

The Maxi 'WAVE' System is designed to perform a variety of separations, including first- and second-dimension SDS-PAGE, native, preparative, gradient and high-resolution nucleic acid electrophoresis, plus capillary tube gel IEF and electroblotting. The Maxi WAVE is one of the most versatile maxi vertical systems available.

The innovative, vertical screw-clamp system within the PAGE insert requires only four screws to secure up to four 20x20cm gels. This gives the Maxi WAVE the advantage of a much faster set up time compared to products whose traditional clamping configurations require as many as 24 screws to secure just two glass plates. In addition, the WAVE's innovative vertical screw-clamp configuration distributes pressure evenly along the height of the gel rather than in the centre to eliminate plate bowing and gel compression. This still maintains a leak-proof seal during casting; while the ergonomic wave-like design of the PAGE insert aids both handling and set up.

A detachable inner cooling coil connects to the laboratory water supply or a recirculating chiller to provide uniform, smile-free electrophoresis, while allowing runs to be performed at higher voltage.

# KEY FEATURES

- Run up to FOUR gels simultaneously [TETRAD systems]
- Only four screws required to secure glass plates significantly reduces set up time
- Vertical screw-clamps distribute pressure evenly along the height of the gel to prevent plate bowing and gel compression
- Detachable inner cooling coil facilitates rapid and uniform, smile-free electrophoresis, even at higher voltages
- Injection moulded construction guarantees long life with reliable and consistent performance

#### MAXI WAVE TETRAD

A 4-gel TETRAD system is created by simply introducing additional plates with spacers and appropriate combs. TETRAD is supplied with a casting base and external casting upstand to allow gels to be prepared in advance, ready for the next run.



upstand is a standard internal PAGE module without platinum wire.



#### ORDERING INFORMATION

VS20NGS1

VS20WAVESYS Maxi WAVE, 20 x 20cm Dual with Glass Plates with bonded 1mm thick spacers, 2x 24 sample combs, cooling pack, dummy plate and casting base

VS20WAVESYS-CU Maxi WAVE, 20 x 20cm Dual with Glass Plates with bonded 1mm thick spacers, 2x 24 sample combs, cooling pack, dummy plate, casting base

and external casting upstand

**VS20WAVETETRAD1** Maxi WAVE, 20 x 20cm Dual with Glass Plates with bonded 1mm thick spacers, 2x 24 sample combs, cooling pack, dummy plate, casting base and external casting upstand, PLUS 2x pks/2 notched glass plates with 1mm bonded spacers and 2x 1mm 24-sample combs

VS20WAVED	Maxi WAVE, 20 x 20cm Dual with Glass Plates, 2 x 24 well combs, cooling coil (no Casting Base)

VS20WAVE-EC VS20 WAVE External Casting Stand - No Casting Base VS20WAVEDIRM VS20WAVE Page insert VS20WAVE-CC Detachable Cooling Coil VS20DCAST V-Maxi WAVE, 20 x 20cm Dual Caster VS20DCASTM Replacement Rubber mats for 20 x 20cm caster VS20ICB Maxi Cooling Pack VS20-x-LG Loading guides for V-Maxi WAVE maxi combs, x = comb well number VS20NG 20 x 20cm Notched Glass Plates 4mm thick (pk/2) VS20PG 20 x 20cm Plain Glass Plates 4mm thick (pk/2) 20 x 20cm Notched Glass Plates with 0.75mm Bonded Spacers (pk/2) VS20NGS0.75 VS20PGS0.75 20 x 20cm Plain Glass Plates with 0.75mm Bonded Spacers (pk/2)

20 x 20cm Notched Glass Plates with 1mm Bonded Spacers (pk/2)

VS20PGS1 20 x 20cm Plain Glass Plates with 1mm Bonded Spacers (pk/2) VS20PGS1.5 20 x 20cm Plain Glass Plates with 1.5mm Bonded Spacers (pk/2) VS20PGS2 20 x 20cm Plain Glass Plates with 2mm Bonded Spacers (pk/2) VS20DP Dummy Plate, 20 x 20cm 20cm Spacers - 0.75mm (pk/2) VS20S0.75 VS20S1 20cm Spacers - 1mm thick (pk/2) VS20S1.5 20cm Spacers - 1.5mm thick (pk/2) 20cm Spacers - 2mm thick (pk/2) VS20S2 VS20WAVE-IEFKIT IEF Conversion for 18cm IPG strips and tube gels, includes: 1 set of plain glass plates with bonded spacers, 0.6x20cm (WxH); and 2x 2-D combs with one 3.5mm marker lane and one 18cm preparatory well

# **Gel Casting**

Dual purpose PAGE insert eliminates time-consuming transfer of glass plates between separate casting and running modules

Ground glass plates with bonded injection moulded spacers consistent with comb thickness ensure 'clean' well formation, as well as the correct alignment for leak-free casting; also eliminate the need for easily mislaid and awkward to use spacer aligners

Very forgiving, ultra-soft silicone mat within cam-caster compensates for glass plate misalignment to ensure leak-free casting



Assemble each gel cassette on a flat level surface, by placing the plain glass plate down with the spacers facing upwards followed by the notched glass plate.



Loosen the vertical screwpins in the PAGE insert to release the locking mechanism, allowing the gel clamps to sit in the resting slots.



Insert a gel cassette into each side of the inner buffer chamber in the PAGE insert, and begin tightening the vertical screw-pins.



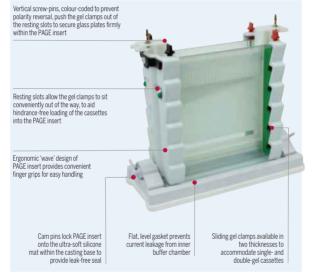
Continue to tighten the screw-pins until the gel clamps glide out of the resting slots and fix firmly against the glass plates pushing them



Check the bottom of the glass plates to ensure that they are flush together, and place the PAGE insert on the casting base; make sure that the cams are facing downwards.



Insert cams and turn until tight, drawing the PAGE insert onto the casting to form a leak-proof seal.





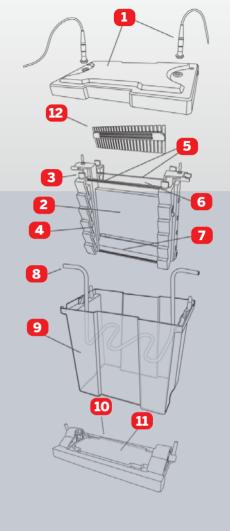
Pour in the gel solution, insert the combs and allow the wells to



Transfer the PAGE insert to gel the tank. Fill the inner and outer buffer chambers before loading samples.



Replace the lid, connect to the power supply and run.



# Maxi WAVE component parts

- 1. Lid and power cables
- 2. PAGE insert
- 3. Vertical screw-pin
- Clamping bars
- 5. Glass plates
- 6. Inner buffer chamber
- 7. Gasket
- 8. Detachable cooling coil
- 9. Outer tank
- 10. Cam-pin caster
- 11. Ultra-soft casting mat
- 12. Combs

Code Code	DESCRIPTION	SAMPLE VOLUME PER WELL	Code Code	DESCRIPTION	Sample Volume PER WELL
VS20-1-0.75	Comb 1 Prep, 1 Marker, 0.75mm thick	1100μΙ	VS20-1-1.5	Comb 1 Prep, 1 Marker, 1.5mm thick	2200µl
VS20-5-0.75	Comb 5 sample, 0.75mm thick	160µІ	VS20-5-1.5	Comb 5 sample, 1.5mm thick	320µІ
VS20-10-0.75	Comb 10 sample, 0.75mm thick	80µІ	VS20-10-1.5	Comb 10 sample, 1.5mm thick	160µІ
VS20-18MC-0.75	Comb 18 sample MC, 0.75mm thick	40µІ	VS20-18MC-1.5	Comb 18 sample MC, 1.5mm thick	80µl
VS20-24-0.75	Comb 24 sample, 0.75mm thick	30µl	VS20-24-1.5	Comb 24 sample, 1.5mm thick	60µl
VS20-30-0.75	Comb 30 sample, 0.75mm thick	25µI	VS20-30-1.5	Comb 30 sample, 1.5mm thick	50µl
VS20-36MC-0.75	Comb 36 sample MC, 0.75mm thick	20µІ	VS20-36MC-1.5	Comb 36 sample MC, 1.5mm thick	40µl
VS20-48-0.75	Comb 48 sample, 0.75mm thick	15µІ	VS20-48-1.5	Comb 48 sample, 1.5mm thick	30µІ
VS20-1-1	Comb 1 Prep, 1 Marker, 1mm thick	1500µl	VS20-1-2	Comb 1 Prep, 1 Marker, 2mm thick	3000µl
VS20-5-1	Comb 5 sample, 1mm thick	200µl	VS20-5-2	Comb 5 sample, 2mm thick	400µІ
VS20-10-1	Comb 10 sample, 1mm thick	100µІ	VS20-10-2	Comb 10 sample, 2mm thick	200μΙ
VS20-18MC-1	Comb 18 sample MC, 1mm thick	50µІ	VS20-18MC-2	Comb 18 sample MC, 2mm thick	100µІ
VS20-24-1	Comb 24 sample, 1mm thick	40µІ	VS20-24-2	Comb 24 sample, 2mm thick	80µl
VS20-30-1	Comb 30 sample, 1mm thick	35µI	VS20-30-2	Comb 30 sample, 2mm thick	70µl
VS20-36MC-1	Comb 36 sample MC, 1mm thick	25µI	VS20-36MC-2	Comb 36 sample MC, 2mm thick	50µl
VS20-48-1	Comb 48 sample, 1mm thick	20µІ	VS20-48-2	Comb 48 sample, 2mm thick	40μΙ



The omniPAGE range of Modular Vertical Gel Systems allow multiple electrophoresis techniques to be performed in the same unit. Using the same main tank and lid, three different inserts are interchangeable for PAGE, tube gel and electroblotting techniques.



#### **ORDERING INFORMATION**

## VS20WAVECES Complete Maxi WAVE (20x20cm) Vertical Electrophoresis Modular System, comprising:

1x Maxi WAVE Vertical Unit, VS20WAVESYS (1) which includes: 2x4mm thick notched glass plates, 2x4mm thick plain glass plates with 1mm thick bonded spacers, 1x blanking plate, 2x combs (1mm thick, 24 samples), 1x casting base, silicone mat, cooling pack

plus: 1x Electroblotting Module, VS20BI (3) comprising: internal electroblotting module, 4x compression cassettes for gel sizes up to 20x20cm and 18x fibre pads plus: 1x Capillary Electrophoresis Module, VS20DCI (2) which includes: internal running module for tube gels, capillary tubes, blanking plugs and 1x VS20WAVE IEF-KIT: 1 set of plain glass plates with bonded spacers, 0.6x20cm (WxH); and 2x 2-D combs with one 3.5mm marker lane and one 18cm preparatory well

## VS20WAVEC2DS Complete Maxi WAVE 2-D System, comprising:

1x Maxi WAVE Vertical Unit, VS20WAVESYS (1) which includes: 2x4mm thick notched glass plates, 2x4mm thick plain glass plates with 1mm thick bonded spacers, 1x blanking plate, 2x combs (1mm thick 24 samples), 1x casting base, silicone mat, cooling pack

plus: 1x Capillary Electrophoresis Module, VS20DCI (2) which includes: internal running module for tube gels, capillary tubes, blanking plugs and 1x VS20WAVE-IEF-KIT: 1 set of plain glass plates with bonded spacers, 0.6x20cm (WxH); and 2x 2-D combs with one 3.5mm marker lane and one 18cm preparatory well

# VS20CBS Complete Maxi WAVE (20 x 20cm) Vertical Electrophoresis & Blotting System, comprising:

1x Maxi WAVE Vertical Unit, VS20WAVESYS (1) which includes: 2x4mm thick notched glass plates, 2x4mm thick plain glass plates with 1mm thick bonded spacers, 1x blanking plate, 2x combs (1mm thick, 24 samples), 1x casting base, silicone mat, cooling pack

plus: 1x Electroblotting Module, VS20BI (3) comprising: internal electroblotting module, 4x compression cassettes for gel sizes up to 20x20cm and 6x fibre pads

# VS20CBS-HI Complete Maxi WAVE (20 x 20cm) Vertical Electrophoresis & High Intensity Blotting System, comprising:

1x Maxi WAVE Vertical Unit, VS20WAVESYS (1) which includes: 2x4mm thick notched glass plates, 2x4mm thick plain glass plates with 1mm thick bonded spacers, 1x blanking plate, 2x combs (1mm thick, 24 samples), 1x casting base, silicone mat, cooling pack, plus: 1x High Intensity Electroblotting Module, SB20BI-HI (4) which includes: internal electroblotting module, 2x compression cassettes for gel sizes up to 20x20cm and 6x fibre pads

SB20 omniBlot Maxi 20 x 20cm Blotting System VS20Bl omniBlot Maxi Insert, including 4x cassettes, 18x foam pads
VS20Bl-HI omniBlot Maxi High Intensity Insert, includes 1x casette, 6x fibre pads