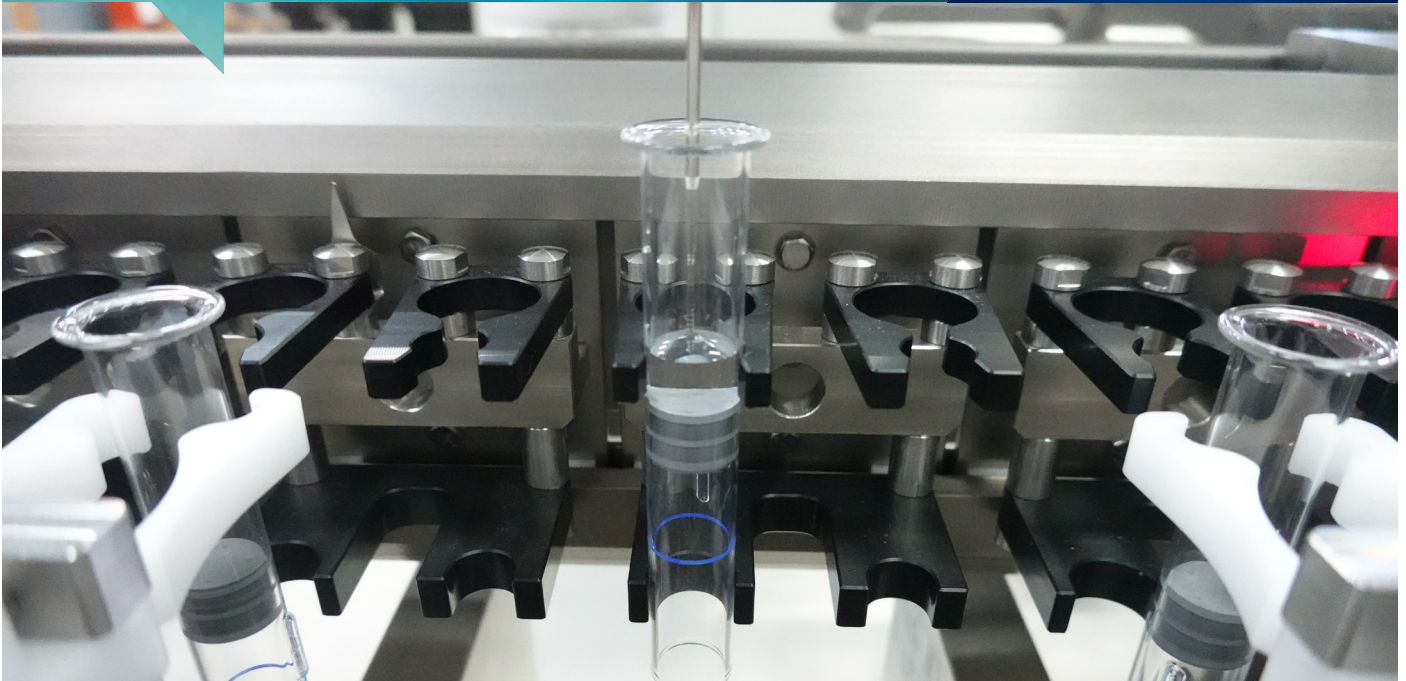


# Primary Packaging Aseptic Fill-Finish Solutions



Dec provides liquid & powder filling solutions for the pharmaceutical aseptic/sterile Fill-Finish process. From standard to custom-tailored equipment solutions Dec's engineered microdosing and containment system technologies are designed to meet your particular needs for sterile primary packaging. Dec's filling solutions are cGMP compliant, perfectly adapted to the process requirements and accurately designed to comply with the most recent revisions of the „Annex 1 Manufacture of Sterile Medicinal Products guidelines.“

All Dec filling equipment is configured for a seamless integration into your production lines and designed to accommodate various speeds and containers, including RTU / RTF (ready-to-use or fill) bottles, vials, cartridges, syringes, pre-sterile nested trays and combined powder and liquid filling for dual chamber systems.

Filling methods for liquids/gels: BoMa technology, net weight filling, peristaltic pump, rotary piston pump

Microdosing technologies for powder:  $\mu$ PTS, flexPTS, sPTS, Auger system



Nested / RTU



Vials



Pre-filled syringes



Dual Chamber



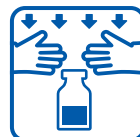
Cartridges



Bottles



Sachets & Pouches



# Primary Packaging Aseptic Fill-Finish Solutions

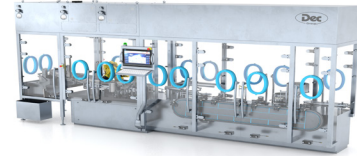
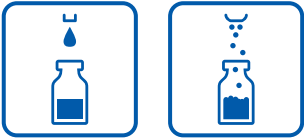


Filling to meet your needs!

Large Volume

Laboratory / Small Scale

Production Line



Product loading	Semi-/Automatic	Semi-/Automatic	Automatic
Drug type	Liquid / Powder	Liquid / Powder	Liquid / Powder / Gel
Product container dosing range:			
• Vials	x	2 - 100 ml	2 - 100 ml
• Syringes	x	0.5 - 20 ml	0.5 - 20 ml
• Dual Chamber Syringes	x	x	✓
• Bottles	100 - 4000 ml	x	x
• Cartridges	x	0.5 - 20 ml	0.5 - 20 ml
• Ready-to-use <sup>1</sup>	x	✓	✓
• Sachets / Pouches	x	x	✓
• Special Packaging	✓	✓	✓
Capacity [max pp/m] <sup>2</sup>	80 ppm	60 ppm	300 ppm
Barrier systems:			
• Safety guard	✓	✓	✓
• oRABS	✓	✓	✓
• Isolator	✓	✓	✓
Product transport	Rotary - intermittent	Indexing - intermittent	Linear - individual
IPC / Check weighing	✓	✓	✓
Stoppering and/or (screw)capping	✓	✓	✓
Audit trail / batch reporting	✓	✓	✓
GDP documented design verification	✓	✓	✓

<sup>1</sup> Optional nested ready-to-use vials, syringes, Dual Chamber Syringes, cartridges

<sup>2</sup> Depending on the number of filling modules and product containers