



MEDIAJET

Petri Dish Filler

Reliable and Versatile

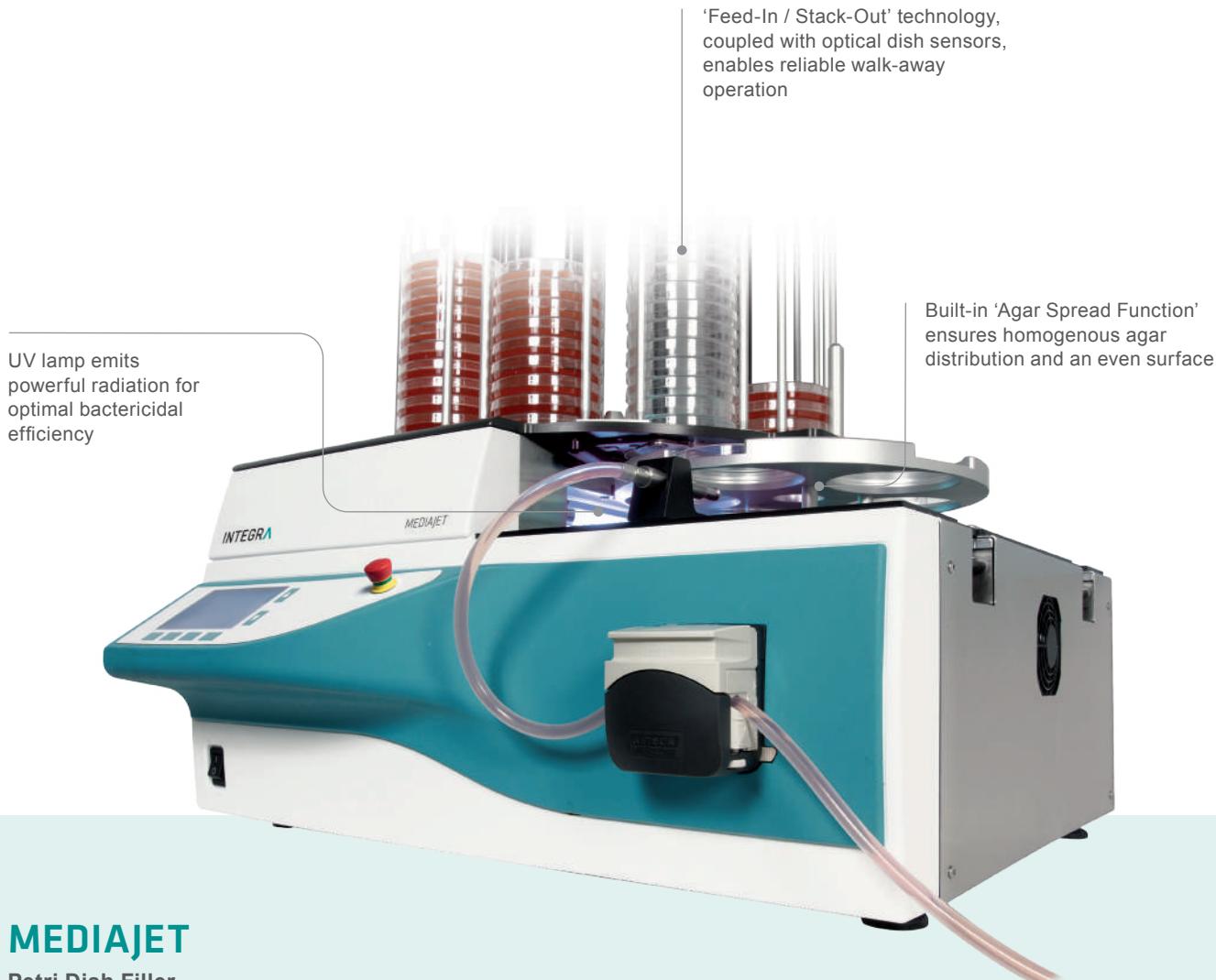


For Ø 90, 60 and 35 mm
Petri dishes

Walk-away
automation

Up to 1100
dishes per hour

RELIABLE AND VERSATILE



MEDIAJET

Petri Dish Filler

Sterile media dispensing is essential for the success of downstream applications, and the risk of contamination during manual plate filling should not be underestimated. Additionally, filling a large number of Petri dishes manually is a painstaking process, creating a need for a more cost efficient, reliable workflow.

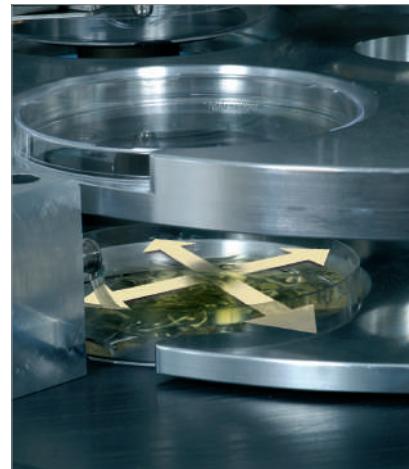
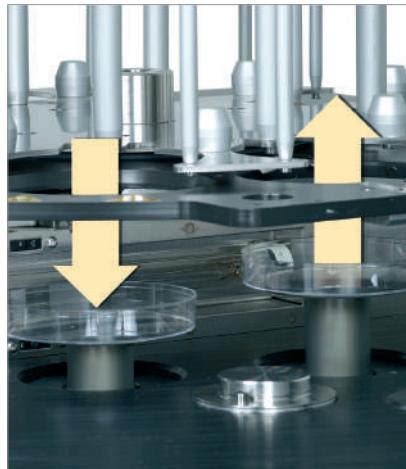
MEDIAJET is an automated medium dispensing system that allows reliable walk-away operation and ensures consistent agar plate quality. The filling chamber is equipped with a UV lamp helping to avoid medium contamination, while the system offers the unique flexibility to fill Petri dishes and tubes of various sizes, processing up to 1100 dishes in a single hour!



Did you know?

MEDIAJET is the perfect partner to the **INTEGRA MEDIACLAVE** media sterilizer range, enabling the continuous filling of up to 30 liters of media into Petri dishes.





Easy handling

The operation of the **MEDIAJET** system is entirely self-explanatory, and is combined with an intuitive user interface that makes it easy to control all **MEDIAJET** functions.

Reliable walk-away automation

The system's 'Feed-In / Stack-Out' technology and optical dish sensors ensure that it can easily be adjusted to virtually any brand of Petri dish (see operating instructions for full specifications).

Media cost reduction

A built-in 'Agar Spread Function' ensures homogenous distribution of agar to create an even surface, optimizing the agar consumption to significantly reduce media costs.



Eliminating sources of contamination

The surface of the filling chamber is manufactured from a single piece of resistant PE to offer convenient and efficient cleaning, helping to ensure consistent agar plate quality. Additionally, a powerful UV lamp extends over the full length of the rotor for optimal bactericidal efficiency in this contamination-vulnerable area.

Process documentation and validation

All process relevant information can be printed directly from **MEDIAJET** using a standard external printer or connected to a **MEDIACLAVE** system to allow export to a PC, supporting individual quality control needs.

Petri dish imprinting

An optional inkjet printer connection kit allows **MEDIAJET** to apply a wide variety of information – including alphanumeric text, expiry/production date or barcodes – to be applied onto the Petri dishes during production. All supported printers – including MARKEM-IMAJE, LINX and Domino models – allow side wall printing, while LINX printers also allow bottom printing.

Operation

MEDIAJET is easy to set up and quickly ready for use. Simply load up to 540 Petri dishes, connect the **MEDIAJET** to a sterilized culture medium source, and start dispensing at the touch of a button. The system can store up to 19 individual user-defined Petri dish filling programs, and offers a number of operating modes to match workflow needs:

STANDARD mode

Standard filling of Ø 35, 60 and 90 mm Petri dishes

TURBO mode

Accelerated filling of up to 1,100 Petri dishes per hour

POUR PLATE mode

Ideal for colony forming unit (CFU) determination, with built-in shaking to ensure samples are evenly distributed in the Petri dish

BATCH mode

Used for applications where it is important to have a very flat and level agar surface, such as automatic colony counting



Special applications



Blood agar preparation

MEDIAJET can be combined with the **DOSE IT** peristaltic pump to continuously mix 3-10 % additives into the medium. For instance, blood can be added into the agar immediately before pouring plates for the classification of hemolytically active pathogens, minimizing the risk of thermal denaturation.



Independent pump functions

The **MEDIAJET** pump can be used independently to provide easy dispensing for other applications – such as the manual filling of tubes or bottles – with the optional foot switch. This feature is especially useful when filling unusually shaped or sized Petri dishes or tubes.

Versatile applications



Processing various Petri dish sizes

MEDIAJET vario allows the automated filling of Ø 35, 60 and 90 mm dishes using the corresponding adapter sets. The system can be converted between dish sizes in just a few minutes, providing extra flexibility for media preparation.



Test tube filling

The TUBEFILLER option provides an extension to the functionality of **MEDIAJET**, enabling the system to be converted into a test tube filler in less than a minute. Suitable for applications such as agar slants, broth cultures or NaCl dilutions, this option allows the continuous processing of test tubes of various diameters and lengths.



Filling of biplates

The biplate option for the **MEDIAJET** vario is an efficient and reliable solution for filling two-compartment Petri dishes, helping to reduce the amount of agar required.

Instrument selection and available options

	MEDIAJET	MEDIAJET vario	MEDIAJET vario with biplate option
Filling of Ø 90 mm Petri dishes	●	●	●
Filling of Ø 60 mm Petri dishes		●	●
Filling of Ø 35 mm Petri dishes		●	●
Filling of Ø 90 mm biplate Petri dishes			●
Filling of test tubes (with TUBEFILLER option installed)	●	●	●
Shaker function for pour plate applications	●*	●*	●*
Turbo mode (with optional kit)	●	●	●
Imprinting 90, 60 and 35 mm Petri dishes on the side wall (connection kit for MARKEM-IMAJE, LINX and Domino)	●	●	●
Imprinting 90, 60 (and 35 mm) Petri dishes on the bottom (connection kit for LINX inkjet printer), ex factory option	●	●	●
Blood agar preparation with external pump DOSE IT	●	●	●
Cooling option, ex factory	●	●	●*

* Standard feature

Technical data

MEDIAJET		Dimensions
Dosing range per dish	1 – 99.9 ml	Basic unit (H x W x D) 330 x 655 x 634 mm
Dosing reproducibility	circa 1% (at 15 ml)	Height with 360 Carousel 1070 mm
Maximal dosing rate	500 ml/min	Height with 540 Carousel 1405 mm
Filling delay	0 – 9.9 sec	UV-Lamp 11.5 W (2.6 W UV-C, 253.7 nm)
Capacity / Carousel	540 (90 mm Petri dish) 360 (90, 60, 35 mm Petri dish)	Interface 2 x RS232, Alarm, Inkjet, Foot switch
Filling rates		TUBEFILLER
Standard filling rate (up to 15 ml)	circa 900 dishes/hour	Test tube diameters 13, 16, 18, 20, 25 or 30 mm
Turbo filling rate	circa 1'100 dishes/hour (up to 24 ml)	Dosing range 0.5 – 999 ml
Petri dish		Flow rate up to 260 ml/min
Dish diameter	90 mm	Test tube length up to 25 cm
	90, 60, 35 mm (vario)	Dosing reproducibility < 1 % (at 1 – 99 ml)
Dish height	12 – 25 mm	Filling rate 1000 tubes/hour (at 10 ml, 4 mm ID tubing)
Power supply		
Consumption	200 W	
Input voltage	100 – 240 V, 50/60 Hz	
Fuses	T 2A (2x)	

Ordering information

Instrument		Part no.
MEDIAJET base unit	for Ø 90 mm Petri dishes. Requires rotor and carousel. Includes tubing set 103 030	103 005 with cooling 103 006
MEDIAJET vario base unit	for Ø 35, 60 or 90 mm Petri dishes. Requires rotor, carousel and conversion set	113 000 with cooling 113 001
MEDIAJET vario base unit with biplate option	for Ø 35, 60 or 90 mm or two-compartment Petri dishes. Requires rotor, carousel and conversion set	113 002 with cooling 113 002
Rotor	for Ø 90 mm Petri dishes	103 271
	for Ø 90 mm biplate Petri dishes (for MEDIAJET vario with biplate option only). Can also be used for standard Ø 90 mm Petri dishes	113 806
	Rotor for small Ø 90 mm (Ø 90S) standard or biplate Petri dishes	103 272
	for large Ø 90 mm (Ø 90L) Petri dishes (for MEDIAJET vario only)	113 460
	for Ø 60 mm Petri dishes (for MEDIAJET vario only)	113 271
	for Ø 35 mm Petri dishes (for MEDIAJET vario only)	113 272
Carousel	for Ø 90 mm Petri dishes, capacity of 360	103 020
	for Ø 90 mm Petri dishes, capacity of 540	103 021
	for small Ø 90 mm (Ø 90S) Petri dishes, capacity of 360	103 022
	for small Ø 90 mm (Ø 90S) Petri dishes, capacity of 540	103 023
	for large Ø 90 mm (Ø 90L) Petri dishes, capacity of 360 (for MEDIAJET vario only)	113 022
	for large Ø 90 mm (Ø 90L) Petri dishes, capacity of 540 (for MEDIAJET vario only)	113 023
	for Ø 60 mm Petri dishes, capacity of 360 (for MEDIAJET vario only)	113 020
	for Ø 35 mm Petri dishes, capacity of 360 (for MEDIAJET vario only)	113 021
Conversion set (required for MEDIAJET vario only)	for Ø 90 mm Petri dishes, comprises the adaptation insert, head plates for feeder and stacker piston and 1 tubing set	113 051
	for large Ø 90 mm (Ø 90L) Petri dishes, comprises the adaptation insert, head plates for feeder and stacker piston and 1 tubing set	113 055
	for Ø 60 mm Petri dishes, comprising the adaptation insert, head plates for feeder and stacker piston, gripper left, gripper right and 1 tubing set	113 052
	for Ø 35 mm Petri dishes, comprising the adaptation insert, head plates for feeder and stacker piston, gripper left, gripper right and 1 tubing set	113 053

Accessories		Part no.
Filling nozzle	for Ø 90 mm Petri dishes	103 032
	for Ø 60 and 35 mm Petri dishes	113 032
Tubing set	for Ø 90 mm Petri dishes, comprising 1.5 m silicone tubing (6 mm inner diameter) and filling nozzle	103 030
	for Ø 35 and 60 mm Petri dishes, comprising 1.5 m silicone tubing (6 mm inner diameter) and filling nozzle	113 030
Communication interface cable MEDIAJET to MEDIACLAVE	for process documentation on MEDIACLAVE printer	103 046
Centering unit	supports planar stacking of all Ø 90 mm Petri dishes (Ø 90, Ø 90S, Ø 90L)	103 048

Turbo mode option		Part no.
Turbo mode kit	for accelerating the filling rate of Ø 90 mm Petri dishes, comprising extension pump head and tubing set for Turbo mode (Part No. 103 035)	103 036
Tubing set for Turbo mode	including filling nozzle for Ø 90 mm Petri dishes and tubing for double pump head configuration (6 mm inner diameter), length 2.0 m, 2 glass Y-pieces	103 035

Petri dish imprinting – Please visit our website for Petri dish imprinting options and printer connection kits.

Independent pump function		Part no.
Footswitch	for independently using the MEDIAJET pump	143 200
Aspiration/dispensing tube	for 6 mm inner diameter silicone tubing as suction or end-piece nozzle, 6 mm inner diameter, 10 cm length, stainless steel, one end dented	171 056
Aspiration tube	6 mm inner diameter, 35 cm length, stainless steel, one end dented	171 066
Tube collar as weight for aspiration tubes	for aspiration tubes with 4-6 mm inner diameter	171 074

Blood agar preparation		Part no.
Tubing set for blood agar	suitable for adding 3 to 10% blood in connection with the INTEGRA peristaltic pump DOSE IT. Includes filling nozzle for Ø 90 mm Petri dishes, tubing for media (6 mm inner diameter) and additive (2 mm inner diameter), glass T-piece, suction needle stainless steel	103 040
DOSE IT P910	peristaltic pump for preparation of blood agar	171 000
Interface cable	for connection of MEDIAJET to DOSE IT	103 047

Tubefiller option		Part no.
TUBEFILLER option for MEDIAJET	including filling arm, support plate and a 2.5 m (3 mm inner diameter) silicone tubing set with 2 aspiration/dispensing tubes and tube collar	103 010
	Height 60 mm Part no.	Height 90 mm Part no.
Test tube racks stainless steel, autoclavable	for Ø 13 mm tubes, 6 x 15 capacity	103 058
	for Ø 16 mm tubes, 5 x 12 capacity	103 063
	for Ø 18 mm tubes, 4 x 10 capacity	103 064
	for Ø 20 mm tubes, 4 x 10 capacity	103 069
	for Ø 25 mm tubes, 3 x 8 capacity	103 078
	for Ø 30 mm tubes, 3 x 7 capacity	103 083
		Height 120 mm Part no.
	Lid for rack with tubes, max. height above rack 40 mm	103 096
Aspiration/dispensing tube	10 cm length, 2.0 mm inner diameter, stainless steel, one end dented	171 052
	10 cm length, 3.0 mm inner diameter, stainless steel, one end dented	171 053
	10 cm length, 4.0 mm inner diameter, stainless steel, one end dented	171 054
Tube collar as weight	for aspiration tubes with 1-3 mm inner diameter	171 071
	for aspiration tubes with 4-6 mm inner diameter	171 074

Consumables		Part no.
UV lamp TUV11W	to reduce the risk of contamination during the filling process	103 705
Silicone tubing	for Petri dish filling, 25 m bulk roll (6 mm inner diameter, 1.5 mm wall thickness)	171 036
	for TUBEFILLER option, 25 m bulk roll (2 mm inner diameter, 1.5 mm wall thickness)	171 032
	for TUBEFILLER option, 25 m bulk roll (3 mm inner diameter, 1.5 mm wall thickness)	171 033
	for TUBEFILLER option, 25 m bulk roll (4 mm inner diameter, 1.5 mm wall thickness)	171 034

www.integra-biosciences.com



INTEGRA Biosciences AG
7205 Zizers, Switzerland
T +41 81 286 95 55
F +41 81 286 95 07
info@integra-biosciences.com

INTEGRA Biosciences Corp.
Hudson, NH 03051, USA
T +1 603 578 5800
F +1 603 577 5529
info-us@integra-biosciences.com

INTEGRA Biosciences Ltd.
Thatcham, Berks RG19 4EP, UK
T +44 1635 797000
F +44 1635 797001
info-uk@integra-biosciences.com

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