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# **SeaFury Drives**

Seafury International's surface drives and surface piercing propellers have been in production for over twenty years, supplying law enforcement, surveillance, military, commercial and strike craft throughout the world.



#### **The Ultimate Propulsion System**

Seafury Surface Drives offer many advantages when compared to conventional drives, water jets, IP Drives, Stern Legs and the more complex surface drives.

Ideal for shallow water areas and where weed is a concern as the propeller(s) will chop up the weed in most cases and is easy to clear if fouling should occur.

Minimal moving parts with no external hydraulics or electrical components and a custom designed propeller for each vessel, makes this unit very simple to install, operate and maintain. All Seafury components are made from high quality, marine grade materials

#### **Higher Top Speeds**

Seafury installations achieve 10% to 25% higher speeds with the same engine horse power compared to a number of alternative propulsion systems due to less underwater drag, and super-ventilating propeller technology.

#### **Higher Cruise Speeds**

By harnessing maximum torque and using carefully designed and developed varying pitched, fixed blade propellers, Seafury Surface drives produce a higher cruise speed with reduced fuel costs

#### **Sooner To Plane**

Seafury<sup>TM</sup>s load carrying abilities mean craft are quicker to the plane and there is a minimal lazy speed range, as is experienced with some other systems. For example, 10 seconds from idle to 50 knots for a 22 ton mono hull with  $2 \times 1200$ HP engines.

#### **Highly Efficient**

Seafury Surface Drive propellers operate half in and half out of the water, allowing the propeller to operate in a super-ventilated environment and eliminating much of the drag co-efficient experienced by conventional systems. Surface drives can be 15-25% more efficient than alternate propulsion systems.

#### **Very Cost Effective**

Seafury Surface Drives are very competitively priced. The drive system comes as a complete package with shafting, bearings, housing, rudder, inboard steering assembly, coupling and propeller, making them very economical to install.

#### **Excellent Load Carrying**

Due to the thrust generated from Seafury<sup>TM</sup>s uniquely designed propellers, excellent load carrying capability and top end performance are achieved. Even with proportionately large increases in loaded weight, minimal boat speed loss is experienced and low boat speed operation is just as efficient.

#### Safer for Passengers and Crew

The design of the Seafury system maximizes protection to and from the propellers.

#### **Better Astern Performance**

Seafury's unique 45° transom design and specially designed large propeller has the benefit of deflecting thrusted water under the hull when reversing. This allows for improved close quarter handling and increased vessel safety.

#### **Quieter and Smoother**

Advanced propeller design ensures Seafury Surface Drives produce smooth and efficient performance.

#### **Easy Installation**

Seafury Surface Drives are simply bolted on to the transom and can be installed in a fraction of the time and work that it takes to install a conventional or water jet, or other Surface Drive Systems.

#### Low Maintenance

Simple by design, high strength construction and quality manufacture all contribute to an extremely robust, low maintenance and high performance drive unit.

#### **Advanced Propeller Design**

Seafury propellers are designed to suit non-articulating surface drive systems. Correct placement of the driveline and propeller in conjunction with our varying pitch propeller design, along with the use of trim tabs if required, negates the need for a trimmable drive

#### **Less Propeller Damage**

As the propeller is positioned between behind the transom and forward of the aft-hung, Seafury's shallow draft means there is minimal chance of propeller damage.



#### 5 Year Warranty(Non-Commerical)

The reliability of Seafury Surface Drives in the past has seen an increase in the Seafury warranty from 2 years to 5 years, with many of their competitors still only offering a 1 year warranty.

#### **Complete Solution**

AluminumNow/Seafury offer a complete propulsion solution, from speed calculation, assistance in vessel design, engine and gearbox recommendations, to the supply of the appropriate drive system.

The Seafury SF16 Surface Drive has been designed principally for use with planing and semiplaning craft up to approximately 1.2 Tonnes displacement for a single application. Designed and built to classification standards, each Seafury Drive comes complete with its own matched propeller ensuring smooth operation.





#### **Specifications**

**Vessel Displacement** Up to 1.2 Tonnes displacement for single SF16 unit application

Up to 2.5 Tonnes displacement for dual SF16 unit application Up to 3.6 Tonnes displacement for triple SF16 unit application

Important Note: Weight to Unit size shown above is indicative only. For more

detailed information consult AluminumNow.

**Engine HP-Kw Range** 

Approx.

Nominal rating 112 Kw to 352 Kw (150-480 HP) dependant on application.

**Propeller Diameter** 300 mm (12") to 406 mm (16") dependant on application.

Weight 91kg Approx for Drive Body, steering and rudder (excludes propeller and

shafting)

**Drive Body** Cast Silicon Bronze (C 87500)

Steering Twin single-acting Hydraulic Cylinders S/S 316

Steering Arms 2205CG Clevis Nibral (AB2)

**Rudder** Single Spade type Nibral (AB2)

**Shaft** Fully enclosed 2205 CG S/S inline conventional driveline arrangement.

**Bearings** Front and rear water lubricated cutlass bearings.

Seals Single lip seal arrangement

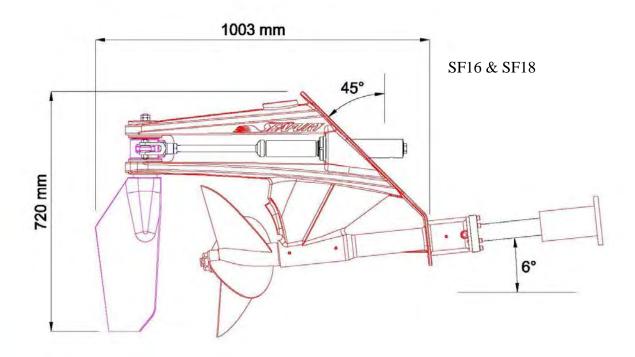
**Propeller** 4 - 5 Bladed Surface Propeller Nibral (AB2)



**Coupling** The shaft terminates in a tapered and keyed section and a coupling flange is

provided to match the desired transmission or coupling.

**Driveline** Fully enclosed inline conventional driveline arrangement.



The Seafury SF18 Surface Drive has been designed principally for use with planing and semi-planing craft up to approximately 2 Tonnes displacement for a single application. Designed and built to classification standards, each Seafury Drive comes complete with its own matched propeller ensuring smooth operation.

**Vessel Displacement** Up to 2 Tonnes displacement for single SF18 unit application

Up to 4.5 Tonnes displacement for dual SF18 unit application

Up to 6.5 Tonnes displacement for triple SF18 unit application

Important Note: Weight to Unit size shown above is indicative only. For more

detailed information consult AluminumNow.

**Engine HP-Kw Range** 

Approx. Nominal rating 112 Kw to 352 Kw (150-480 HP) dependant on application.

**Propeller Diameter** 406 mm (16") to 508 mm (20") dependant on application.

Weight 91kg Approx for Drive Body, steering and rudder (excludes propeller and

shafting)

**Drive Body** Cast Silicon Bronze (C 87500)

**Steering** Twin single-acting Hydraulic Cylinders S/S 316

Steering Arms 2205CG, Clevis Nibral (AB2)

**Rudder** Single Spade type Nibral (AB2)

**Shaft** Fully enclosed 2205 CG S/S inline conventional driveline arrangement.



**Bearings** Front and rear water lubricated cutlass bearings.

Seals Single lip seal arrangement

**Propeller** 4 - 5 Bladed Surface Propeller Nibral (AB2)

**Coupling** The shaft terminates in a tapered and keyed section and a coupling flange is

provided to match the desired transmission or coupling.

**Driveline** Fully enclosed inline conventional driveline arrangement.

The Seafury SF22 Surface Drive has been designed principally for use with planing and semi planing craft up to about 2.8 Tonnes displacement for a single application. Designed and built to classification standards each Seafury Drive comes complete with its own matched propeller ensuring vibration free operation.





#### **Specifications**

**Vessel Displacement** Up to 2.8 Tonnes displacement for single SF22 unit application

Up to 6 Tonnes displacement for dual SF22 unit application
Up to 8.8 Tonnes displacement for triple SF22 unit application

Single acting hydraulic cylinder.

Important Note: Weight to Unit size shown above is indicative only. For more

detailed information consult AluminumNow.

**Engine HP-Kw Range** 

Approx.

Nominal rating 150 Kw to 360 Kw (200 -480 HP) dependant on application.

**Propeller Diameter** 430 mm (17") to 584 mm (23") dependant on application.

Weight 80kg Approx for Drive Body, steering and rudder (excludes propeller and

shafting)

**Drive Body** 1 Single acting hydraulic cylinder.

**Steering** Twin single-acting Hydraulic Cylinders S/S 316

Steering Arms 2205CG, Clevis Nibral (AB2)

**Rudder** Single Spade type Nibral (AB2)

**Shaft** Fully enclosed 2205 CG S/S inline conventional driveline arrangement.

**Bearings** Front and rear water lubricated cutlass bearings.



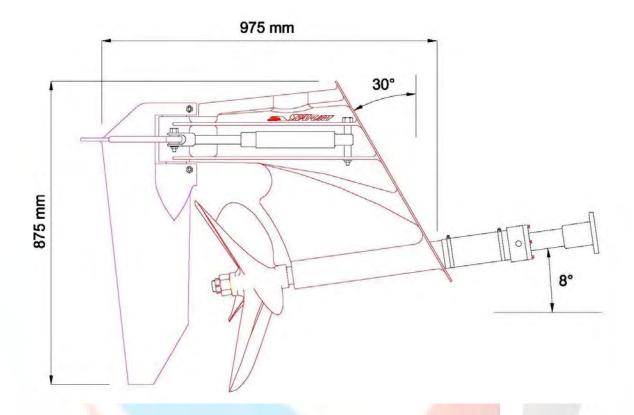
Seals Single lip seal arrangement

**Propeller** 4 - 5 Bladed Surface Propeller Nibral (AB2)

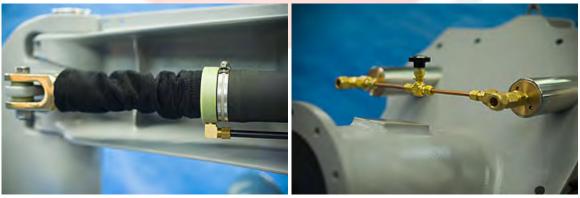
**Coupling** The shaft terminates in a tapered and keyed section and a coupling flange is

provided to match the desired transmission or coupling.

**Driveline** Fully enclosed inline conventional driveline arrangement.



The Seafury SF24 Surface Drive has been designed principally for use with planing and semi planing craft up to about 3.7 Tonnes displacement for a single application. Designed and built to classification standards each Seafury Drive comes complete with its own matched propeller ensuring vibration free operation.



**Specifications** 

**Vessel Displacement** Up to 3.7 Tonnes displacement for single SF24 unit application



Up to 8.5 Tonnes displacement for dual SF24 unit application Up to 12.2 Tonnes displacement for triple SF24 unit application Important Note: Weight to Unit size shown above is indicative only.

For more detailed information consult AluminumNow.

**Engine HP-Kw Range** 

Approx.

Nominal rating 150 Kw to 400 Kw (200 - 540 HP) dependant on application.

**Propeller Diameter** 560 mm (22") to 610 mm (24") dependant on application.

Weight 137 kg Approx for Drive Body, steering and rudder (excludes propeller and

shafting)

**Drive Body** Cast Silicon Bronze (C 87500)

**Steering** Twin single-acting Hydraulic Cylinders S/S 316

Steering Arms 2205CG, Clevis Nibral (AB2)

**Rudder** Single Spade type Nibral (AB2)

**Shaft** Fully enclosed 2205 CG S/S inline conventional driveline arrangement.

**Bearings** Front and rear water lubricated cutlass bearings.

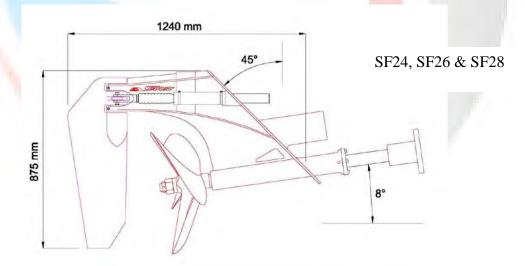
Seals Single lip seal arrangement

**Propeller** 4 - 5 Bladed Surface Propeller Nibral (AB2)

**Coupling** The shaft terminates in a tapered and keyed section and a coupling flange is

provided to match the desired transmission or coupling.

**Driveline** Fully enclosed inline conventional driveline arrangement.



The Seafury SF26 Surface Drive has been designed principally for use with planing and semi planing craft up to about 5 Tonnes displacement for a single application. Designed and built to classification standards each Seafury Drive comes complete with its own matched propeller ensuring vibration free operation.

## **Specifications**



**Vessel Displacement** Up to 5 Tonnes displacement for single SF26 unit application

Up to 10.5 Tonnes displacement for dual SF26 unit application Up to 15.5 Tonnes displacement for triple SF26 unit application Up to 20 Tonnes displacement for quad SF26 unit application

Important Note: Weight to Unit size shown above is indicative only. For more

detailed information consult AluminumNow.

**Engine HP-Kw Range** 

Approx.

Nominal rating 150 Kw to 490 Kw (200 - 650 HP) dependant on application.

**Propeller Diameter** 600 mm (24") to 660 mm (26") dependant on application.

Weight 137 kg Approx for Drive Body, steering and rudder (excludes propeller and

shafting)

**Drive Body** Cast Silicon Bronze (C 87500)

Steering Twin single-acting Hydraulic Cylinders S/S 316

Steering Arms 2205CG, Clevis Nibral (AB2)

**Rudder** Single Spade type Nibral (AB2)

**Shaft** Fully enclosed 2205 CG S/S inline conventional driveline arrangement.

**Bearings** Front and rear water lubricated cutlass bearings.

Seals Single lip seal arrangement

**Propeller** 4 - 5 Bladed Surface Propeller Nibral (AB2)

Coupling The shaft terminates in a tapered and keyed section and a coupling flange is

provided to match the desired transmission or coupling.

**Driveline** Fully enclosed inline conventional driveline arrangement.

The Seafury SF28 Surface Drive has been designed principally for use with planing and semi planing craft up to about 7 Tonnes displacement for a single application. Designed and built to classification standards each Seafury Drive comes complete with its own matched propeller ensuring vibration free operation.

#### **Specifications**

Vessel Displacement Up to 7 Tonnes displacement for single SF28 unit application

Up to 15 Tonnes displacement for dual SF28 unit application Up to 22 Tonnes displacement for triple SF28 unit application Up to 30 Tonnes displacement for quad SF28 unit application

Important Note: Weight to Unit size shown above is indicative only. For more

detailed information consult AluminumNow.

**Engine HP-Kw Range** 

**Approx.** Nominal rating 150 Kw to 625 Kw (200 - 850 HP) dependant on application.

**Propeller Diameter** 660 mm (26") to 710 mm (28") dependant on application.

Weight 137 kg Approx. for Drive Body, steering and rudder (excludes propeller and

shafting)

**Drive Body** Cast Silicon Bronze (C 87500)



**Steering** Twin single-acting Hydraulic Cylinders S/S 316

Steering Arms 2205CG, Clevis Nibral (AB2)

**Rudder** Single Spade type Nibral (AB2)

**Shaft** Fully enclosed 2205 CG S/S inline conventional driveline arrangement.

**Bearings** Front and rear water lubricated cutlass bearings.

Seals Single lip seal arrangement

**Propeller** 4 - 5 Bladed Surface Propeller Nibral (AB2)

**Coupling** The shaft terminates in a tapered and keyed section and a coupling flange is

provided to match the desired transmission or coupling.

**Driveline** Fully enclosed inline conventional driveline arrangement

The Seafury SF30 Surface Drive has been designed principally for use with planing and semi planing craft up to about 8.5 Tonnes displacement for a single application. Designed and built to classification standards each Seafury Drive comes complete with its own matched propeller ensuring vibration free operation.





#### **Specifications**

**Vessel Displacement** Up to 8.5 Tonnes displacement for single SF30 unit application

Up to 22 Tonnes displacement for dual SF30 unit application Up to 31 Tonnes displacement for triple SF30 unit application Up to 40 Tonnes displacement for quad SF30 unit application

Important Note: Weight to Unit size shown above is indicative only. For more

detailed information consult AluminumNow.

**Engine HP-Kw Range** 

**Approx.** Nominal rating 262 Kw to 735 Kw (350 - 1000 HP) dependant on application.

**Propeller Diameter** 700 mm (28") to 760 mm (30") dependant on application.

Weight 215 kg Approx for Drive Body, steering and rudder (excludes propeller and

shafting)

**Drive Body** Cast Silicon Bronze (C 87500)

**Steering** Twin single-acting Hydraulic Cylinders S/S 316

Steering Arms 2205CG, Clevis Nibral (AB2)

**Rudder** Single Spade type Nibral (AB2)



**Shaft** Fully enclosed 2205 CG S/S inline conventional driveline arrangement.

**Bearings** Front and rear water lubricated cutlass bearings.

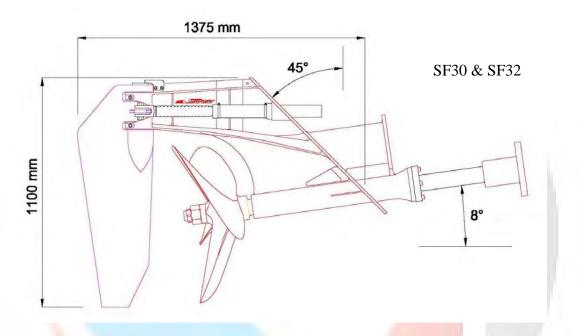
Seals Single lip seal arrangement

**Propeller** 4 - 5 Bladed Surface Propeller Nibral (AB2)

**Coupling** The shaft terminates in a tapered and keyed section and a coupling flange is

provided to match the desired transmission or coupling.

**Driveline** Fully enclosed inline conventional driveline arrangement.



The Seafury SF32 Surface Drive has been designed principally for use with planing and semi planing craft up to about 10 Tonnes displacement for a single application. Designed and built to classification standards each Seafury Drive comes complete with its own matched propeller ensuring vibration free operation.

#### **Specifications**

**Vessel Displacement** Up to 10 Tonnes displacement for single SF32 unit application

Up to 28 Tonnes displacement for dual SF32 unit application Up to 38 Tonnes displacement for triple SF32 unit application Up to 50 Tonnes displacement for quad SF32 unit application

Important Note: Weight to Unit size shown above is indicative only. For more

detailed information consult AluminumNow.

Engine HP-Kw Range

Approx.

Nominal rating 262 Kw to 1165 Kw (350 - 1550 HP) dependant on application.

**Propeller Diameter** 760 mm (30") to 810 mm (32") dependant on application.

Weight 215 kg Approx for Drive Body, steering and rudder (excludes propeller and

shafting)



**Drive Body** Cast Silicon Bronze (C 87500)

**Steering** Twin single-acting Hydraulic Cylinders S/S 316

Steering Arms 2205CG, Clevis Nibral (AB2)

**Rudder** Single Spade type Nibral (AB2)

**Shaft** Fully enclosed 2205 CG S/S inline conventional driveline arrangement.

**Bearings** Front and rear water lubricated cutlass bearings.

Seals Single lip seal arrangement

**Propeller** 4 - 5 Bladed Surface Propeller Nibral (AB2)

**Coupling** The shaft terminates in a tapered and keyed section and a coupling flange is

provided to match the desired transmission or coupling.

**Driveline** Fully enclosed inline conventional driveline arrangement.

The Seafury SF36 Surface Drive has been designed principally for use with planing and semi planing craft up to approximatly 20 Tonnes displacement for a single and 100 plus tonnes for muiltipable applications. Designed and built to classification standards each Seafury Drive comes complete with its own matched propeller ensuring vibration free operation.

#### **Specifications**

**Vessel Displacement** Up to 20 Tonnes displacement for single SF36 unit application

Up to 50 Tonnes displacement for dual SF36 unit application
Up to 90 Tonnes displacement for triple SF36 unit application
Up to 125 Tonnes displacement for quad SF36 unit application

Important Note: Weight to Unit size shown above is indicative only. For more

detailed information consult AluminumNow.

**Engine HP-Kw Range** 

Approx. Nominal rating 375 Kw to 1500 Kw (500 - 2000 HP) dependant on application.





**Propeller Diameter** 800 mm (32") to 910 mm (36") dependant on application.

Weight 480 kg Approx. for Drive Body, steering and rudder (excludes propeller and

shafting)

**Drive Body** Cast Silicon Bronze (C 87500)



**Steering** Twin single-acting Hydraulic Cylinders S/S 316

Steering Arms 2205CG, Clevis Nibral (AB2)

Rudder Single Spade type Nibral (AB2)

Shaft Fully enclosed 2205 CG S/S inline conventional driveline arrangement.

**Bearings** Front and rear water lubricated cutlass bearings.

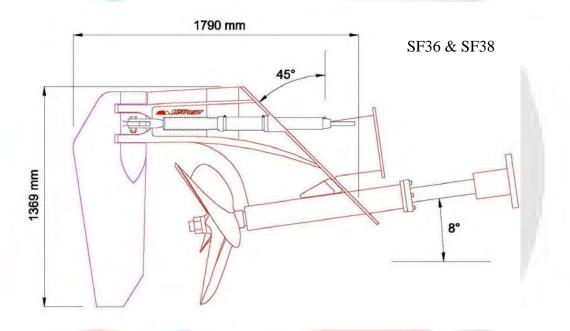
**Seals** Single lip seal arrangement

**Propeller** 4 - 6 Bladed Surface Propeller Nibral (AB2)

Coupling The shaft terminates in a tapered and keyed section and a coupling flange is

provided to match the desired transmission or coupling.

**Driveline** Fully enclosed inline conventional driveline arrangement.



The Seafury SF38 Surface Drive has been designed principally for use with planing and semi planing craft up to approximately 30 Tonnes displacement for a single and 125 tonnes plus for multiple applications. Designed and built to classification standards each Seafury Drive comes complete with its own matched propeller ensuring vibration free operation.

#### **Specifications**

Up to 30 Tonnes displacement for single SF38 unit application Vessel Displacement

Up to 65 Tonnes displacement for dual SF38 unit application Up to 100 Tonnes displacement for triple SF38 unit application

Up to 150 Tonnes displacement for quad SF38 unit application

Important Note: Weight to Unit size shown above is indicative only. For more

detailed information consult AluminumNow.

#### **Engine HP-Kw Range**



**Approx.** Nominal rating 375 Kw to 2260 Kw (500 - 3000 HP) dependant on application.

**Propeller Diameter** 800 mm (36") to 980 mm (38.5") dependant on application.

Weight 480 kg Approx. for Drive Body, steering and rudder (excludes propeller and

shafting)

**Drive Body** Cast Silicon Bronze (C 87500)

**Steering** Twin single-acting Hydraulic Cylinders S/S 316

Steering Arms 2205CG Clevis Nibral (AB2)

**Rudder** Single Spade type Nibral (AB2)

**Shaft** Fully enclosed 2205 CG S/S inline conventional driveline arrangement.

**Bearings** Front and rear water lubricated cutlass bearings.

Seals Single lip seal arrangement

**Propeller** 4 - 6 Bladed Surface Propeller Nibral (AB2)

**Coupling** The shaft terminates in a tapered and keyed section and a coupling flange is

provided to match the desired transmission or coupling.

**Driveline** Fully enclosed inline conventional driveline arrangement.

## **Summary**

## Low maintenance, high-performance surface drives

Advantages include the surface drive's simple, robust design and high quality marine components and manufacture ensures extremely low maintenance and high performance.

No hydraulic steering or articulated drive system being exposed to the harsh marine environment, maintenance is much easier and significantly reduced.

Excellent astern / reverse and close handling performance as Seafury was the world's first propulsion manufacturer to specify a 45° transom, ensuring thrusted water goes under the vessel. Should your vessel or current design not have a 45° transom it is easily overcome by the addition of pods or simple transom design modifications.





Low Maintenance / High Performance. No hydraulic steering or articulated drive system exposed to harsh marine environment. Excellent reverse with 45° transom.



Speed / Efficiency. 60 + knots Customs vessel with 2 X 1500HP & Seafury SF30s' 16.5 meter Interceptor Strike Craft.





Speed / Efficiency. 50 + knots Customs vessel with 2 X 1000HP & Seafury SF30s' 16 meter Customs Patrol



SeaFury Drives are represented in West Africa by AluminumNow Ltd.

Offered on New Builds in UK, Nigeria, Turkey & India

New Build & Retro-fit enquires to newbuilds@nigeriashipbuilding.com





## **Naval and Military Recommendations**

Police Vessel:- RAYMOND TOH Designer / Boat Builder Singapore

Indonesian Police commissioned Green Bay Marine in 2001 to design and build 3 high performance law enforcement vessels. We chose the Seafury Drives for their strong build and low maintenance. The other main factor is that they produce more vessel speed using smaller engines.

Since the first order 5 years ago our client has ordered a further **4 vessels specifying in each case the Seafury surface drive system** with 40 knots + speed application. "without reservation nor qualification", I can say that Seafury International can be proud – both of its product and their standard of workmanship." I have no hesitation in recommendation Seafury International of New Zealand to anyone who intends to place an order for a propulsion package.

Advantages included low maintenance, minimal spares required, spares readily available, higher speeds achievable, reduced fuel consumption & reliability.

Perantas Customs Vessel HALIM BIN YAACOB Service Support and Marine Branch Malaysian Custom Authority



Malaysian Customs have been running Seafury since 2000 at speeds in excess of 50 knots with great success.

To use the words of their Service Support Division "they are a very simple, robust and efficient drive system which we are happy to say exceeded the contractual speed requirements as specified by our Department".- Low maintenance and reliability of the Seafury Drives were major considerations when selecting our propulsion system.

The ability of the vessels to achieve high speeds with good manoeuvrability and to operate in shallow water were all considered critical.

"Having operated Seafury for a number of years we are happy with the performance."

So happy, they have just ordered a further 10 Seafury SF30 units. And now have a 75 knot (140km/h) vessel on the drawing board.



## **Commercial Service Experience**

## M.V. ROBERT HENRY Sandie and Greg Edwards

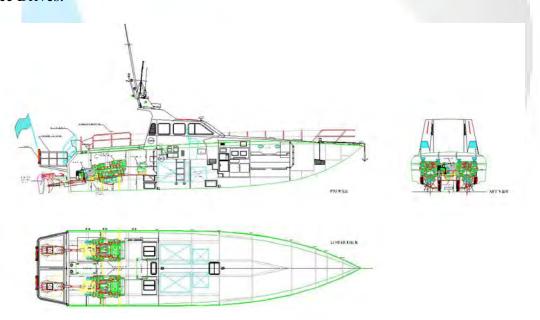
Six years ago "Cougar Cat" on the Gold Coast, Queensland, constructed a 12 meter Power Catamaran to suit our requirements for operation in the Torres Strait.

In order to travel in the range from 22 to 25 knots, loaded, we specified Cummins C Series motors (450HP), Twin Disc Gearboxes and Seafury Surface Drives The **SF26 Seafury Drives** enabled the **12 tonne** "Robert Henry" to get out of the hole" and onto the plane **easier and faster** than any other drive system we have experienced on our previous vessels.

We now have **7000 hours** on the machinery and only have had to change the SF26 drive bushes and seals every **2500 hours**.

We are undertaking a major refit in the near future and will be continuing to utilize the Seafury Drives.

They have provided smooth, economical operation with the **added benefit of reduced engine noise as the exhausts vent underwater directly in front of the propellers.**We are planning to acquire another new vessel and we will certainly be utilizing Seafury Surface Drives.



Conversation from Waterjets to SeaFury Drives For Higher speed, lower maintenance and reduced fuel consumption

# **Installation**







Simply installation for new builds and retro fits





Note:- Exhaust Outlets



Shallow Draft and good protection

SeaFury Drives are available thru the AluminumNow Group. Offered on New Builds in the UK, Nigeria, Turkey and India

New Build & Retro-fit enquires to newbuilds@nigeriashipbuilding.com

