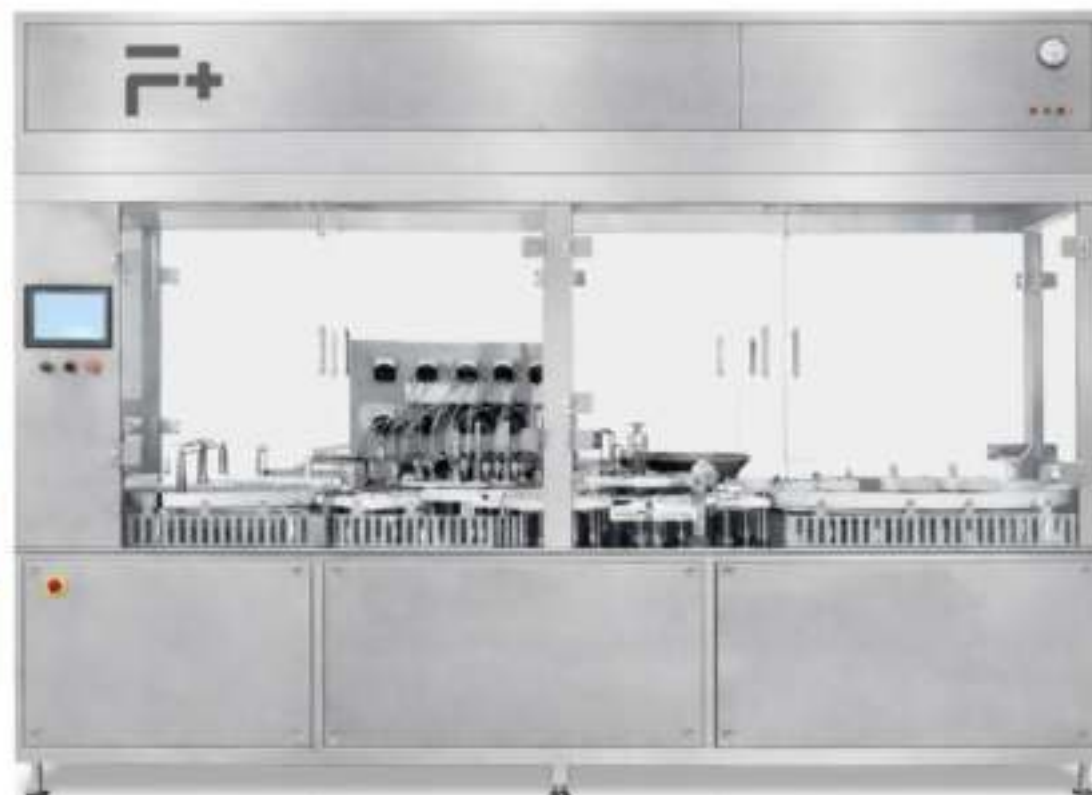
- + Filling volume adjustment and batch printing facility using the HMI/PLC
- + Continuous filling operating as nozzles travel with vials
- + Rotary Vial filling with rubber stoppering & half-stoppering for Lyophilized product.

OUTPUT

120 | 250 | 300 per minute*

PRODUCT RANGE

2 ml to 100 ml Vial





Injectable (Sterile) | Ampoule and Vial Filling Line

Fill+ Series



HIGH SPEED INJECTABLE POWDER FILLING MACHINE

Servo-Driven Precision Powder Filling with Integrated Stoppering.

- + Injectable Powder along with servo media filling attachment using peristaltic pump.
- + Integrated rubber stoppering unit reduces the equipment footprint
Servo based control for powder wheel and vial holding starplate
- + **1500 mg (single dose) | 3000 mg (double dose) | 4500 mg (triple dose) filling range**

OUTPUT

120 | 240 vials per minute*

PRODUCT RANGE

5ml to 100ml



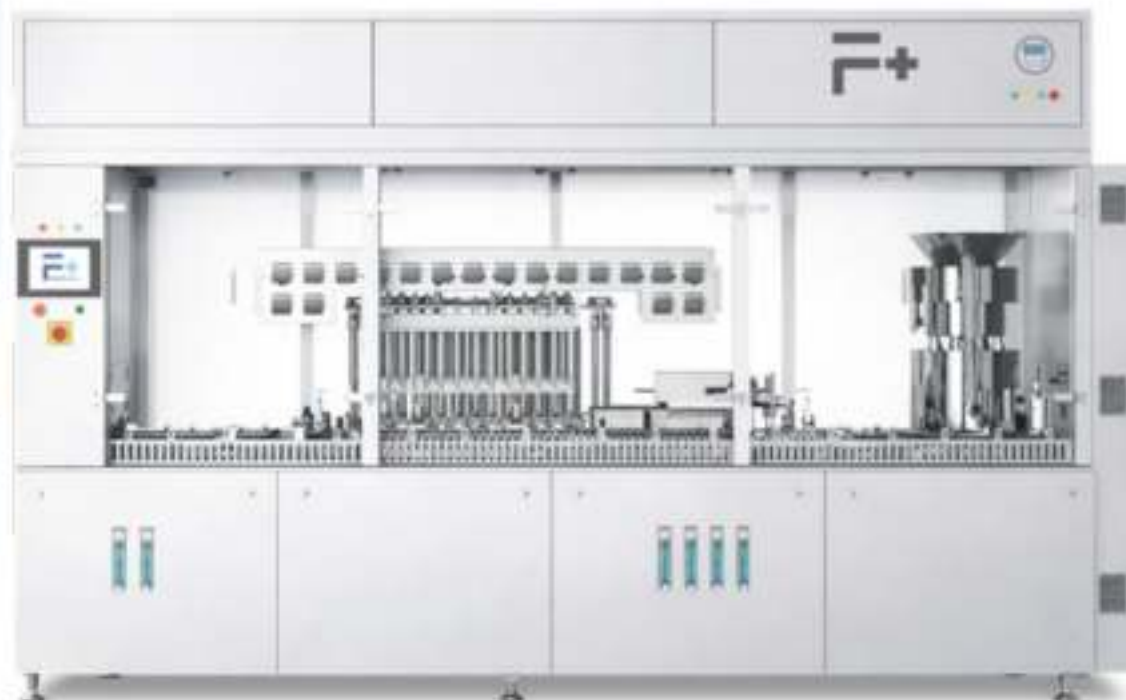


AMPOULE / VIAL (COMBO) FILLING & SEALING MACHINE

Single machine with filling and sealing capability for both Ampoules and Vials

- + Reduced floor space requirement
- + Higher asset utilization
- + Simplified validation and qualification
- + Lower maintenance and spare parts inventory

OUTPUT	PRODUCT RANGE
600 per minute*	1ml to 25ml Ampoules 2ml to 30ml Vials



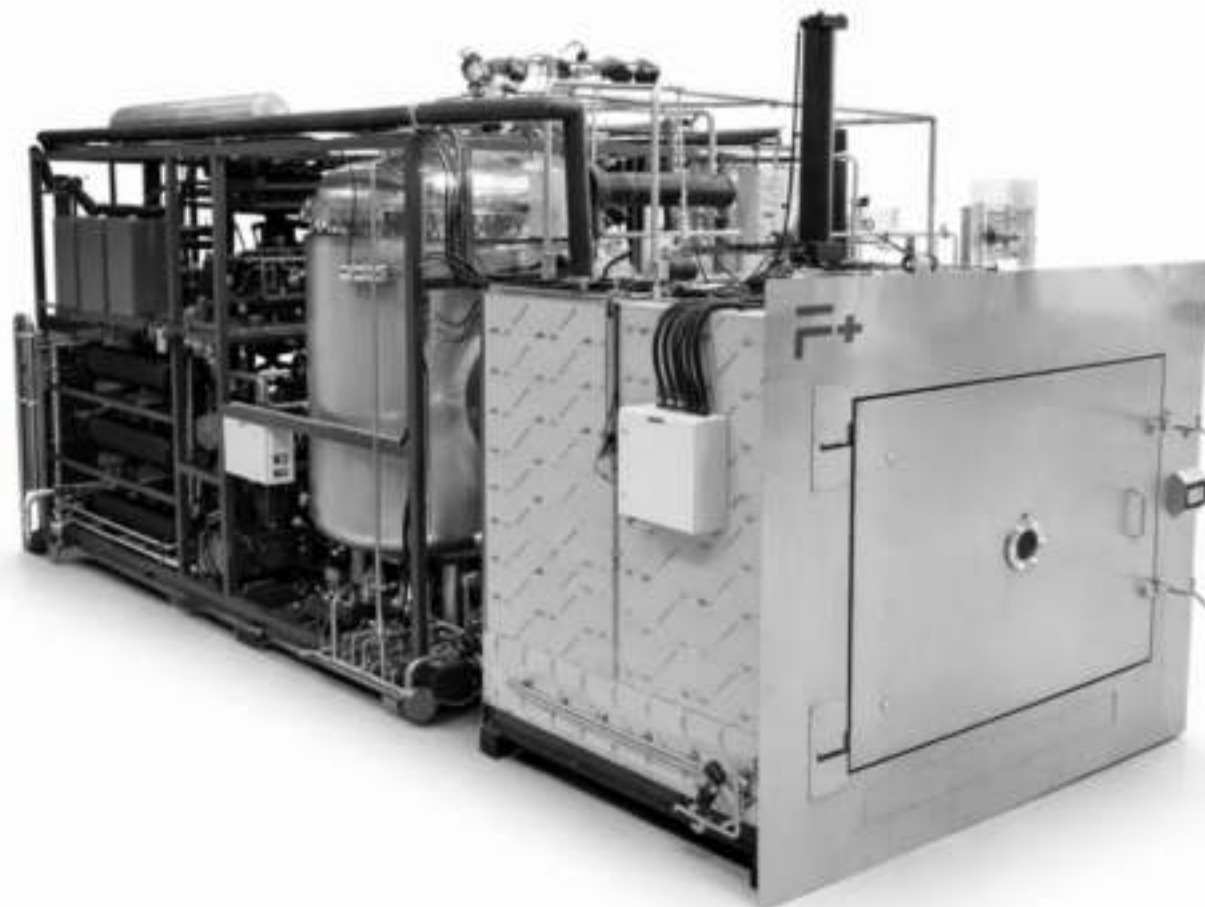


FILL+ LYOPHILIZERS

Advanced lyophilization technology for the development of advanced nucleic acid drugs, cellular drugs, tissue regeneration and other cutting-edge pharmaceutical processes

- + Eliminate the risk of batch loss with our independent backup cooling and vacuum skids designed to keep you running even during component failure.
- + Impressive automatic loading speed of 400 vials per minute and an extraordinary unloading speed of 600 vials per minute.

Features	Specification
Shelf Area	0.5 to 35 m ²
Shelf Interdistance	Up to 130mm
Shelf Temperature	Up to -70 °C
Condenser Temperature	Up to -85 °C
Condenser Capacity	10-800 Kg
Vacuum Level	Up to 5µbar
Leakrate	Up to 10µbar L/S





MULTIHEAD ALUMINIUM CAP SEALING MACHINE

Single motor synchronizes star wheels, capping turret and conveyor with VFD for speed control

- + Spring loaded free spinning sealing rollers eliminate any damage to aluminum caps and allows greater flexibility of variation in the container neck dia.
- + Sealing pressure can be adjusted for different size of caps and gauges.
- Adjustable height of conveyor belt, to align with other
- + machine of the line.

OUTPUT	PRODUCT RANGE
4 Head : 120 Vials*/min 8 Head : 120 Vials*/min 12 Head : 120 Vials*/min	2ml to 100ml Vials





VISUAL VIAL INSPECTION MACHINE

Inspection of vials for breakage and cap seal

- + Available in two and four track model with nylon roller chain.
- + No change-part required for vials between 5ml to 30ml





LABELLING MACHINE

High Speed Sticker Labelling of Vials and Ampoules with built-in speed indicator, counter and online Ink-jet printing system



Upto 250 Vials per minute*
Pressing unit for round container labelling
No change parts required



Upto 300 ampoules per minute*
Quick change-over for multiple sizes of ampoules



PRE-FILLED SYRINGE FILLING MACHINE

Pre-Filled Syringes (PFS) offer a modern, safe, and efficient solution for aseptic parenteral drug delivery.

- + Multiple dosing systems: Rotary piston, peristaltic pump, and time/pressure with optional CIP/SIP
- + Suitable for watery to highly viscous and highly potent or non-potent products, compatible with oRABS, cRABS, and isolators
- + Integrated Statistical In-Process Control (IPC)
- + Compatible for cartridges and syringes



CONTAINMENT SYSTEMS & ISOLATORS

We understand **containment**
like no other

Our Containment and Aseptic Solutions provide specialized OEB 5 Isolators for the safe handling of highly potent compounds and oRABS/cRABS configurations for strict aseptic compliance.





**Custom
Built**

**Operator
comfort**

**OEB 5
(0.1-1 µg/M3)**

**In accordance to
ISO 10648-PART 2
standards**

Meeting all international regulatory requirement

- + IOT ready systems
- + Auto pressure test, Inflatable gasket
- + Differential pressure interlock for passbox
- + Safe change of double HEPA filters
- + PLC/HMI based control with override protection of interlocks



ISO⁺ SAFE | FOR OPERATOR SAFETY

Maintains **negative pressure** inside the chamber to protect the operator and surrounding environment

- + Maintains air quality levels in accordance with Grade 'A' EU GMP (Class 100) along with **OEB 5 level of containment**
- + Designed to meet stringent OEB 4 and OEB 5 requirements for highly potent compounds.
- + In case of a breach (e.g., glove damage), air flows inward to prevent hazardous escape.
- + Ideal for handling potent APIs, toxic substances, and hazardous chemotherapy agents.
- + Equipped with safe-change ports and interlocked doors to maintain continuous containment.





ISO⁺ PURE | FOR PRODUCT SAFETY

Maintains **positive pressure** inside the chamber to protect the product from contamination by keeping clean, sterile air flowing outward.

- ✦ Eliminates environmental contamination, providing superior protection for sterile products.
- ✦ Essential for handling sterile, aseptic, and non-hazardous products
- ✦ Specifically designed to meet stringent **OEB 4 and OEB 5 standards** for highly potent compounds.
- ✦ Suitable for carrying out sterile operations using a laminar flow system.
- ✦ Designed to handle sterile manufacturing, compounding, filtration, and filling operations.
- ✦ Can house the complete injectable line or envelop processing machines.





FLEXIBLE ISOLATORS | ISO⁺ FLEX

Achieve low OEB/OEL levels during operations, typically $<10 \mu\text{g}/\text{m}^3$ but can be validated to reach OEL's as low as 50 nanograms.

- + Can be used for application with **negative or positive pressure**
- + Feed and remove using continuous liner system
- + No cleaning validation, just replace
- + Zero risk of cross-contamination
- + Zero external facility cleaning
- + Excellent visibility
- + Elimination of cleaning and validation cost
- + Gamma or x-ray sterilization possible
- + High tear resistant foil

Sampling

Weighing

Filter change

Dismantling

Reactor feeding

Lyophilization





ISO+ Series



C-RABS

Designed to meet the containment or aseptic requirements of process equipment & meet compliance requirement

- + Fully compatible with retrofitting projects on existing facilities.
- + Compliant with Grade A, ISO 5, in Grade B, ISO 7 environments
- + Laminar Air flow with velocity $0.45\text{m/s} \pm 20\%$
- + Velocity sensor | Temperature Sensor | Rh Sensor
- + Contact Parts MOC: SS316L | Non-contact parts MOC: SS304



FUMEHOODS

Designed to provide personnel protection against toxic fumes, vapors, and dust. Its secondary function includes protection against chemical spills, runaway reactions, and fires by acting as a physical barrier.

- + Compliance to ASHRAE 110 and EN 14175 for superior fume containment
- + Robust construction for withstanding chemicals even at high temperatures
- + Equipped with safety features such as: sash stop limit and airflow monitoring system
- + Available sizes: 4, 5, 6 and 8 ft





DOWNFLOW | BOOTH RLAF

Provides critical operator protection (OEB 3) and product safety during open handling of powders/liquids

- + It directs the airflow to carry contaminants away from the breathing zone of operators and into low-level exhaust grilles and then through the booths filter system.
- + Maintains ISO 5 environment at rest within the working zone
- + Safe change filter configuration is available for potent products
- + Optional hazardous area configuration to meet ATEX rated requirements



CLEANROOM SOLUTIONS

ENGINEERED SYSTEMS FOR **CONTROLLED ENVIRONMENTS**

Built on precision, driven by performance, and refined for the spaces to meet uncompromising quality to support environments that demand excellence.





AERO⁺ Series



AERO⁺ MIST SHOWER

- + **Gentle Cleaning:** Fine mist removes particles without harming sensitive garments or components.
- + **Efficient Decontamination:** Eliminates dust, lint, and loose fibers before cleanroom entry.
- + **Quick, Low-Vibration Cycle:** Fast operation with minimal vibration for safe personnel movement.



AERO⁺ AIR SHOWER

- + **High-Velocity HEPA Airflow:** Powerful air jets with HEPA filtration quickly clear surface contaminants.
- + **Fast De-dusting:** Adjustable nozzles remove particles efficiently in a short cycle.
- + **Controlled Entry:** Interlocked doors preserve pressure and limit contamination.





AERO⁺ Series



AERO⁺ STATIC PASSBOX

- + **Safe Material Transfer:** Enables movement between areas with different cleanliness levels while controlling access.
- + **Pressure & Traffic Control:** Maintains pressure differentials and minimizes human movement in critical zones.
- + **Reliable & Low Maintenance:** Simple design with no internal mechanical parts ensures easy upkeep



AERO⁺ DYNAMIC PASSBOX

- + **Effective Decontamination:** Self-cleans items with high-velocity, HEPA-filtered air to remove particles.
- + **Enhanced Safety:** Protects sensitive materials during transfer into clean areas.
- + **User-Friendly Design:** Equipped with internal lighting for easy handling.





DE-DUSTING TUNNEL



Complete cleaning of incoming raw material in drums, bags, etc

SAMPLING & DISPENSING



Three-stage filtration and primary containment by design, Creating a controlled, safe, and contamination-free working environment

LAMINAR AIR FLOW



Continuous unidirectional airflow with full-area HEPA coverage
Ensuring sterile, particle-free conditions for critical processes

WATER SYSTEMS

INTEGRATED PHARMACEUTICAL WATER & PROCESS UTILITY SOLUTIONS

Complete product portfolio of advanced water treatment systems designed and engineered for pharmaceutical, food & beverage, and industrial applications.





PURIFIED WATER SYSTEM | AQUA+ PW

Skid mounted system for easy installation and mobility.

- + Solutions available with flow rates from **200 LPH up to 20,000 LPH.**
- + Provides water and energy efficiencies through recycling mechanisms.
- + Offers full or partial heat sanitizing capability for bacterial control.
- + Features a three-stage purification process: Softening, Reverse Osmosis (RO), and Continuous Electrode-ionization (CEDI).





WATER FOR INJECTION | AQUA⁺ MCDP

MCDP - Multi-Column Distillation Plant

- + **Multi-column distillation** produces WFI through evaporation and condensation - the gold standard for pyrogen-free water. Multiple effects provide energy recovery and operational efficiency.
- + Functions as a highly efficient purification system for advanced sterile processes.
- + Features flow rates from 80 LPH to 5,000 LPH.
- + All contact parts are electropolished to less than 0.4 RA microns.
- + Offers high flexibility with variable production capacity of up to 80%.





PURE STEAM GENERATOR | AQUA+ PSG

Clean, non-condensable-gas-free steam which is essential for sterilization, SIP, and clean utilities

- + Functions as a one-of-a-kind purification system for sterile applications.
- + Features flow rates from **50 to 1,500 kgs per hour**.
- + Delivers optimized purity of steam for sterilization and humidification needs.
- + Used for:
 - Sterilization of equipment
 - Steam-in-Place (SIP) of product-contact systems
 - Humidification in cleanrooms
 - Autoclave sterilization processes





STORAGE TANKS

Engineered to store Purified Water (PW) and Water for Injection (WFI) with full cGMP compliance

Material

SS 316L contact / SS 304 non-contact

Design Standard

ASME Sec VIII Div-2 — cGMP certified

Connections

Triclover nozzles for all utilities

Configuration

Vertical, leg-mounted, vent-filtered

Sanitation

Thermal or chemical media compatible

Drainability

100% — Torispherical dish ends





CLEAN-IN-PLACE/STERILIZATION-IN-PLACE | CLEAN⁺ CIP/SIP

Available as a combo CIP + SIP system for simultaneous cleaning and sterilization.

- + Ensures sterile integrity is maintained throughout the manufacturing process.
- + Incorporates static or dynamic spray balls for thorough sanitization.
- + Works in tandem with temperature, time duration, and spray concentration for maximum effectiveness.
- + Customizations available with or without a dedicated tank CIP system.
- + Can be configured as a centralized CIP or for local recirculation skids.





STEAM STERELIZER AUTOCLAVE | CLEAN⁺ AUTOCLAVE

Robust structure and an intelligent software control loop to ensure precise inputs and consistent sterilization performance.

- + Ensures precise inputs and consistent sterilization performance.
- + Effectively sterilizes porous materials like garments, fabrics, etc.
- + Effectively sterilizes solid materials, closures, vessels, machines, and change parts.
- + Effectively sterilizes empty glassware, utensils, instruments, filters, and accessories.



— Major Clients



Annora





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