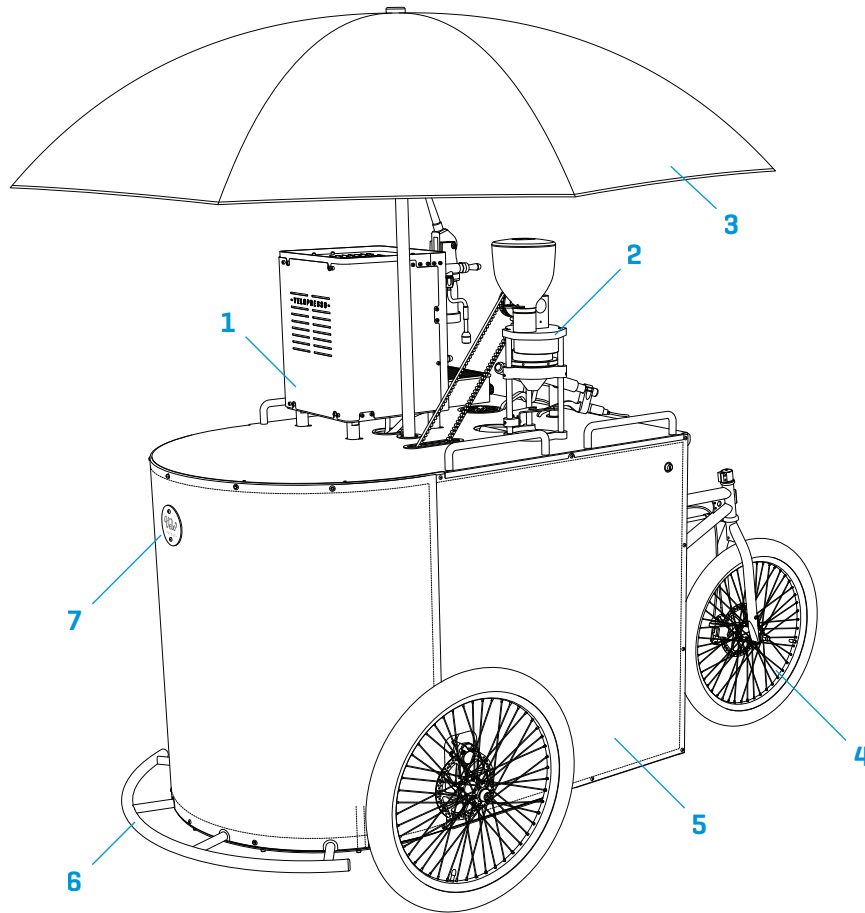




VELOPRESSO SPECIFICATION



The Velopresso is a unique and highly innovative coffee trike – a complete mobile café – that combines great mobility and excellent espresso machinery with an ultra low carbon footprint and pedal-powered operation that requires no electricity. The machine is designed to perform beautifully, with minimal maintenance, and built to last. All our unique componentry – from the grinder, to the transmission, to the frame parts and accessories – are precision engineered here in Britain. Every Velopresso is built by hand in our east London factory, from the TIG-welding of the steel trike frame-sets to the final assembly and testing, and proudly bears the Made in Britain marque etched on it's data plate.

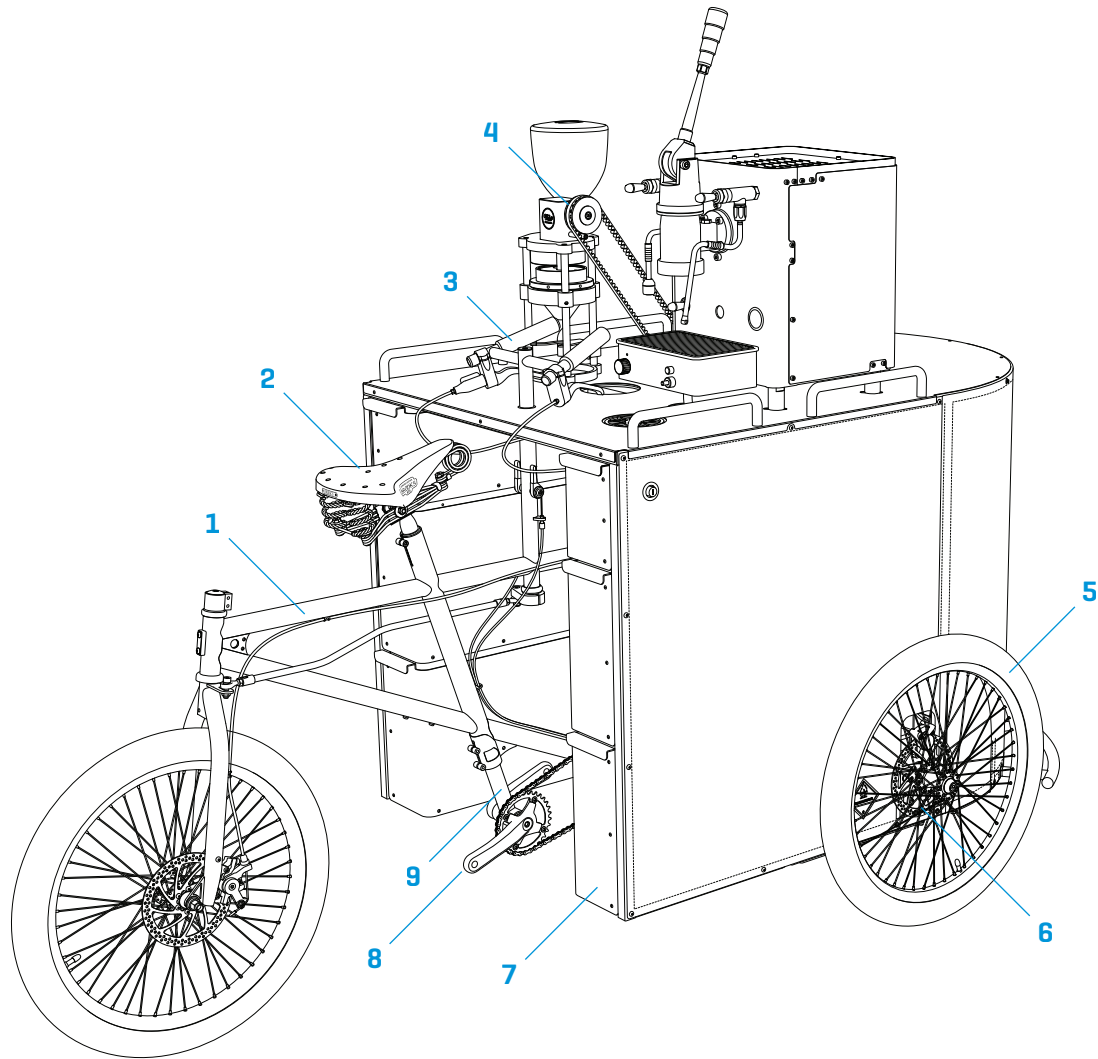
NOTE: For detailed technical specification see p. 9–13, for pricing and further guidance see Price List and Order Guide

- 1** Espresso machine: FCL1-Velo, gas-fired*, commercial spring-lever machine *dual fuel (gas/ electric) option available in UK, EU, AUS, NZ and additional countries world-wide, please enquire for further details
- 2** Grinder: GR1-Velo, pedal-grinder, with conical Ø71mm burrs, no electricity required
- 3** Umbrella*: 2.4m canopy, fibreglass frame, aluminium pole *recommended accessory
- 4** Wheels: strong and light Halo SAS DH pro alloy wheels, custom built for Velopresso, 24" rims, 48 spoke, 20mm through axles
- 5** Branding panels: 3 square metres for your branding / artwork, digitally printed, full-colour, weatherproof, fire retardant PVC* fabric panels, bolt-on *EU Reach approved, recyclable
- 6** Bumper: stainless steel (304) bumper, bolt-on
- 7** Marque: stainless steel Velopresso marque, bolt-on, secures front panel

Velopresso Ltd
+44 (0)20 8539 0069
contact@velopresso.cc
velopresso.cc

Registered in England:
Company 08324134
VAT 159 777 545
EORI GB159777545000

Unit B04
Leyton Industrial Village
Argall Avenue
London E10 7QP

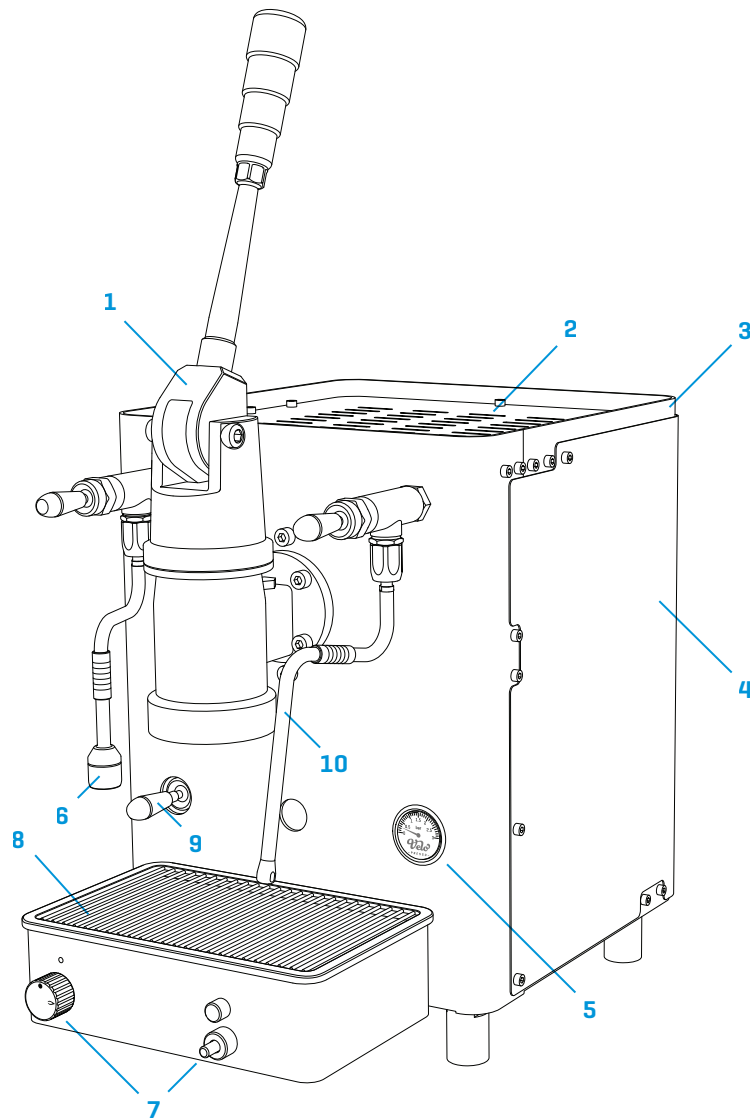


The Velopresso tricycle is designed to meet the structural, spatial and ergonomic requirements necessary to locate and transport the combined weight of the cyclist, machine and supplies, and allow from-the-saddle operation of the coffee machinery. Rear-wheel steering allows the trike to turn on the spot. The handlebars are removable to give a clear work area when in coffee-mode. Two levers operate the 3-speed hub gear and clutch – which switches the transmission from ride-mode to coffee-mode where pedalling directly drives the grinder and water pump. Six key-lockable aluminium drawers provide the main storage. The Gates Carbon Drive™ system is used at the grinder for clean and maintenance-free operation, while chain is used at the cranks (pedals) for quick rider height adjustment. Hydraulic twin disc-brakes provide efficient stopping power.

* Gates Carbon Drive™ system available at the cranks also, but as a custom option, and is suitable for single-user trikes only

- 1** Frame: Reynolds 631 plain gauge steel alloy tubing and mild steel, powder-coated black* (RAL 9005) *colours available – see custom options
- 2** Saddle: Brooks B33 sprung leather delivery saddle – for optimal all day comfort
- 3** Steering: stainless steel (304) handlebar unit and steerer-rod, aluminium tiller / steerer clamp
- 4** Grinder belt: Gates Carbon-Drive™ drive belt is used at the grinder
- 5** Tyres: Schwalbe 'Crazy Bob' super-strong reinforced cruiser tyres give cushioned ride
- 6** Disc brakes: Magura 'Big Twin' hydraulic (front), mechanical (rear), parking brake lever
- 7** Drawers: aluminium, key-lockable, 2 x small, 4 x large (receive insulated coolbox inserts* for milk storage up to 24 litres / 48 pints) *accessory
- 8** Cranks: short 150mm cranks, with a low gear (32T) chainring and chain is the new standard
- 9** Boom bottom bracket: stainless steel telescopic boom for rider height adjustment

ESPRESSO MACHINE

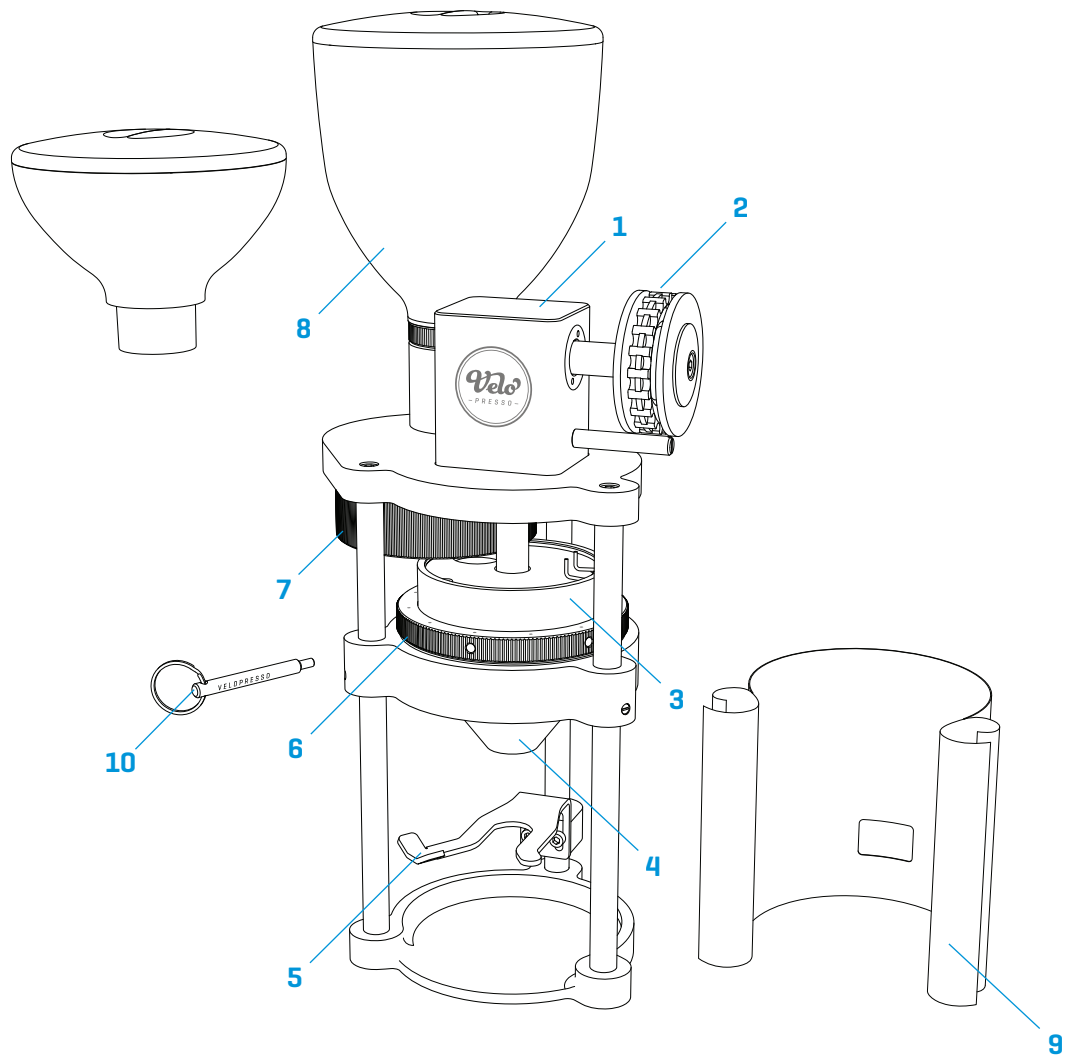


The FCL1-Velo is a gas-fired* commercial spring lever espresso machine designed for the Velopresso in collaboration with its award-winning UK manufacturers Fracino. Commercial lever machines are simple to operate, very forgiving, and widely regarded as delivering exceptional espresso with rich crema, high solids, and a fine buttery mouthfeel. The lever group used is the best available, while the 7-litre copper boiler is heated by a powerful but silent burner running on LPG. A pedal-driven rotary pump synced to the grinder refills the boiler with water as it is used. A powerful steam tube for steaming milk, a stainless steel hot water outlet and unique rattle-free silicon drip tray with stainless steel grille complete the machine. With its' superb build quality, the FCL1-Velo is one of the most robust and reliable mobile espresso machines.

*dual fuel (gas/electric) option available in EU and additional countries world-wide, see Custom Options for more details

- 1** Commercial (58mm) spring-lever group: forged brass group, polished chrome
- 2** Boiler: 7L copper boiler with powerful 1.8kW rated LPG gas burner*
- 3** Chassis: steel chassis, powder-coated black* (RAL 9005) *colours available – see custom options
- 4** Stainless steel cover: vented with laser-cut 'Velopresso' type logo on rear
- 5** Boiler pressure gauge: with Velopresso logo
- 6** Hot water valve: stainless steel tube, anti-splash nozzle, push-to-lock-on / flick operation
- 7** Gas controls: on/off setting, pilot and piezo-ignition controls
- 8** Drip tray: stainless wire grille in silicon 'rattle-free' tray, plumbed-in waste connection
- 9** Water inlet valve: lock-in-position lever valve
- 10** Steam tube: stainless steel, 4 hole steam nozzle, push-to-lock-on / 'flick' operation lever

GRINDER

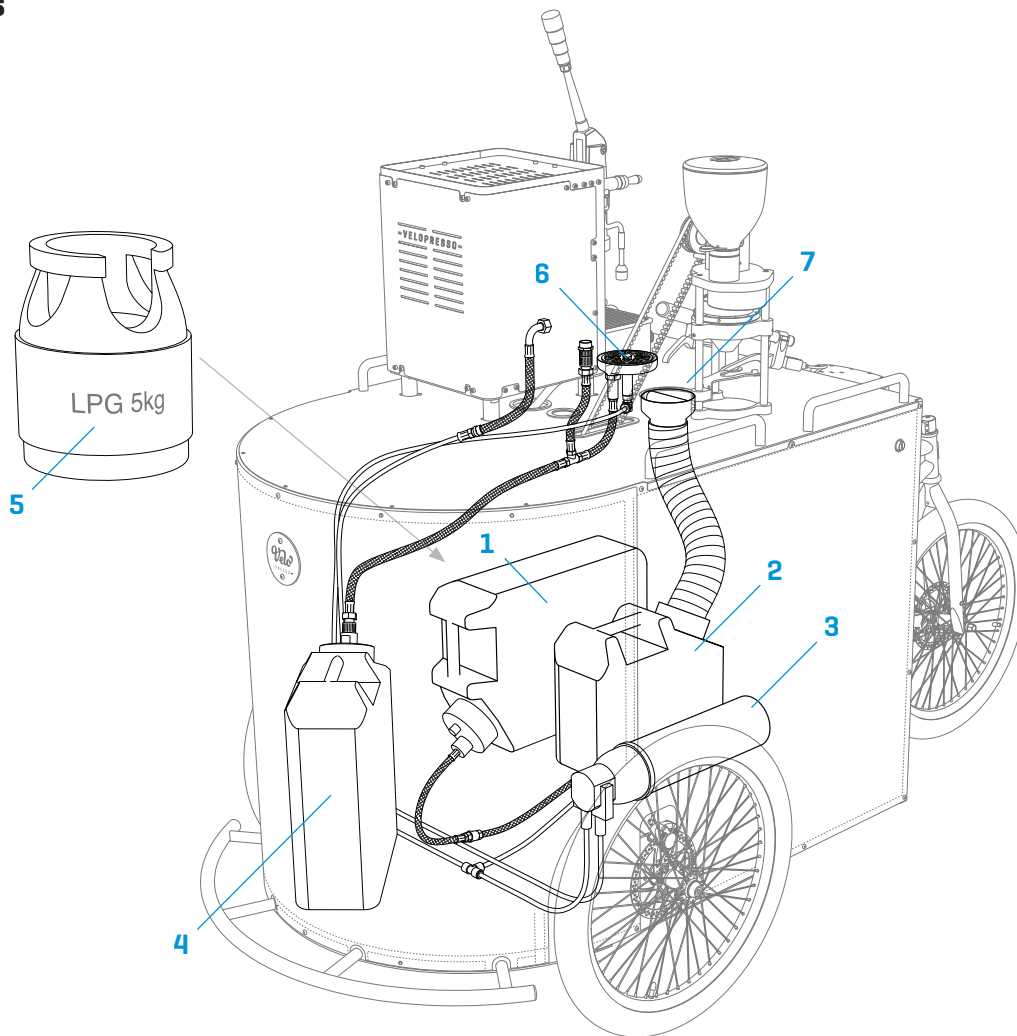


The GR1-Velo is the first pedal-driven commercial coffee grinder in the world. Precision engineered to last a lifetime* in stainless steel, hard-anodised aluminium, and polycarbonate, the grinder uses large 71mm conical burrs, has stepless grind adjustment, volumetric pre-dosing of beans and very low grind retention. The grinder is directly pedal-driven, so there is no electricity required and therefore no motor noise or possibility of electrical failure. Easy pedalling at 90 – 100rpm gives 300 – 400rpm at the burrs, grinding a double shot in 5 – 10 seconds with no overheating of the beans. The magnetic grind funnel and bolted assembly allows for easy dismantling for cleaning and burr changes. A removable wind screen (9) and grind adjustment tool (10) is supplied. GR1-Velo: rapid, fresh, cool and efficient on-demand grinding by pedal-power!

*burrs need replacing periodically according to use

- 1** Gearbox: stainless steel shafts, hardened gears, silent, sealed unit with foodsafe grease
- 2** Drive sprocket: Gates Carbon-Drive™ CenterTrack™, 22T sprocket, 9-spline mount
- 3** Burrs: conical Ø71mm steel burrs – ‘Mazzer Robur’ type, typical rpm range 300 – 400
- 4** Grind funnel: magnetic stainless steel for easy access to clean the burrs, guides coffee grinds direct from burrs to portafilter
- 5** Portafilter support fork: height adjustable with handle rest, stainless steel, electropolished
- 6** Grind adjustment collar: stainless steel, precision stepless grind adjustment
- 7** Doser: volumetric rotary bean doser, can be set to nominal 9g or 8 or 7g single doses with reducer sleeves, rotate twice for double shot
- 8** Hopper: the hopper mount is compatible with all Compak K-series hoppers, a 0.8kg* extra-strong Makrolon® hopper is supplied
*the smaller 0.3kg hopper (also illustrated above) is available as an accessory

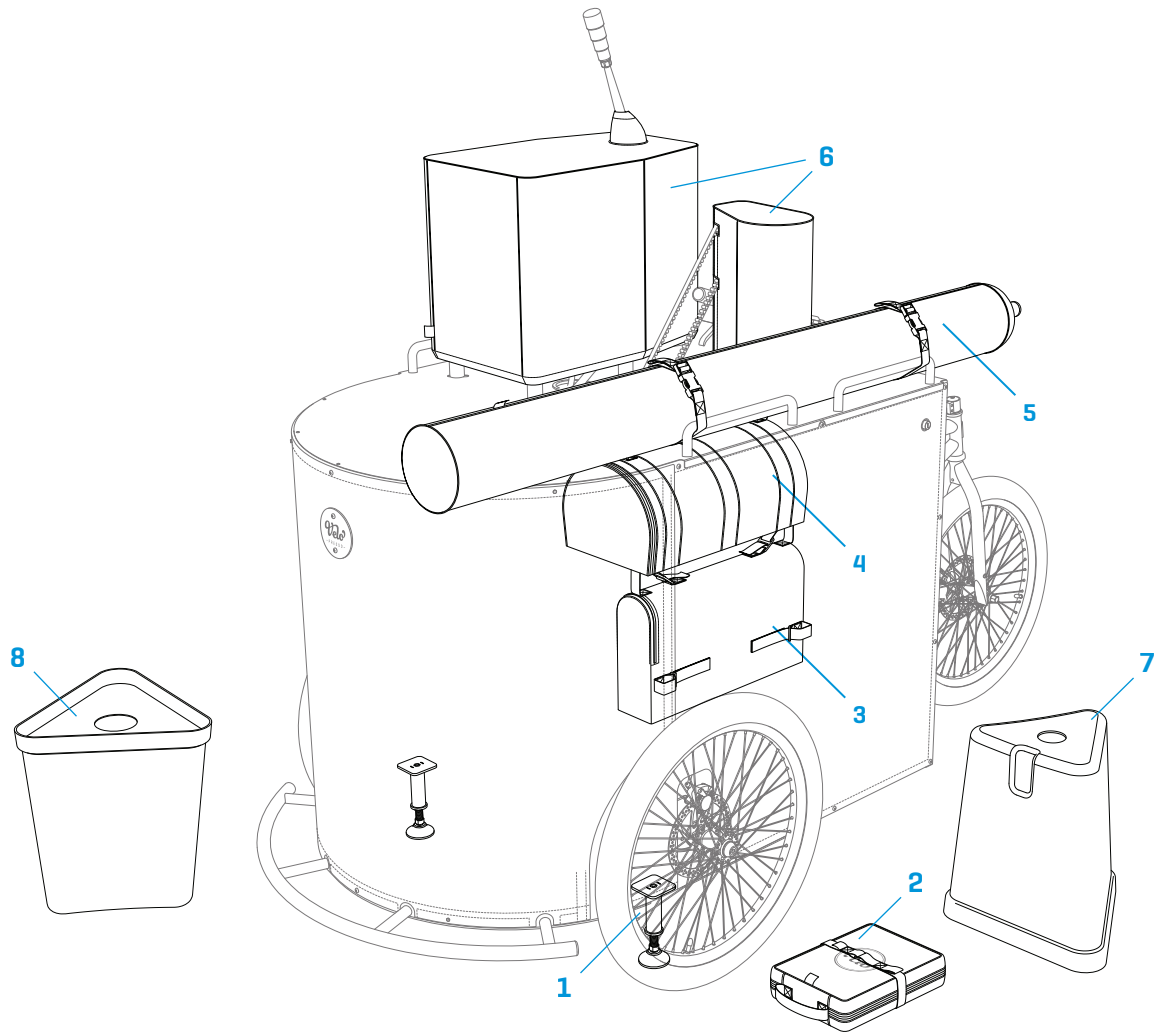
UTILITIES



Velopresso is all about efficiency and all the utilities are secured with webbing straps fitted with strong snap buckles or Velcro for quick set-up and removal. The blue 20L* Scepter MWC fresh water tank has a quick-release coupling (QRC) with stop valve that connects it to the rotary pump (pedal-driven), which pushes the water either direct to the on-board pitcher rinser sink or with the switch of a lever to the espresso machine via the water filter. The fresh-water hose connections, tanks and pump are all designed for potable water use. Liquid waste is collected in the black 20L MWC waste tank fitted with a QRC. Waste coffee pucks are collected in a black 10L MWC via the knock bar, stainless steel funnel and smooth-bore ducting. A bolt-on aluminium shelf with rubber pad supports a gas cylinder (not supplied) of 1.8kg to 5kg, providing up to 10 days use (average consumption is 0.5kg per day).

- 1** Fresh water tank: blue 20L* Scepter MWC, hoses and QRC suitable for potable water use
*a 10L fresh-water tank can be supplied as an alternative or accessory
- 2** Knock box tank: black 10L Scepter MWC
- 3** Filter: Brita Purity Quell ST C300 cartridge, Brita Purity C 30% head
- 4** Waste liquid tank: black 20L Scepter MWC, hoses and QRC
- 5** Gas cylinder*: LPG gas, propane or butane
*the gas cylinder, regulator and gas hose are not supplied as must be sourced, fitted and certified locally
- 6** Pitcher rinser sink: pedal-driven cold water pressure rinser for milk jugs, stainless steel sink, Celli rinser mechanism, plumbed in
- 7** Knock bar and funnel: bolt-on black plastic knock bar, spun stainless steel funnel, smooth bore ducting

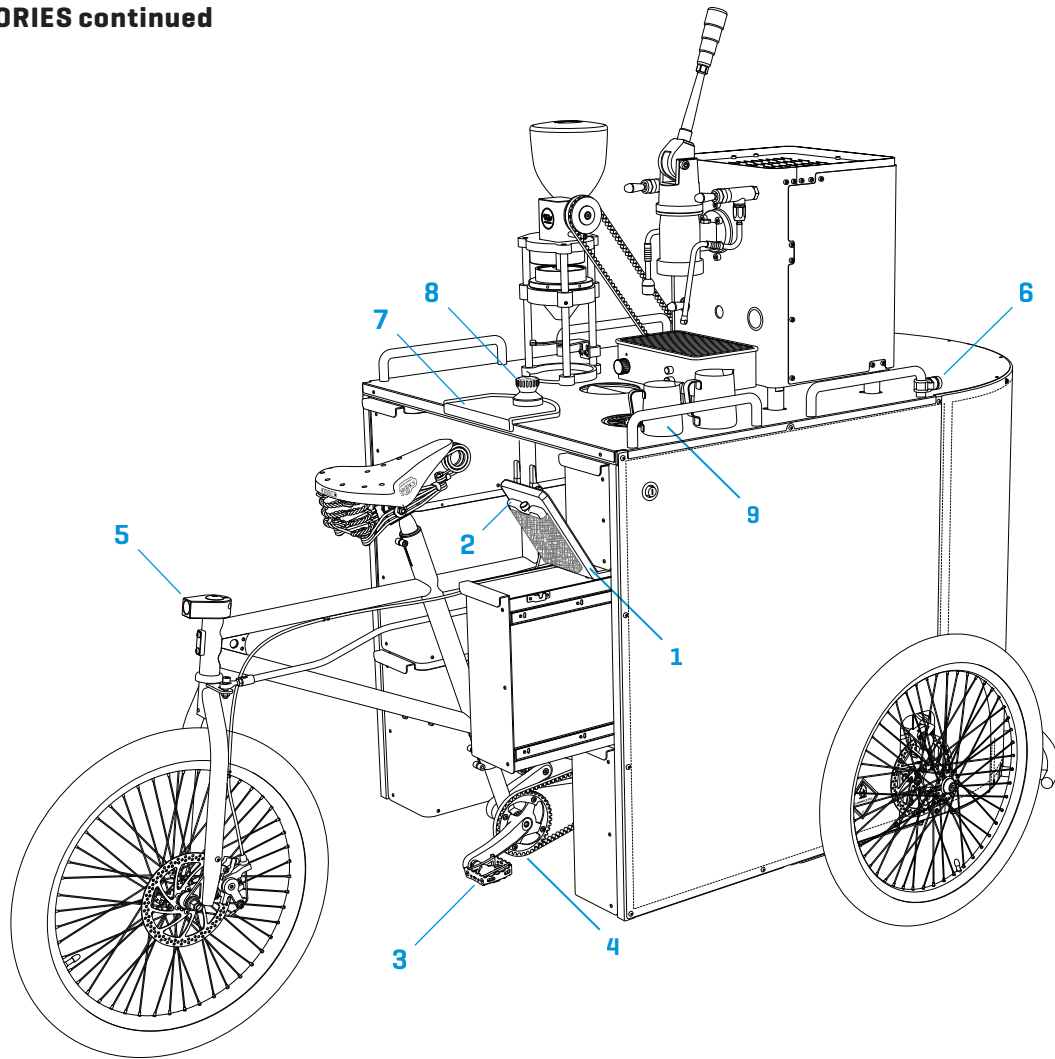
ACCESSORIES



The key accessories listed on these pages are all designed specifically for the Velopresso: the umbrella (plus umbrella transit bag), protective machine covers, jack stands, coolbox inserts, ice packs and storage bags are all regarded as essential items. The umbrella is strong and lightweight and completes the look and function of the Velopresso; the multifunctional jack stands are quick to bolt in place and both level and steady the trike in coffee-mode and support the trike in the rare event of a puncture. The VP toolkit provides nearly all the tools you will ever need in normal use, (plus space for the jacks and a pump) in a bespoke bag that straps inside the trike. The tough weather resistant storage bags provide space for supplies, machine covers and hopper when not in use. Up to 4 Roto Stacka stools and a waste bin can stack inside the Velopresso, providing onboard customer seating and a waste bin to complete the mobile cafe.

- 1** Jack stands: multifunctional support legs, welded stainless steel, bolt into place
- 2** Velopresso toolkit: 21 piece toolkit including specially designed toolbag, and transit strap
- 3** Storage bag (small): weather resistant nylon (orange) bag for up to 300 paper cups
- 4** Storage bag (large): weather resistant nylon (orange) bag for hopper, beans, etc.
- 5** Umbrella & umbrella bag: 2.4m (8') diameter, UV and water proof, certified fire-retardant; aluminium pole, fibreglass frame and fittings. Weather resistant nylon (black) bag to match protective covers, supplied with shoulder and transit straps
- 6** Protective covers (espresso machine & grinder): weather resistant nylon (black) covers with reflective piping
- 7** Rotostacka stool: tough stackable customer seating in various colours
- 8** Rotostacka waste bin: based on the stool with stainless steel lid and closed base

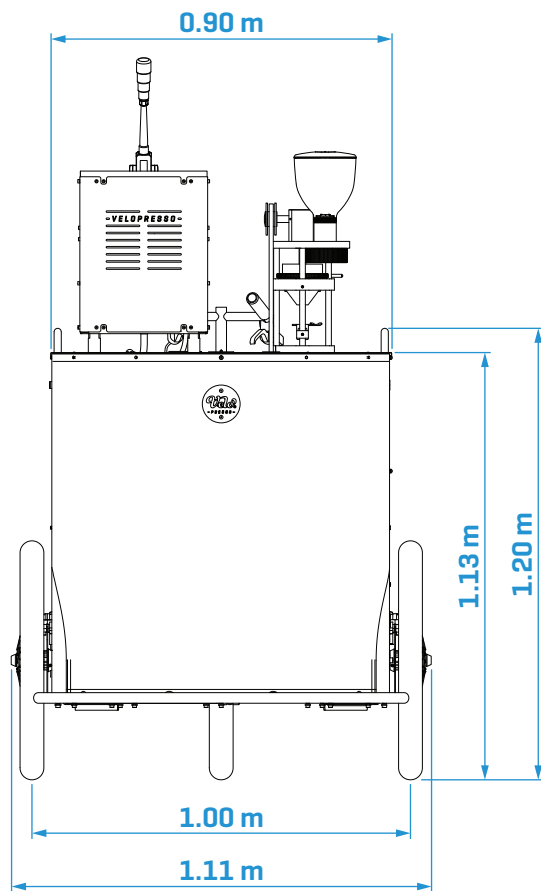
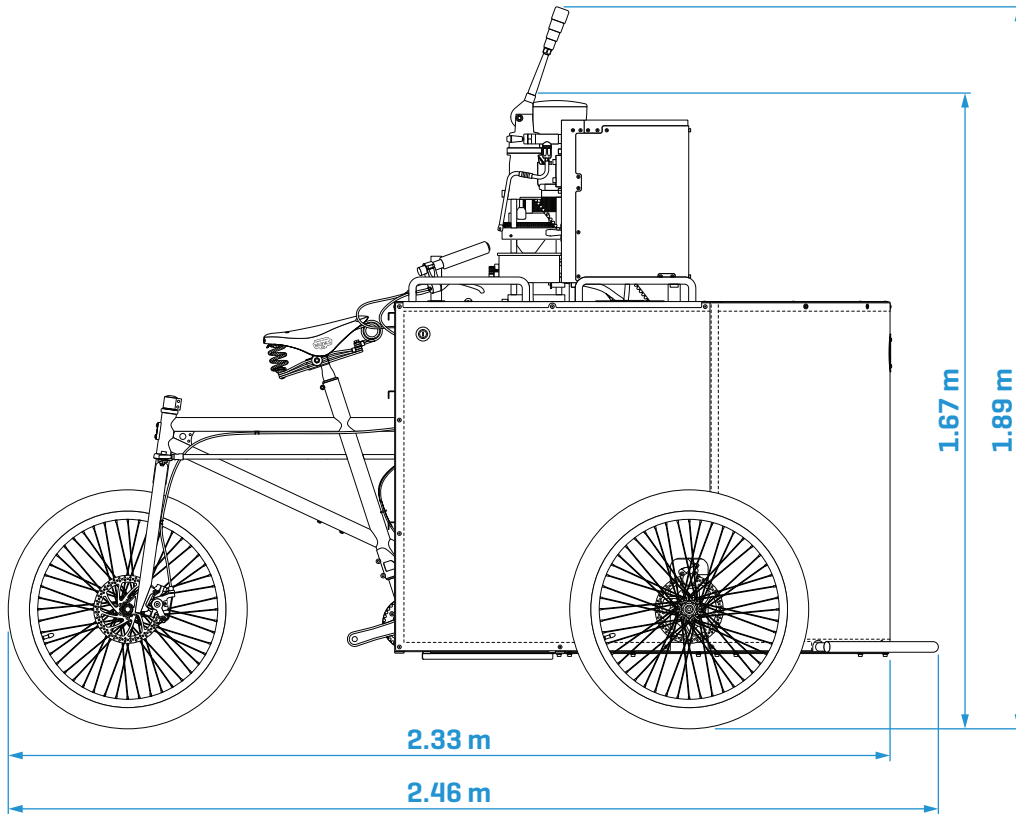
ACCESSORIES continued



The coolbox inserts are highly insulated liners that fit precisely into the 4 large aluminium drawers. Used with our ice packs they provide excellent cold storage for up to 3 x 2 litre (4 pint) containers of milk in each drawer (24 litres / 48 pints total). Best pedal-grinding technique requires click-in (e.g. SPD) pedals and cycling shoes. A heavy-duty tamping mat provides the perfect work area and also covers the handle-bar mount. Our low and heavy VP Tamper has been developed with the specific from-the-saddle ergonomics in mind. The rear clamp light is our elegant 2-in-1 solution that replaces the standard twin-clamp, while also neatly housing a Lezyne Femto LED rear light. Matching Femto front lights fit on the hand rails. With cold-water pressure rinsing, non-stick milk pitchers are ideal. Trikes with a single dedicated barista can be fitted with the low maintenance and grease-free Gates Carbon-Drive™ CenterTrack™ system at the cranks as a custom option.

- 1** Coolbox insert: insulated flat-pack drawer liners used with 5 or more freezer blocks provide exceptional cold storage for milk
- 2** Ice packs: Kampa ice packs (200ml x 5) fit precisely into the coolbox inserts
- 3** Pedals: click-in (e.g. SPD) pedals and cycling shoes are recommended – see page 10 for further information
- 4** Gates Carbon-Drive™ CenterTrack™ belt system (see Custom Options)
- 5** Rear Light: CNC-machined aluminium clamp light, hard anodised black (or silver), matching top cap, and Lezyne Femto rear light fitted
- 6** Front lights: Lezyne Femto, silver, LED
- 7** Tamping mat ('Lippy'): heavy duty, long lasting tough rubber tamping mat with the perfect lip
- 8** VP Tamper: CNC-machined stainless steel base, aluminium handle, colour and laser engraving options, 510g, 58.5, fits VST and VP
- 9** Milk pitchers (12 and 20oz): black, non-stick

DIMENSIONS



TECHNICAL SPECIFICATION

VELOPRESSO COFFEE TRIKE

Description:

The Velopresso tricycle is a unique and original design, but its general configuration can be described as a 'tadpole' format delivery tricycle with rear-steering and front-wheel drive.

For customs / import purposes due to the integrated hybrid nature of the Velopresso it is shipped under 'HS Code 8419818090: Machinery / equipment for making hot drinks'.

Dimensions:

Overview:

2.5m long × 1.1m wide × 1.7m high

Lengths:

Bumper to rear wheel, straight: 2.46m

(2.33 with bumper removed)

With rear wheel turned: 2.20m

(2.08 with bumper removed)

Widths:

Worktop: 0.90m

Front wheels, centre to centre: 1.00m

Maximum width of trike (at front axle bolts): 1.11m

Heights:

To top of espresso machine incl. lever: 1.89m

(1.67m with lever arm removed)

To top of hand-rails: 1.20m

To top of worktop: 1.13m

Weight:

Complete trike: unladen weight approx. 175kg; fully laden* weight approx. 265kg

* for this purpose fully laden weight includes the umbrella, gas cylinder, a handwash unit, fresh water × 25L, milk × 24L, 4kg of beans, cups, freezer blocks, coolbox inserts, tools, etc., but excludes the rider

Cyclist height range:

The Velopresso standard rear frame fits a wide height range. Although small leg reach adjustments of around 25mm (equivalent to up to 50mm or 2" in total height) can be made at the seatpost (i.e. 'at the saddle'), because there is an optimal saddle height relative to the coffee machinery and work surface, nearly all the main height adjustment (for different leg lengths) is done at the 'telescopic' boom bottom bracket (i.e. 'at the pedals') which has 160mm (6") of adjustment accommodating a user height range of approximately 1.63m (5'4") to 1.96m (6'5"). If the intended user is at either end of this range please contact us to discuss in detail before ordering. We can also supply a 'Small' rear frame (custom option) which will allow for a height range of approximately 1.57m (5'2") to 1.82m (6'2").

Modular frame:

The trike frame-set is modular and consists of six welded modules that bolt together. Modularity allows for ease of fabrication, and the replacement of an individual module instead of the entire frame-set in the event of an accident resulting in damage to the frame. In addition, the modular frame anticipates future developments by Velopresso Ltd to create alternative machine modules that would fit on top of the core module and trike, in order to offer new functionality. Modularity also allows the Velopresso to be partly disassembled if necessary for transportation in a more compact form, or entry into buildings with doorways narrower than its assembled width, e.g. if it is to be operated inside a gallery space with poor access. The partial dismantling and re-assembly of a Velopresso would take several hours but this can be a worthwhile process if it enables access to a building for a job of significant duration.

Each frame module is made up of 3D laser-cut steel tubes or box section, laser-cut and formed steel plates, brackets and other specialist fittings. Fabrication is by TIG welding, with brazing and silver soldering used for the smaller fittings. The tricycle frame-sets are finished with a tough, two-stage industrial powder-coat process. The default colour is black (RAL 9005) in a satin finish, but a range of RAL colours and full bespoke colour powder-coat options are available as custom options.

The Velopresso tricycle framesets are all hand-made with specially developed tooling in our east London factory, and on completion are fitted with the company data plate – bearing the Velopresso and Reynolds '631' logos and 'Made in London, England' and the 'Made in Britain' marque – which is stamped with the tricycle serial number and production date, confirming authenticity

Rear frame module: Reynolds 631 air-hardening, seamless steel alloy over-size automotive tubing

Front frame modules: box section ERW steel and laser cut steel plate, stainless steel studs

Fork: custom VP version of the Identiti Rebate 1420 DH jump fork, Cr-Mo 4130, with M5 bosses for mud-guard or rack, and welded steering rod mount

Boom bottom bracket: stainless steel (304), BSA / English thread × 68mm, machined alignment groove, TIG welded, electropolished, with CNC machined hard-anodized aluminium seat-tube shim

Headset – rear: heavy duty 1 1/8" threadless steel cups, oversize 1/4" bearings, black alloy twin bolt clamp and top cap

Headset – front: alloy 1" threadless, sealed bearing, black

Bumper: removable front bumper, stainless steel (304), TIG-welded, bolt-on, electropolished

Worktop: brushed finish laser cut and folded stainless steel (304), bolted and riveted in place with stainless steel fixings, and protective HDPE plastic gaskets and grommets at openings

Hand-rails: architectural hand rails (x 4) in brushed stainless steel (304), 19mm diameter, bolt-on

Branding panels:

The wrap-around branding panel set provides approx. 3 square metres for company branding / artwork, spread over the three bolt-on panels – left side, right side and front. Digitally printed (dye sublimation) – to your design – in full colour and high resolution, on heavyweight, weatherproof EU Reach approved and recyclable 'Truckside' PVC, with stitched hems, Velcro and metal eyelets, secured with stainless steel bolts and frame studs.

Fully detailed Adobe Illustrator design templates and instructions are provided for your graphic designer to prepare your artwork for the Velopresso branding panels. Panel sets can easily be changed in just 15 minutes – with a 3mm hex key, and 25 tx pin security key – making re-branding for events or corporate hires very simple to achieve. Additional branding panel sets can be ordered at any time – see Spare Parts in Price List.

Front panel: dimensions 146 × 92cm, bolt-on at centre only, with velcro and eyelets hooked over stainless steel studs welded to the frameset to allow the front to be opened each side of centre line for quick access to the gas cylinder, water and waste tanks, storage bags, hand-wash unit, etc. A front panel restraining strap is fitted to hold panels open when accessing the interior of the trike.

Side panels: left and right side panels, dimensions 109 × 92cm, bolt-on

Front Brace: stainless steel (304) tube, TIG welded and electropolished, bolt-on; includes mounting points for Velopresso marque and front panel strap

Marque: polished stainless steel (304) Velopresso logo badge with colour infill, two stainless steel security bolts hold marque and front panel in place

Steering:

Velopresso has front-wheel drive and rear-wheel steering with an excellent turning circle. The handlebars and stem are combined as a single bolt-on and removable unit. In order to have a completely clear work surface when in coffee-mode, the unit is unbolted and removed in seconds and stored out of the way on a separate mount point underneath the worktop, and then replaced before switching back to ride-mode. Normal steering action is transferred from the compact handlebars to the rear fork via

a stainless steel steerer and rigid stainless steel steering-rod.

Handlebar unit: stainless steel (304), 3D laser-cut tube, CNC machined stainless mount and top, TIG-welded, electropolished, stainless steel M6 hex bolt, plain black plugs, ESI Chunky silicon grips, black

Tiller: CNC-machined aluminium bolt-on tiller clamp, hard anodized black, stainless steel fittings

Steerer-rod: CNC-bent, stainless steel (304) tube, welded threaded ends, electropolished, M8 universal joint and swing bolt

Brakes:

Velopresso's weight and mobility requires serious stopping power and this is provided by two independent braking systems:

Front: Magura Big Twin hydraulic disc brakes, a single lever operates the left and right wheel calipers simultaneously

Rear: Tektro Aquila mechanical (cable) disc brake, with Magura locking lever for use also as the parking brake

Wheels:

Velopresso super strong and lightweight custom-made Halo SAS DH pro alloy wheels, 24", silver:

Rims: Halo SAS, double eyelet, double joint, 48 hole alloy DH rims, silver, subtle laser-etched Velopresso and Halo logos

Hubs: Halo Spin Doctor, 48 hole, sealed bearing alloy disc hubs, for Ø20mm through-axles, silver

Spokes: Halo stainless steel, 14 gauge, non-buttet

Tyres: Schwalbe Crazy Bob, 60–507 (24×2.35 inch), strengthened side walls, inflated to 40–60 PSI

Tubes: Schwalbe AV10D, 60–507 (24×2.35 inch), downhill schrader tube with reinforced valve

Axles:

Only the left front wheel is driven, there is no differential and the right front wheel is independent and passive. High quality oversize flange bearings bolted to steel axle plates in the chassis support the axles.

Front axles: Ø20mm solid stainless steel (304), drive side – left, passive axle – right, VP CNC-machined anodised aluminium axle washer and stainless steel M8 bolt

Bearings: sealed flange bearings inner Ø20mm, stainless steel, hardened pressed steel flanges, stainless steel M8 bolts and nyloc nuts

Rear axle: Identiti Rebate Ø20/14mm through-axle, Halo chrome M14 wheel nuts

Transmission, gears, clutch:

The Velopresso incorporates many innovations in the transmission: at the centre is our unique precision engineered clutch mechanism and changer that enable the pedal drive to be switched between ride-mode and coffee-mode, i.e. from driving the front left wheel to move the trike, to powering the coffee machinery while stationary, and vice versa; the exposed drive at the grinder uses clean, grease-free and maintenance-free Gates Carbon-Drive™ system ('belt drive') at low tension, while standard 3/32" bicycle chains, sprockets and tensioners are used at the cranks* and internal transmission; short 150mm cranks are used for ergonomic necessity on the upstroke (to reduce thigh lift) and improved pedaling efficiency.

Bottom bracket: SunRace BSA 68 x 103mm, sealed bearing, alloy cups, square taper

Cranks: Andel TMS1 single-ring crankset, 150mm alloy, silver, 104 BCD

Chainring*: 32T chainring, stainless steel bolts.

* the Gates Carbon-Drive belt option can also be fitted at the cranks
– see Custom Options

Chain: Gusset GS8 3/32" chain

Tensioner: Sturmey Archer CTS80 chain tensioner

Sprockets: Surly 22T, 9-spline; Velosolo bolt-on hardened disc-mount sprockets; Gusset HG and disc-mount sprockets

Hub gear: Sturmey Archer F30 CS-RK3, 3-speed, black

Gear lever: Sturmey Archer 3-speed control lever (right side)

Clutch lever: matching SunRace friction clutch control lever (left side)

Espresso machine – FCL1-Velo:

Commercial lever group: 7kg forged-brass spring-lever group, polished chrome

Boiler: 7L copper boiler

Burner: powerful 1.8kW LPG gas burner*, in stainless steel burner box housing, with new (2017) faster 0.85mm gas jet

*electric heating kit to give dual fuel (gas/electric) option is available in UK, EU, AUS, NZ and additional countries world-wide – see Custom Options

Chassis: strong 3mm thick Zintec steel chassis, powder-coated black* (RAL 9005) satin

*colours available – see Custom Options

Feet: the espresso machine is bolted to the trike frame through 50mm high solid stainless steel

feet; the lateral/forward/aft position adjustment of +/-20mm

Stainless steel cover: one piece back and side panel in 0.9mm thick polished stainless steel, vented with stencil logo on rear, bolt-on

Boiler pressure gauge: with enamelled Velopresso logo

Drip tray: cantilevered Zintec steel band, with unique easy-clean and rattle-free injection-moulded silicone tray, electropolished stainless steel wire grille; plumbed-in waste connection

Gas controls: engraved stainless steel on/off control knob, pilot and piezo-ignition controls

View porthole: for visual flame check and manual lighting in the event of piezo ignition failure

Sight glass: for monitoring boiler water level, with minimum and maximum indicators

Water inlet valve: allows boiler water level to be topped up semi-automatically, with pedal-driven water pump and push-to-lock-on / flick operation lever valve

Hot water valve: stainless steel tube, anti-splash nozzle and push-to-lock-on / flick operation lever, for americano, teas, etc.

Steam tube: powerful stainless steel steam tube, supplied fitted with CNC machined stainless steel steam nozzle (4 x 1.2mm holes) with push-to-lock-on / flick operation lever

Portafilters (x2): twin spout and double basket; plus 1x single basket and spout supplied

Safety features: thermocouple flame-failure safety device, and boiler pressure-release valve.

Certification: EC conformity, boiler safety test certificate, CE marked, SAI AS/NZS, made in UK exclusively for Velopresso by Fracino.

Grinder – GR1-Velo:

Power / Drive train: pedal-powered direct drive grinder using Gates Carbon-Drive™ CenterTrack™ sprocket, 22T, and 122T belt, 9-spline mount, polycarbonate safety guards

Gearbox: stainless steel shafts, hardened gears, hard-anodised aluminium casing, industrial sealed bearings, greased for life, food-safe, sealed unit

Burrs: conical Ø71mm steel burrs for rapid and cool grinding – 'Mazzer Robur' type 186c

Grind adjustment collar: stepless grind adjustment with sprung stainless steel (304) collar, 1.5mm pitch

Grind funnel: magnetic grind funnel, removable instantly for cleaning burrs, spun stainless steel (ferritic 416)

Portafilter support fork: height-adjustable stainless steel portafilter support fork with handle rest

Doser: volumetric rotary bean doser, supplied with reducer sleeves to give choice of single shot doses of 9, 8 or 7g; rotate twice for double shot

Hopper mount: the removable aluminium hopper mount is designed to receive Compak K series hoppers, a food-safe O-ring fitted to the mount firmly secures the hopper in place

Hopper: 0.8kg* Compak K series hopper in 'extra strong' Makrolon® (polycarbonate) is supplied

*a 0.3kg Compak K series Makrolon® hopper is also available as an accessory

RPM: 300rpm when pedalling in 3rd gear at 90rpm, while speeds over 400rpm (equivalent to the electric 'Robur') are possible with the high gear upgrade at the grinder (see Custom Options)

Grind adjustment tool: this stainless steel tool – laser-marked with 'VELOPRESSO' type logo – assists the adjustment of the stepless grind collar; supplied on stainless steel key-ring loop, ideal for the key used to lock the drawers

Wind screen: a clear plastic wind screen that can be fitted to the grinder to prevent grinds being blown from portafilter prior to tamping when outdoors. 0.5mm PETG sheet, hook & loop (BS EN 13780:2003)

Swipe wire: the 'swipe' is a small laser-cut and folded stainless steel part that rotates with the inner burr and keeps grinds from accumulating on the funnel wall, one swipe is fitted to the grinder and a spare is supplied

Utilities:

Fresh water tank: 20L Scepter MWC (military water canister), blue, BPA-free and designed for potable water use

Hoses & fittings: John Guest fittings and hose; stainless braided EPDM hoses, WRAS and/or NSF/FDA approved for potable water; brass QR fittings for liquid waste hose connections

Pump: Fluid-O-Tech P0204F rotary pump, WRAS and NSF approved, pedal-driven (no electricity required)

Filter: Brita Purity C300 Quell ST professional filter, Brita Purity C 30% head

Knock bar and funnel: black acetal knock bar, stainless steel funnel, PU smooth bore ducting to tank

Knock box tank: 10L Scepter MWC, black knock-out waste coffee pucks are collected, est. capacity 300 double pucks

Waste liquid tank: 20L Scepter MWC, black

Pitcher rinser & sink: pedal-driven Celli fountain pressure rinser for milk pitchers, pedal-driven, cold water supply only, stainless steel mini sink

Drawers: 2 small and 4 large aluminium drawers with key-operated central locking, provide storage for beans, tools, cups, and up to 24L of milk – when fitted with the coolbox inserts and ice packs (see Accessories below)

Straps: webbing straps with QR snap buckles and hook & loop fastenings secure utilities in place. Polypropylene webbing, ITW Nexus acetal buckles (military grade); hook & loop (BS EN 13780:2003)

Aluminium floor & shelves: 3mm thick aluminium floor protects transmission from upspray from road, and supports waste tank etc., shelves support gas cylinder, fresh water tank, knock-box and filter, all are bolted on with stainless steel fittings

Gas cylinder & regulator (not supplied): must be sourced locally by customer and installed by a registered gas engineer to meet regional regulations – see [Order Guide](#) for more details

User manual:

A comprehensive 60 page User Manual is supplied in PDF form with the trike. A 20 page Installation Manual is also supplied, which guides you through the setting up process and gas installation. Updates are issued via email when required.

Customer support and maintenance:

The Velopresso is designed for minimal servicing, and for most maintenance to be handled locally. Spare parts can be sent by courier worldwide, and guidance provided via email, phone or Skype video as required.

You can choose various custom options, and accessories as described below. Pricing for all these optional items, as well as spare parts can be found in the [Price List](#)

CUSTOM OPTIONS

Colour options for trike frame-set and espresso machine chassis

The tricycle's steel frame and the espresso machine chassis, have an anti-corrosion pre-treatment and are then finished in a tough black (RAL 9005) automotive / architectural quality polyester powder-coat paint as standard. For an additional cost you can have either or both finished in a colour of your choice from the 12 RAL colours shown here:



Note: this colour chart is an approximate visual guide only, and the RAL numbers should be used as a definitive reference. If you require a 'bespoke' colour, not in this chart, then please select the 'bespoke' option on the order form and supply the colour reference

Electric / dual fuel option for espresso machine

The standard FCL1-Velo is heated by gas only, but an electric heating element is available for dual fuel versatility – both gas and electric in one machine. This option can be fitted at the factory or retro-fitted to existing gas-only machines. The electric element and controls allow the espresso machine to be heated from cold (full boiler) in 15 minutes. Having an electric option can be particularly useful if the machine is to be used inside and where use of gas cylinders is prohibited. Specification: 230V, 13A, 2.7kw rating, 50Hz single phase mains power. For EU, Australia, NZ and selected countries worldwide only (this option is not available for use in US or Canada due to electrical supply differences and certification).

Trike rear frame – small size option:

On request we can supply a smaller rear frame which will allow for a height range of approximately 1.57m (5'2") to 1.82m (6'2"). This may extend the production build time depending on stock availability of this item.

Transmission options:

'Belt drive at the pedals': Gates Carbon-Drive™ CenterTrack™ system; 39T CX sprocket (at cranks), 125T belt, 28T CX sprocket (at hub gear):

If the Velopresso is to be used by one barista then the option of selecting the Gates Carbon-Drive™

CenterTrack™ system ('belt drive') at the cranks ('at the pedals') can be recommended for the advantages that it gives over standard chain of clean, lubrication-free and maintenance-free operation.

This option is not suitable if multiple baristas of different heights will regularly be using the trike as the process of raising or lowering the telescopic boom to make a height (leg reach) adjustment and correctly re-setting belt tension requires several tools to complete and can take 20–40 minutes, depending on technical competence. However, the option of 'belt-drive' at the cranks may well be suitable if two or more baristas of similar height are to use one Velopresso regularly – as it will be possible to find a median position that can work satisfactorily for all the riders so as to avoid making regular height adjustments at the 'boom'. Please note that small height adjustments of up to 25mm can be made at the seat post ('at the saddle').

High gear ratio for the grinder: Gates Carbon-Drive™ CenterTrack™ system; 125T belt, 28T CDX sprocket

With the high gear ratio option fitted at the grinder it is possible to increase the rpm at the burrs from a nominal 300 rpm (in gear 3, pedaling at 90rpm) to 400rpm with this upcharge option.

Red belt at the grinder: Gates Carbon-Drive™ CenterTrack™ CDX 122T belt, red

An all red belt (122T only) is available instead of the default option of the standard black/blue Carbon-Drive™ CDX belt as an upcharge option

ACCESSORIES

Umbrella:

This lightweight and strong umbrella has been developed in collaboration with our specialist UK manufacturer who build each umbrella to order. The tough 2.4m (8') diameter canopy is waterproof, UV proof, certified flame-retardant and can be supplied in single or mixed standard colours or as a digital dye sublimation print version to enable full custom branding. The frame is fibreglass and the pole extruded aluminium (35mm diameter). The Velopresso frame-set has a built-in umbrella mount clamp designed specifically to quickly and easily secure the umbrella in place.

Pole: aluminum extruded tube, Ø35, silver

Frame: fibreglass, black

Canopy: PU coated 500 denier polyester; hydrostatic head 150cm min; UV resistant; flame retardant: EN533 Class 1, BS7837:1996 & CPAI 84 Section 6; Washing instructions: hand wash pure soap max. temp 40 °C

Umbrella – plain colour canopy: choose a single colour or a combination from the 17 colour options shown below:



Note: this colour chart for the plain umbrella fabric is an approximate visual guide only, email us at contact@velopresso.cc for further information

Umbrella – digitally printed canopy: a completely bespoke canopy, with your artwork printed digitally in full colour via dye sublimation on to the same tough fabric – ideal if you want the umbrella to match the design of the branding panels on the tricycle, or to include logos, patterns or other graphic elements.

Umbrella bag: the umbrella transit bag is a bespoke design made of a very tough black nylon, is weather resistant, and is fitted with reflective piping, a shoulder carry strap and two snaplock transit straps to secure the umbrella to the trike. It is designed to match the protective machine covers (see below). 1000 denier PU coated nylon, black; polypropylene webbing; ø3mm shock cord; reflective piping; ITW Nexus acetal buckles (military grade)

Cold storage:

The coolbox inserts are highly insulated, flatpack, wipe clean, drawer liners that fit precisely into the 4 large aluminium drawers. Used with our ice packs they provide excellent cold storage performance for up to 3 x 2 litre (4 pint) containers of milk in each of the four large drawers (24 litres / 48 pints total). Two of the ice packs are fitted into the hinged lid of each Insert ensuring a snug seal and optimised cooling, with 3 more used below and among the milk containers. In hot weather more ice packs can be added if space allows.

Coolbox insert: self-sealing with mesh pockets in lid for two ice packs, fits into large drawers, up to 4 per trike. Inner: 200gm² PU coated nylon, black with reflective coating to inner face; Outer: 1000 denier Oxford weave PU coated nylon, grey; polyester mesh; Insulation: 15mm thick Plastazote, closed cell

foam; polypropylene webbing; hook & loop (BS EN 13780:2003)

Ice packs: Kampa 200ml ice packs, set of 5 used per coolbox/drawer

Pedals:

Operating the Velopresso requires ‘click-in’ cycling shoes* and pedals. Shimano SPD pedals (model PD-M324) can be supplied as an accessory, and give the option of using just the SPD ‘click-in’ fitting or combining that with traditional toe-clips and straps on the flipside for use with regular shoes

*there is a wide range of SPD cycling shoes on the market

Jack stands:

Jack stands (supplied as a pair): these multifunctional support legs can be quickly bolted into position on the trike frame to serve 3 functions. Their primary function is to take all the weight off the front wheels to optimise stability for perfect barista operation. These legs are also essential for leveling the trike on uneven ground for even flow of espresso out of the twin spouts, and in the rare event of a puncture they are used to elevate either front wheel off the ground for conducting the repair with the wheel in place. Stainless steel (304), TIG-welded, electropolished.

Jack stand rear adaptor: by fitting this T-shaped adaptor to one of the jack stands, the assembly and the rear wheel through-axle can be used to support the trike at the rear fork when removing the rear wheel for maintenance or puncture repair. Stainless steel (304), TIG-welded, electropolished.

Tools:

VP Toolkit: the 21 piece VP toolkit provides nearly all the tools you will need for the Velopresso in a tough bespoke bag that straps into the trike interior and includes specific spaces for the jacks, spare inner tube and a compact bicycle pump. Items included:

- Toolbag, 1000 denier PU coated nylon, orange; polypropylene webbing; reflective piping and logo
- Transit strap for securing bag into Velopresso
- Combi-spanners (Silverline, chrome vanadium) 10, 13, 15, 17, 19, 20 mm
- Hex keys (Bondhus) 2, 2.5, 3, 4, 5, 6, 8mm
- 25TX pin key
- Park Tools 13/15mm cone spanner
- Schwalbe tyre levers (x3)
- Solo cinch strap (to secure the front brake ‘ON’ for loading or repair)

Pump: Lezyne HV Drive, medium, silver

Silicon grease: Loxeal No.4, 100g, food safe

Thread locker: Loxeal 55-03, 10ml, food safe

Protective covers:

These tough protective and reflective machine covers for the grinder and the espresso machine keep them clean and ready for use, protected from dust and the weather when in transit or storage and give smart appearance and added safety on the road. It is recommended they are used whenever the trike is not in coffee-mode. The use of the covers also clearly indicates to potential customers when you are not in active service.

Grinder cover: weather resistant, tough black nylon fabric with velcro fastening and reflective piping, fits over the grinder with hopper removed, and closes around the drive belt, keeping the grinder clean and dry when not in use. 1000 denier Oxford weave PU coated nylon, black; reflective piping; hook & loop (BS EN 13780:2003)

Espresso machine cover: as above but perfectly tailored to the espresso machine, and can be fitted with lever in place or when removed, and even when the machine is still hot. 1000 denier Oxford weave PU coated nylon, black; reflective piping; ø3mm shock cord

Brooks saddle raincover: waterproof black nylon rain cover designed and manufactured by Brooks England for the Brooks B33 saddles used on the Velopresso

Storage bags:

The two tough weather resistant storage bags are designed specifically for the Velopresso to make use of easily accessible available space above the water filter, for invaluable additional storage in the interior of the trike.

Storage bag – small: weather resistant, tough orange nylon fabric bag for up to 300 paper cups, beans, etc. 1000 denier Oxford weave PU coated nylon, orange; polypropylene webbing; ITW Nexus acetal buckles (military grade); Volume: 11 litres

Storage bag – large: weather resistant, tough orange nylon fabric bag for hopper, beans, general use. As above; Volume: 20 litres

Lights:

Rear light: CNC-machined aluminium clamp light, secures rear steering column, conceals headset and houses rear light, matching top cap, and Lezyne Femto rear LED light, hard-anodised black or silver

Front lights: Lezyne Femto front LED light, silver with rubber strap mount for attaching to hand rails

Waste bin:

Roto Stacka bin: lightweight, robust and portable free-standing waste bin, in recyclable polyethylene, with stainless steel lid, stacks with Roto Stacka stools & fits inside Velopresso for transport, available in black or grey

Customer seating:

Roto Stacka stool: lightweight, robust and portable seating for customers, in recyclable polyethylene; up to 5 stools, or 4 stools plus 1 waste bin can be stacked inside Velopresso for transport; available in white/natural, orange, black or grey; designed and manufactured in the UK by Michael Marriott

Hand wash unit:

HMP portable hand wash unit: the robust and compact Handeman® HMP compact portable hand wash unit, for use with pre-heated hot water, keeps water warm for 5 hours and provides a minimum of 10 × 12-second hand washes per filling, compact unit, straps inside front of Velopresso, out of sight (electric version also available)

Barista accessories:

Portafilters: spare portafilters available, double, single or bottomless (“naked”), supplied with basket

VP tamper: At 510g our precision machined compact, and heavy tamper has been developed specifically for the ‘from-the-saddle’ operational ergonomics of the Velopresso. Available in three colours (black, gold or red) and can be laser-etched with your logo or VP logo, stainless steel base, with anodised aluminium fluted handles

Tamping mat: heavy duty, black rubber ‘Lippy’ tamping mat, fits over steering mount, protects work surface and portafilter when tamping, and prevents grinds from entering steering mount (made in UK by Made By Knock)

Hoppers: Kompak K-series ‘extra-strong’ Makrolon polycarbonate hoppers with lids, available in 0.8kg and 0.3kg sizes

Milk frothing pitchers: milk pitchers (12 or 20oz): black, non-stick, perfect for cold-water rinsing

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Velopresso Ltd reserve the right to change the above specification without notice

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