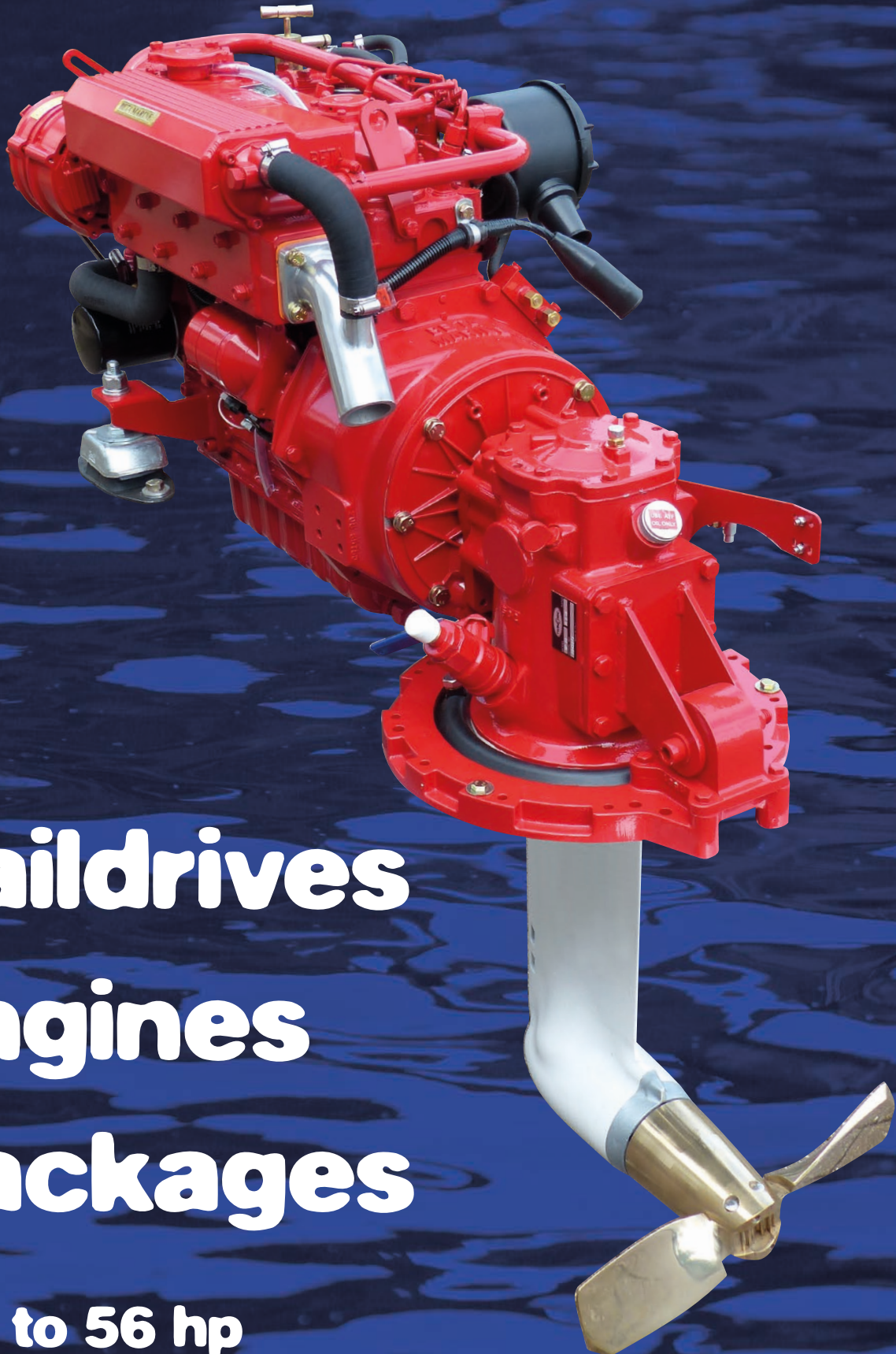


***BETA** MARINE*



Saildrives Engines Packages

13.5 to 56 hp

All the power you need

Prices and specifications are subject to amendment without notice. Information given is subject to our current Conditions of Tender and Sale.

Why Beta?

Because:

- We have a superb heat exchanger cooled saildrive engine range especially engineered for the yachtsman at an affordable price, and with a 2 year 'self service' warranty.
- With our Dealer network and dedicated seagoing team, we have probably installed a Beta engine in a yacht similar to yours. We will help you!
- We offer our Special Engine Feet option - we can design and manufacture them to suit your existing saildrive feet position.
- Low carbon foot print - these clean engines meet all current and projected **RCD** (Recreational Craft Directive 94/25/EC as amended by 2003/44/EC) exhaust emission regulations. Our Beta 14 through to Beta 38; plus our Beta 43, Beta 50 and Beta 60 Saildrive units meet **EPA** (USA Environmental Protection Agency) exhaust emission compliance.
- Our engine range is based upon the most technically advanced Kubota diesels that give you very smooth, quiet power, right through the speed range. The engine design includes reliable gear driven injection pump and camshaft.
- Easy maintenance with mounted sump pump and optional polyvee belt & pulley drive transmission with our high output alternators.
- We are always improving our engine range so our current production may differ slightly from the photographs.
- Beta Engines are built in Gloucestershire, U.K.
- See our website for many details: www.betamarine.co.uk

Beta's Gloucester manufacturing facility

Solution 1 Specifications

Beta Marine's Saildrives engines are:

- Heat exchanger cooled, indirect injection, naturally aspirated (except Beta 45 - Turbocharged) marine diesel engines based on Kubota.
- Multi cylinder with high inertia flywheel for smooth running.
- Three vortex combustion for quiet running, low emissions and excellent fuel consumption.
- Quiet gear driven camshaft for engine reliability and easy servicing - no timing chains or tooth belts to replace.
- Mechanical injection pump and mechanical governing for maximum reliability.
- Battery charging alternator 45/70 amps - giving full power at cruising speed with 12 volt electric starting as standard.
- Heater plugs for cold start below 5°C.
- Standard 'ABV' Control Panel.
- Fuel filter and mechanical fuel lift pump.
- Lubricating oil filter and sump drain pump.
- 'Morse' type engine speed and gearbox control cable support and end fittings.
- Optional special feet are available to suit your GRP moulding/installation.

Solution 2 Specifications

As solution 1 but including:

- Technodrive SeaProp 60 saildrive leg with 2.15:1 reduction ratio. Output rotation can be either clockwise or anticlockwise.
- Shallow sump.
- Optional special feet with flexible mountings to match your existing installation.

Solution 3 Specifications

As solution 1 but including:

- Technodrive SeaProp 60 saildrive leg with 2.15:1 reduction ratio. Output rotation can be either clockwise or anticlockwise.
- GRP moulded base with stainless steel inserts.
- Engine feet and flexible mountings to suit the GRP base.

Options & Accessories

- Optional special feet to suit your GRP moulding.
- Control panel options ABVW, B, C and D with gauges and alarms.
- Larger 12 volt battery charging alternators.
- Solid or folding propeller.
- Calorifier connections for hot water systems.
- **Many more - see our price list!**

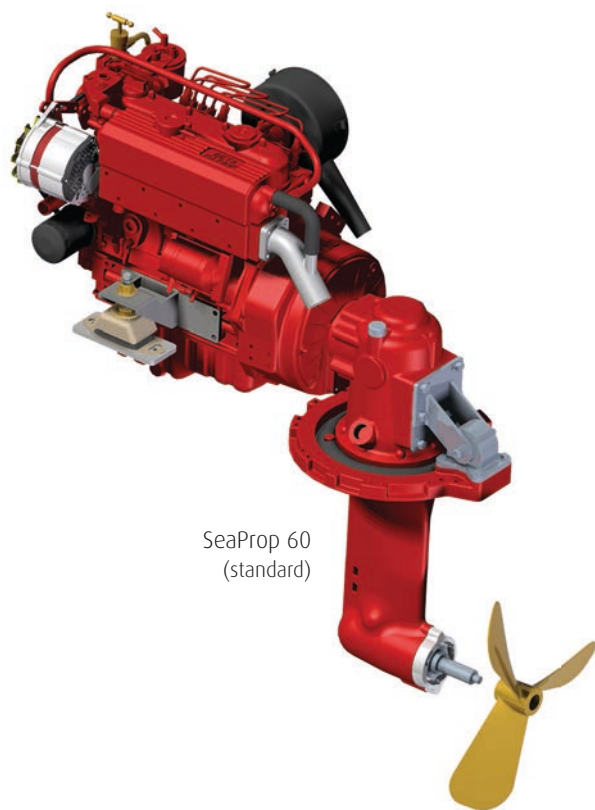
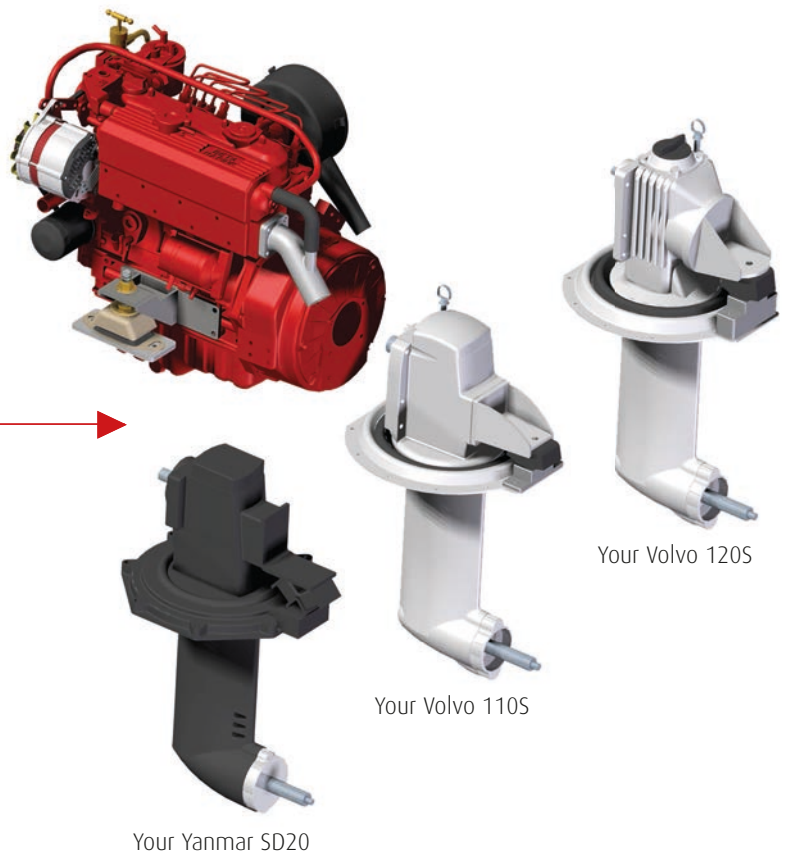


Saildrive Solutions

We can offer you three different
Saildrive solutions:

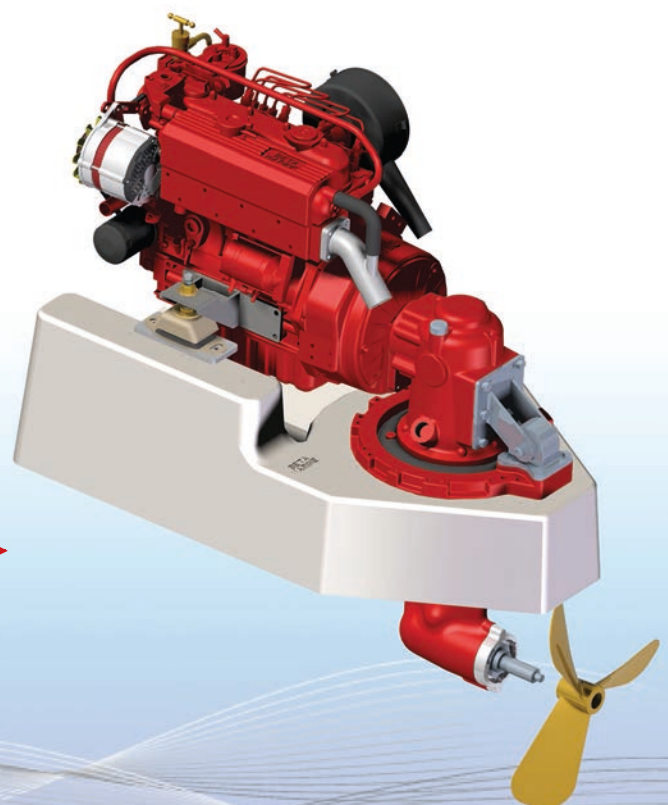
Solution 1:

A new Beta Engine - fitted to your existing Volvo 110S, 120S or 130S or Yanmar SD20 saildrive leg. Special feet to suit your existing GRP base are available as an option.



Solution 2:

A new Beta Engine fitted to a new SeaProp 60 with standard feet. Special feet to suit your existing GRP 'Saildrive' moulding are available as an option.



Solution 3:

A complete Saildrive package with a new Beta Engine fitted to a new SeaProp 60 with engine feet matching the GRP base. We have an installation manual to help you install the GRP base.



Solution 1: Replacement Engine to Existing Saildrive Leg

Many yachts have been built using the Volvo 110S, 120S, 130S and Yanmar SD20 saildrives - eventually the engines wear out; but the saildrive legs are still good.

Beta can provide a smooth, quiet new engine replacement that bolts directly to your existing leg with our shallow sump and special feet options it is an inexpensive solution to the problem, while adding value to your yacht.



New Beta Engine with special adaption and drive plate to suit your existing leg

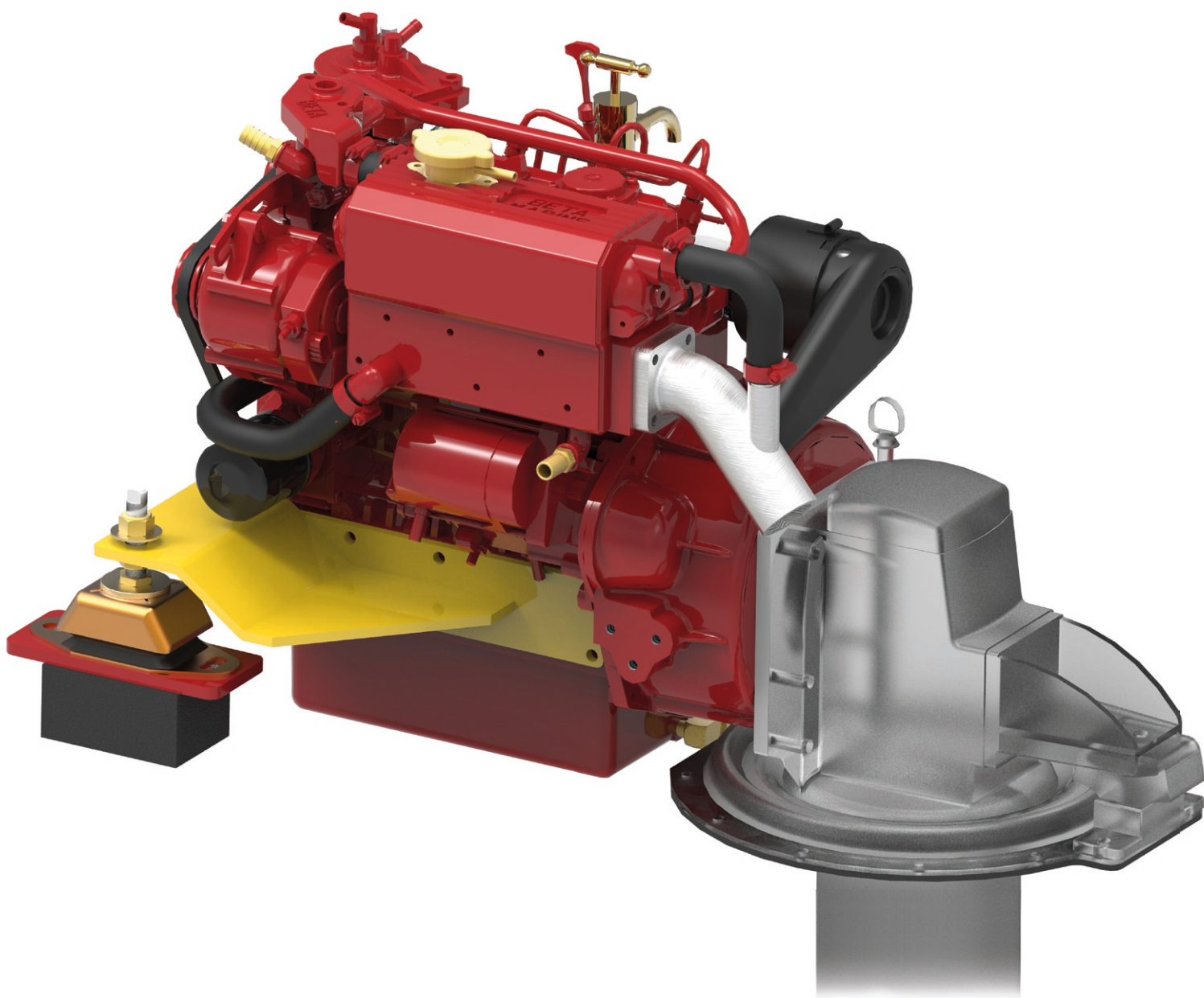
Special Feet option that will match the existing location positions in your GRP moulding

Your Volvo or Yanmar Leg

Special Feet

Are you replacing an old engine?

When replacing a Saildrive engine or complete Saildrive unit in an existing hull moulding, you will need special feet to match the existing positions in your boat. We can design/ manufacture and supply these to suit your existing mounting positions.



Saildrive Power Outputs

Beta 14SD	2 Cylinders	478 cc	13.5 bhp @ 3,600 rev/min
Beta 16SD	2 Cylinders	599 cc	16 bhp @ 3,600 rev/min
Beta 20SD	3 Cylinders	719 cc	20 bhp @ 3,600 rev/min
Beta 25SD	3 Cylinders	898 cc	25 bhp @ 3,600 rev/min
Beta 30SD	3 Cylinders	1123 cc	30 bhp @ 3,600 rev/min
Beta 35SD	4 Cylinders	1498 cc	35 bhp @ 2,800 rev/min
Beta 38SD	4 Cylinders	1498 cc	38 bhp @ 3,600 rev/min
Beta 45SD	4 Cylinders Turbo	1498 cc	45 bhp @ 3,000 rev/min
Beta 43SD	4 Cylinders	1999 cc	43 bhp @ 2,800 rev/min
Beta 50SD	4 Cylinders	2197 cc	50 bhp @ 2,800 rev/min
Beta 60SD	4 Cylinders	2434 cc	56 bhp @ 2,700 rev/min

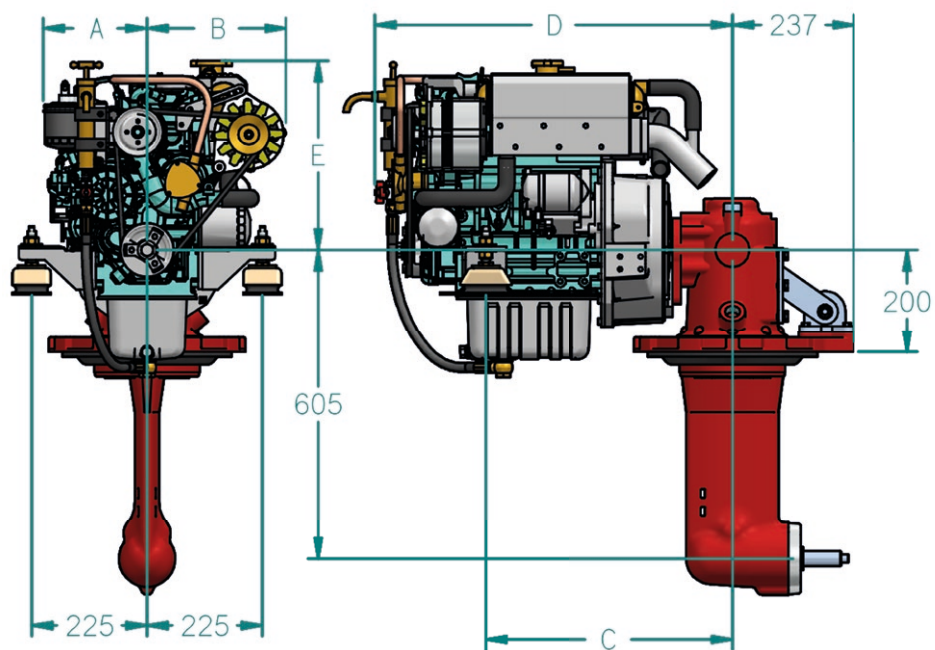
Solution 2: Replacement Engine and Saildrive to fit existing GRP Base



With solution 2 we supply a complete replacement saildrive unit. With our special feet option it will just 'drop into your existing GRP moulding'.

Our SailDrive range includes the Technodrive SeaProp 60, a shallow sump and optional 'special feet' to match your existing GRP moulding. They are suitable for both Pleasure and Commercial applications up to our Beta 38. The Beta 43, 45, 50 and 60 are suitable for pleasure applications with the 2.15 ratio. For clarification and/or any other options please contact Beta Marine.

We have detailed and dimensioned arrangement drawings available - please ask and we can send them to you; or please look on our website for drawings that can be 'downloaded'.



Saildrive Dimensions using SeaProp 60

	Beta 14SD	Beta 16SD	Beta 20SD	Beta 25SD	Beta 30SD	Beta 35/38/45SD	Beta 43/50/60SD
A	218	218	218	218	202	228	252
B	217	217	217	217	271	271	283
C	390	402	460	484	482	568	626
D	569	581	639	663	699	784	850
E	340	340	340	340	369	369	405
Weight	110 Kg	115 Kg	130 Kg	145 Kg	175 Kg	235 Kg	300 Kg

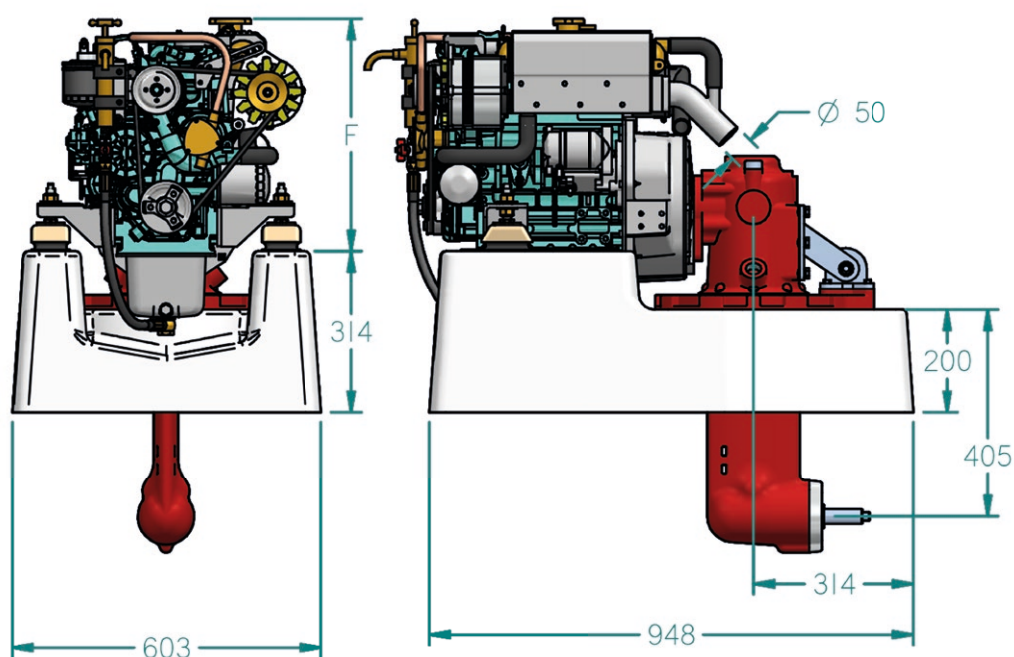
Solution 3: Complete Engine, Saildrive & GRP Base



With solution 3 we supply a complete saildrive unit, that includes the engine, SeaProp 60 saildrive leg with heavy duty engine feet and flexible mountings to match our optional GRP base - for you or your boat builder to mould into your existing hull. The base is designed to be cut to suit the shape of your hull, and we have an installation manual to help you install the GRP base.

They are suitable for both Pleasure and Commercial applications up to our Beta 38. The Beta 43, 45, 50 and 60 are suitable for pleasure applications with the 2.15 ratio. For clarification and/or any other options please contact Beta Marine.

We have detailed and dimensioned arrangement drawings available - please ask and we can send them to you; or please look on our website for drawings that can be 'downloaded' If your hull design requires it, the saildrive leg can be turned through 180 degrees so that the engine is directly over the propeller, please ask for details.

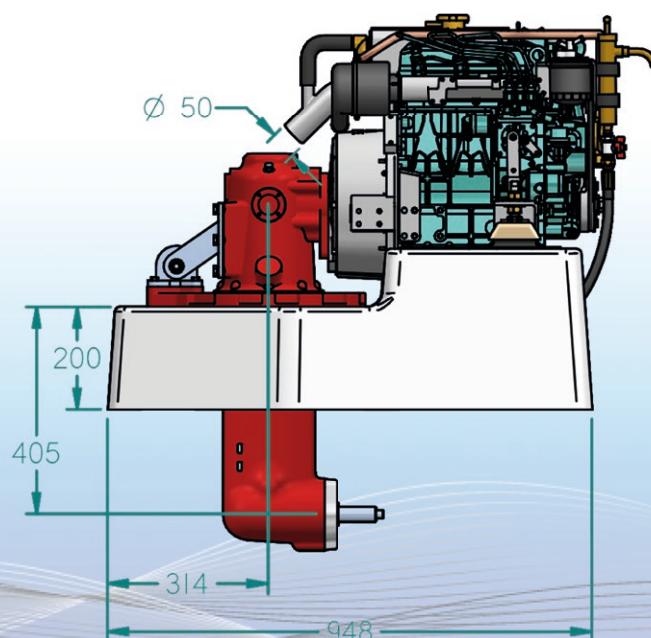


Saildrive Dimensions using SeaProp 60

	Beta 14SD	Beta 16SD	Beta 20SD	Beta 25SD	Beta 30SD	Beta 35/38/45SD	Beta 43/50/60SD
F	421	421	421	421	450	450	495
Weight	110 Kg	115 Kg	130 Kg	145 Kg	175 Kg	235 Kg	300 Kg

SeaProp 60 - Reverse Leg Output

If your hull design requires it, the saildrive leg can be turned through 180 degrees so that the engine is directly over the propeller, Please ask for details.



Control Panels



Standard Control Panel 'ABV'

Tachometer with running hour recorder, keystart switch, push button stop, green light for 'power on', red warning lights and audible alarm for: low oil pressure, high water temperature, domestic and engine alternators 'no charge'; 3m interconnection cable with multi pin plug connector.



Control Panel 'ABVW'

Tachometer with running hour recorder, waterproof push buttons for heat/start/stop, green light for 'power on', red warning lights and audible alarm for: low oil pressure, high water temperature, domestic and engine alternators 'no charge'; 3m interconnection cable with multi pin plug connector.



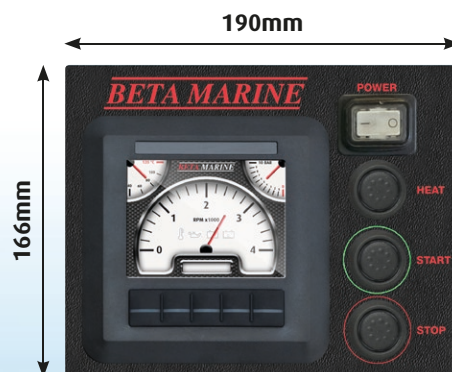
Control Panel 'B'

Tachometer with running hour recorder, water temperature gauge, keystart switch, push button stop, green light for 'power on', red warning lights and audible alarm for: low oil pressure, high water temperature, domestic and engine alternators 'no charge'; 3m interconnection cable with multi pin plug connector.



Control Panel 'C' Deluxe

Tachometer with running hour recorder, oil pressure and water temperature gauges, voltmeter, keystart switch, push button stop, green light for 'power on', red warning lights and audible alarm for: low oil pressure, high water temperature, domestic and engine alternators 'no charge'; 3m interconnection cable with multi pin plug connector.



Control Panel 'D' Digital

'Digital' display – front panel is waterproof to IP65. The display panel switches between the normal engine displays of: engine speed (a tachometer), oil pressure gauge, engine temperature gauge and voltmeter for either one or two alternators. It is also possible to plug-in another electronic display for viewing elsewhere; that could be the wheelhouse.

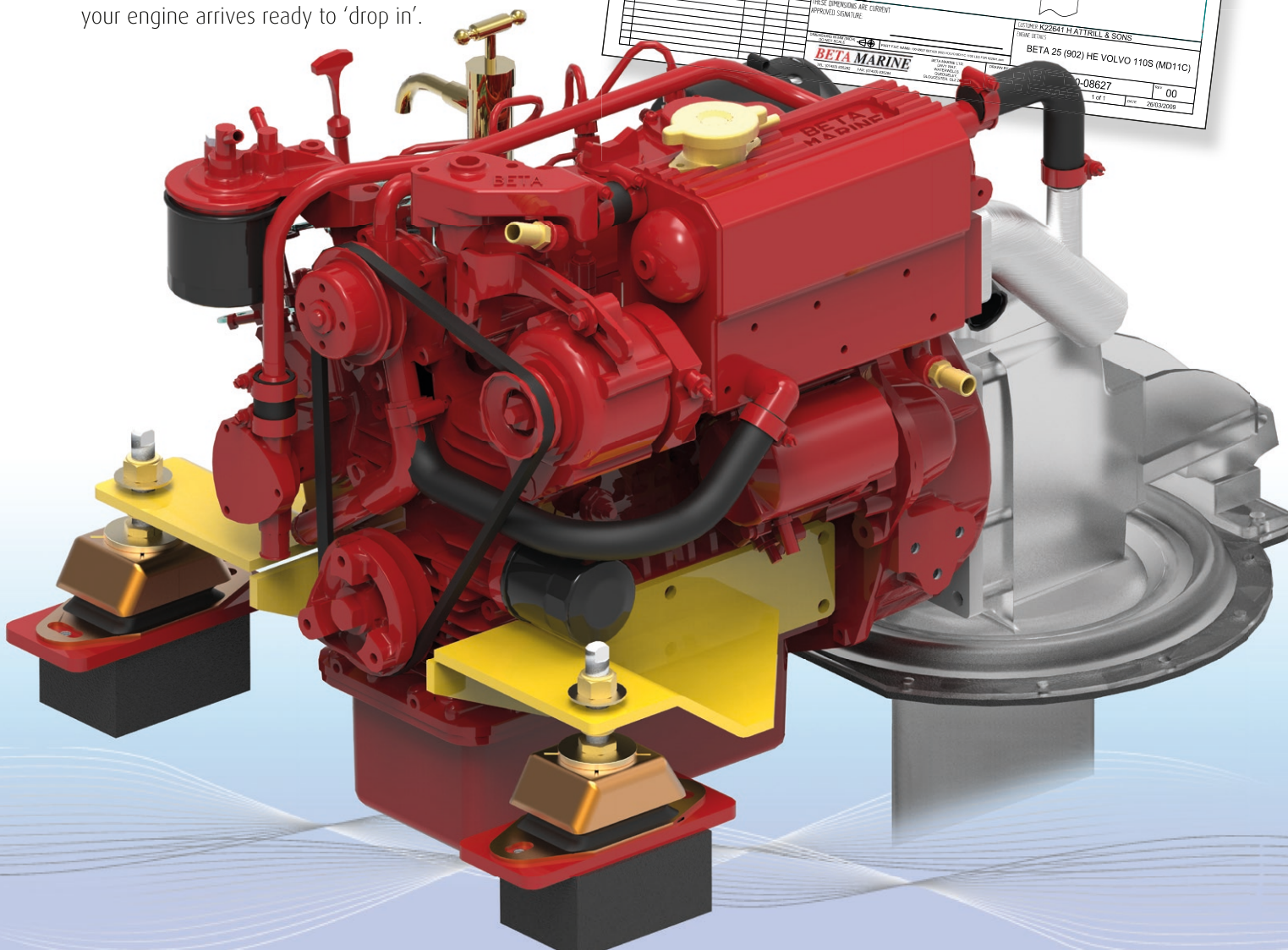
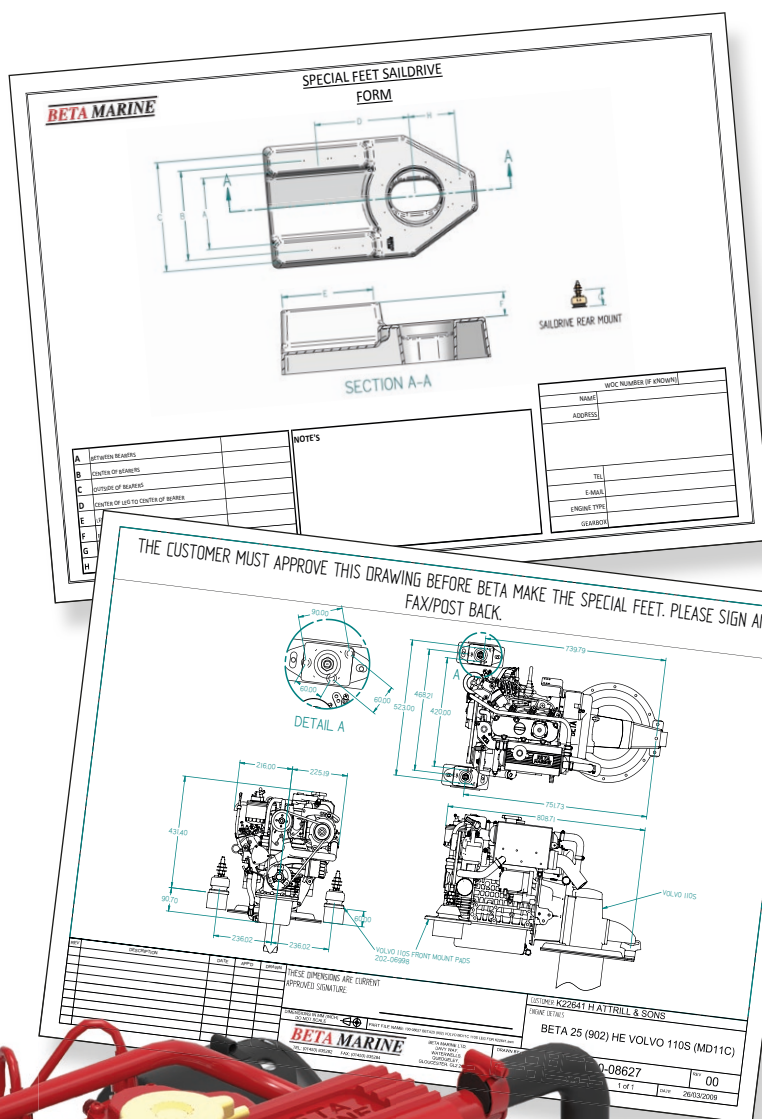
Re-Engining? - Special Feet

Are you replacing an old saildrive or just the engine?

Beta saildrive engines have been fitted into hundreds of yachts around the world and this is usually done with our special saildrive engine feet. With this option we give you a unique service of designing and manufacturing "Special Feet" so that our saildrive engine just drops onto your existing engine feet position. They substantially reduce the time and installation costs.

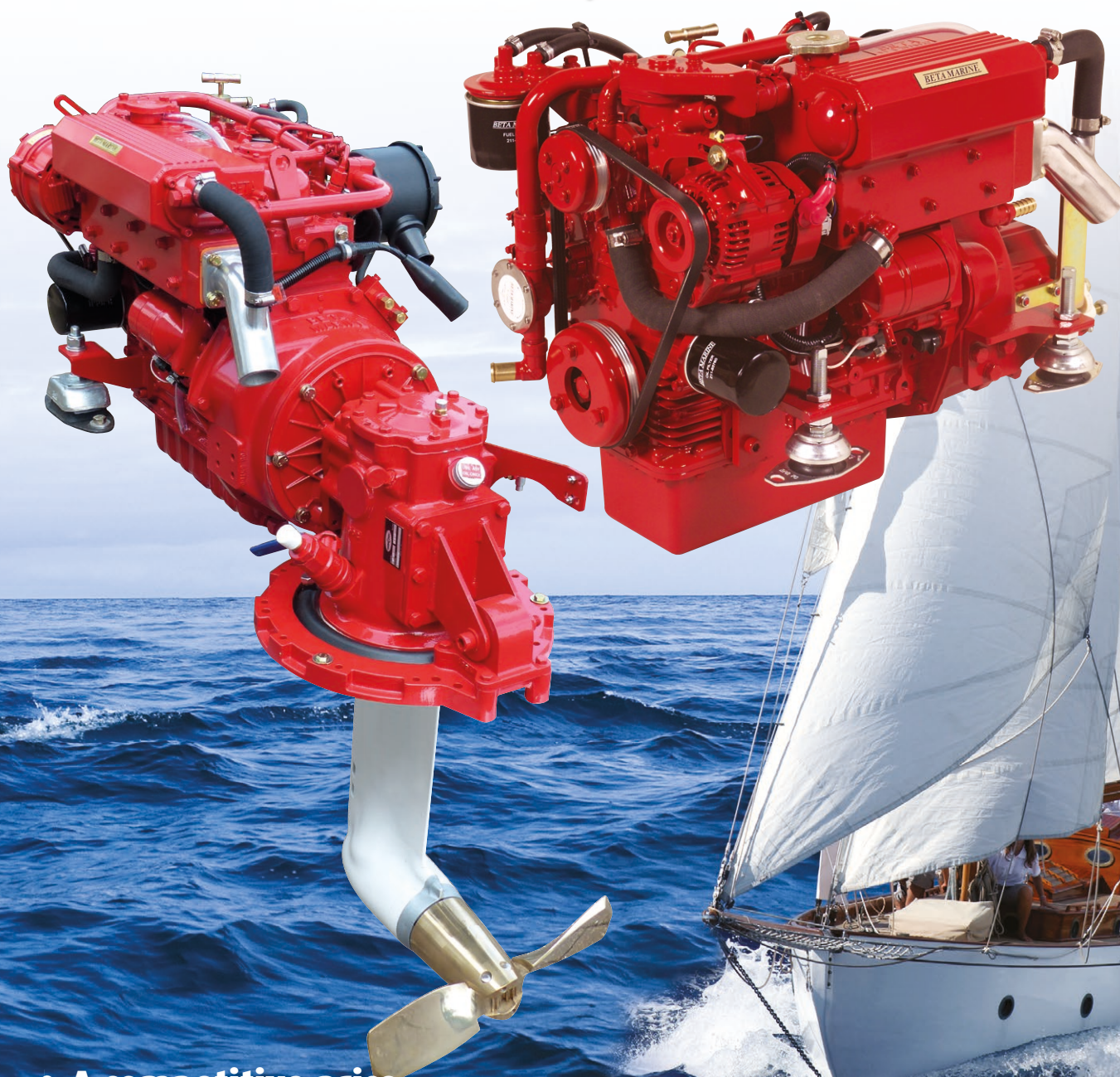
The system works like this:

1. We have a standard drawing that you can download or we can send you. You just fill in the measurements of your existing engine bearers and send them to us.
2. We then prepare a finalised drawing for you to sign-off. You then check the drawing, and if correct 'sign it off' and return it to us.
3. We then manufacture, fit and paint them so that your engine arrives ready to 'drop in'.



BETA MARINE

The Yachtman's Choice...



- **A competitive price**
- **10 to 150 hp, engineered in the UK**
- **Advanced, compact, quiet reliable engines**
- **Easy engine replacement, with our special feet option**
- **Amazing 'Beta' national and International support**
- **Saildrive - 2 Year 'Self Service' Warranty**

Beta Marine Limited, Davy Way, Waterwells, Quedgeley, Gloucester, GL2 2AD. UK

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