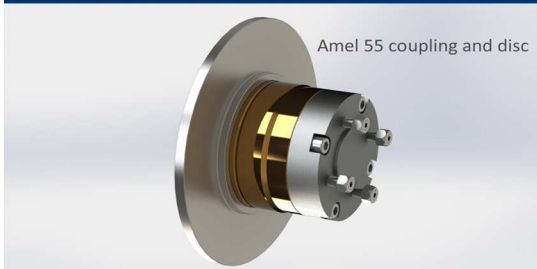




Boats using Sigmadrive



Stops **noise** and **VIBRATIONS**



**Seawork
Innovation
Showcase Awards
Winner**

**Standard
Installation**

For shaft tapers and straight shafts



**V-Drive
Installation**



**D Sigma
Jet Drive**



STS

SigmaDrive thrust system



www.sigmadrive.info



Registered Company No: 156484. VAT Registration No: GB 102 2770. Parent Company Langham Industries Group. Registered Office: Bingham's Melcombe, Dorset, DT2 7PZ. UK

Brunton's are part of the Stone Marine Group of Companies www.stonemarine.co.uk

www.bruntons-propellers.com

Sigmadrive was developed by a small Italian company called Unimec. Its designer, Stefano Cova, continues to work with Bruntons, started the design process with a clean sheet of paper resulting in a system incorporating the very latest thinking and technology. This company was unable to get market penetration on a worldwide basis and so approached Brunton's Propeller to take on the worldwide manufacturing and marketing rights to the SigmaDrive.

We first come across this highly innovative transmission device for yachts and workboats back in 2010 at the Genoa Boat Show and joined forces with SigmaDrive this year. The SigmaDrive can cope with a 3 degree misalignment of the vessels shaft in all directions, and therefore significantly reduces noise and vibrations. Its many benefits over existing products of a similar nature have already seen it win the Marine Equipment, Electronics and Materials category of the Seawork Innovation Awards in 2011, <http://www.seawork.com>

"At Cockwells we have used CV joints for many years but had issues with them, including bad corrosion occurring not long after fitting. This is an issue we do not have with the aluminium bronze constructed SigmaDrives and to date we, and our clients, have been very happy with the performance of them."

Dave Cockwells

<http://www.cockwells.co.uk>

The Sigmadrive is the perfect complimentary piece of equipment for reducing noise and vibration. Once installed the unit ensures that seals and bearings are always perfectly aligned reducing wear and ensuring a longer trouble free life for all associated components. The SigmaDrive unit itself is manufactured from a special bronze alloy, with no rubber or bearings included in its construction, giving a low maintenance product which will have a very long service life. The SigmaDrive can cope with a 3 degree misalignment of the vessels shaft in all directions, 6 degrees in total. Unlike most CV shafts our model DS intermediate shaft coupling can be fitted in-line or at an angle making installation much easier and faster.

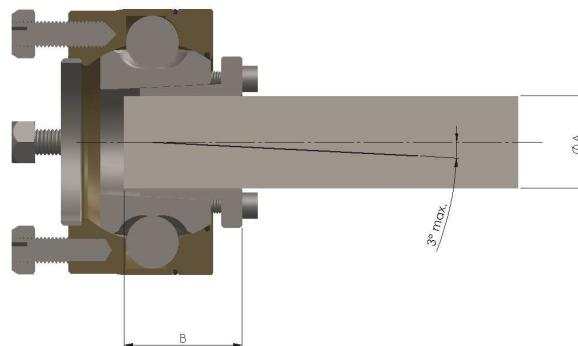
Advantages of the SD range of intermediate CV shafts

- High running speeds
- Articulation and plunging in a single unit
- Maintenance-free
- Space-saving installation solutions.
- Ball spline keeps the shaft flexible when the engine is on soft mounts.
- The CV shaft automatically adjusts to changes in the alignment between engine and drive unit
- Solutions for large and small bending angles
- Using optimised material
- Long part life
- Eliminates the need for accurate engine alignment, either during initial installation or subsequent use.
- Gearbox coupling kits available for all marine gearbox transmissions.



The simple solution is to fit a SigmaDrive coupling in the place of the standard one. The whole system from gearbox to propeller instantly becomes much more flexible, with the coupling able to correct imperfect co-axial alignment between the prop shaft and the gearbox of as much as 3 degrees, with a maximum of 6 degrees. As can be seen in the image below with the SigmaDrive in place the reduction in the rigidity of the whole propulsion system means that the engine vibrations are significantly reduced or eliminated completely, and the prop-shaft can rotate naturally with no vibrations or noise to transmit to the hull.

SD 55 working angle



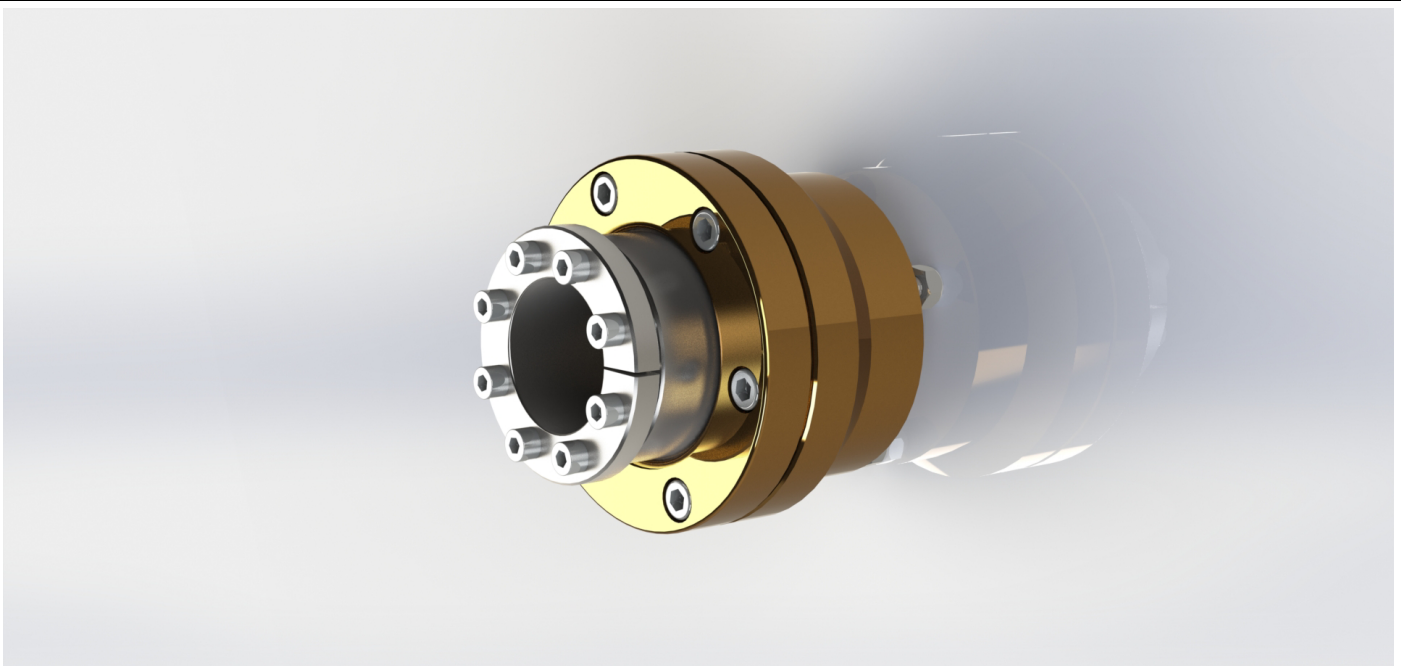
Perhaps the most important question to answer is why SigmaDrive does a better job of doing this work than other couplings that are available? The simple answer is that the SigmaDrive is a constant velocity joint which allows the propeller shaft to rotate without transmitting the engines movement and vibrations. Various other attempts at solving those problems rely on rubber couplings, Carden units, or thrust bearings. The SigmaDrive requires none of these, is compact and easy to fit, usually without slipping the vessel or requiring modifications to the shaft line. As if all this was not enough SigmaDrives are manufactured from a special bronze alloy and contain no bearings or rubber in their construction. In addition to requiring virtually no maintenance themselves their actions mean that there will be considerably less wear on other stern gear components.

Sigma Drive Range of products

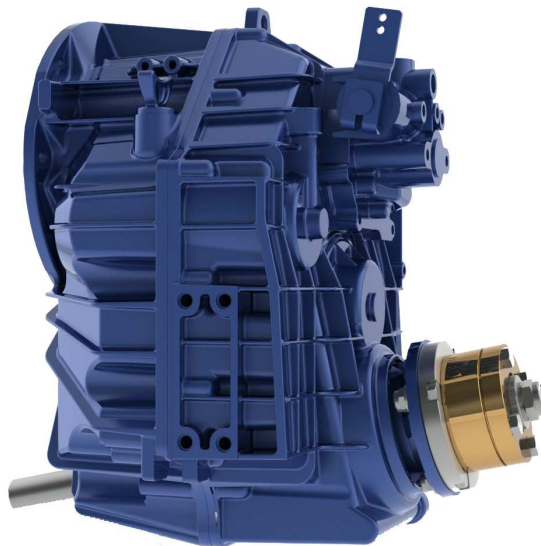
[SD 55, 100, 150, 250 and 300](#)

The SD unit is a standalone unit that resists the propeller thrust compensating for up to 3° in all directions. It fits directly to the shaft using a taper lock and couples to the transmission output flange





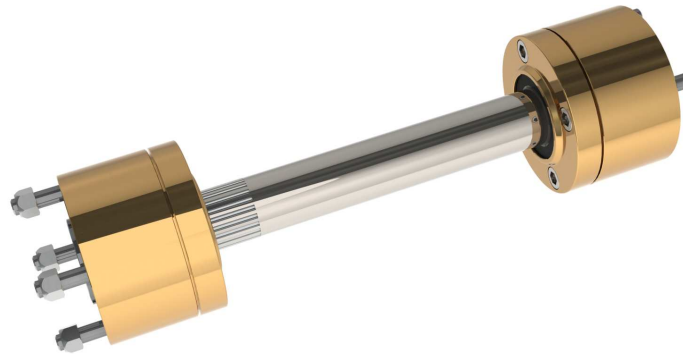
V-Drive SV 55, SV 100 SV150, SV250 and SV 300



The SV unit is a standalone unit that resists the propeller thrust compensating for up to 3° in all direction and fits to all makes of VDrive transmissions



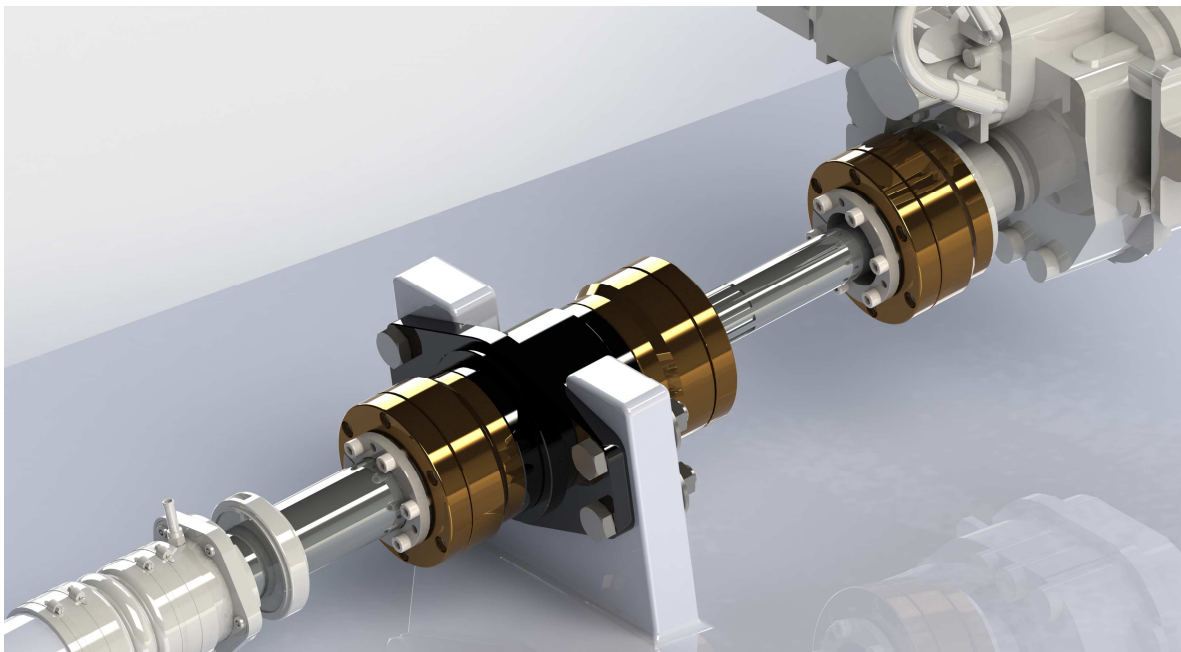
D Sigma D-55, D100, D150, D250, D 300



The D sigma is constant velocity joint for coupling up jet drives and sterndrives to the main engine.

STS Sigma Thrust System

STS 550, STS 1000, STS1500 STS 2500, STS 3000

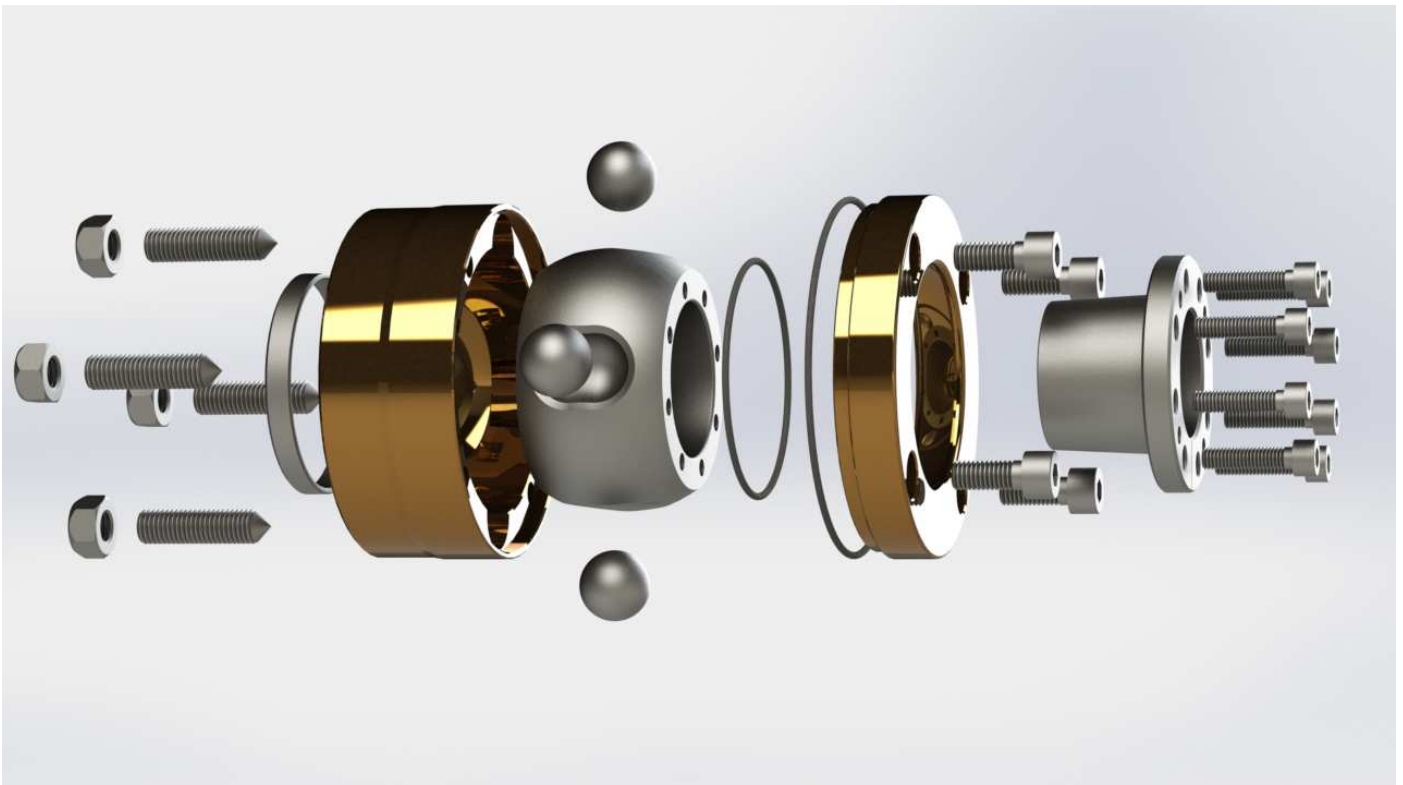


This system incorporates a thrust bearing to isolate the propellers thrust to the engine. It uses a combination of three SD units built together. Two of which are incorporated in the thrust bearing and another coupled to the transmission with an intermediate shaft.

Together with its anti-noise and vibration abilities having a SigmaDrive on your vessel also ensures that seals and bearings are always perfectly aligned, reducing wear and ensuring a longer trouble free life for all associated components.

The coupling is manufactured from a special bronze alloy that makes it a premium product that is maintenance free. The internal component is hard-wearing with a long service life. No rubber is used in the construction of the SigmaDrive and its unique design compensates for the movement of the engine when under load from the propeller shaft.

Exploded view



Formula to select the correct Sigmadrive

Formula to select correct Sigmadrive				
MAX Torque =(Kw/RPM) X 9680 X reduction ratio				
Model	Torque		Nm	Shaft diameter
SD 55	Max torque		550 Nm	1" -1.500"
SD 100	Max torque		1000 Nm	1.25"-1.750"
SD 150	Max torque		1500 Nm	1.5" - 2"
SD 300	Max torque		3000 Nm	1.75"-2.5"
SD 400	Max torque		4000 Nm	2" -3"

Customer using Sigmadrive

Vessel fitted with Sigma Drive, see the website below to get an idea, of what we have fitted to. We have also fitted many sailboat installations, some of which are retrofitted. Amel and CNB are now using Sigmadrive as standard.

<http://www.boesch-boats.ch/>

<http://www.pascoeinternational.com>

<http://www.mustangmarine.com/>

<http://www.planetsolar.org/>

<http://www.cockwells.co.uk/>

<http://britamarine.com/>

<http://www.goodchildmarine.co.uk/>

<http://www.cnb-yachts.com/>

<http://www.matrix-yachts.com/>

<http://www.2oceans.co.za/>

Sports Runabouts

Superyacht tenders and RIBS

Commercial vessels, Windfarm boats and Pilot Boats

Hybrid world Explorer

Modern and Classic Yachts

Mahogany Sports Boats

Commercial Pilot Boats

Sailing yachts and Lagoon catamarans

Sailing catamarans

Motor and sailing cruising Catamarans

Find out all the latest news at <http://www.bruntons-propellers.com/downloads/pdfs/Proptalk2015.PDF>

