



# ISO FLEX flexibility with Stability

By Cia Stumm

■ Though the Beach Boys song may have been a huge hit, when it comes to boating there really is no such thing as Good Vibrations. Boat owners and prospective boat owners (particularly in the leisure market) have come to favour a smooth ride with a quiet engine, which is why relative newcomer IsoFlex have managed to sky rocket to success in just under a year.

IsoFlex designs and manufactures a range of vibration isolation products. They provide primarily to the marine industry, however they also service industrial and mining sectors. Their mission has been to remove unnecessary vibrations from the boating experience, and they've achieved this through developing a range of high performance engine and machinery mounts and flexible drive couplings, tailored to meet the demands of today's installations.

Flexibility with Stability... it may sound like a contradiction in terms, but it is exactly what Isoflex offers their customers with their vibration isolation products. Campbell Ewart, company director, explains the reasoning behind their catchy slogan. "Flexibility with Stability refers to our world wide patented thrust block mounts. The mounts are fitted with a copolymer core

which give very high resistance to both lateral and thrust forces experienced in seaways and high engine loads, but with the added bonus of improved vibration isolation."

Vibration in boats generally comes from five main sources:

1. Engine
2. Exhaust
3. Drive Shaft
4. Propeller pulse
5. Ancillaries  
(Gensets, air conditioners etc)

Ewart says, "We focus on the isolation of engines and gear to isolate the energy introduced to the vessel structure. It is found that many manufacturers supply engine mounts that are only just adequate for the task. We find that with the correct mount selection, the NVH (Noise, Vibration, Harshness) of the vessel can be significantly reduced leading to a more comfortable, smoother and quieter experience."

The IsoFlex new generation mounts work to isolate over 90% of engine vibration, throughout the rev range. Their mounts control driveline misalignment by being 50-100% stiffer in lateral and thrust directions, and are designed to handle thrust and seaway induced misalignments. IsoFlex is adamant their products are long lasting and resistant to fuel, oil and water, which means they won't harden or become brittle. They believe their mounts are set apart from the rest as they can even cope with complete knock down or inversion and will not let an engine break loose.

"We also supply flexible drive couplings to work in unison with resilient mounts and provide isolation from drive line misalignment, gear chatter and directional change impact. They also provide a sacrificial link in the drive line to minimize gear damage. Our mounts cover most common engines available on the market, both new and old. We also supply ancillary mounts to air conditioners, fans, pumps etc. to remove the wearisome whirring at night!"

Isoflex began trading as a business only in January of this year, however they have over 42 years of combined experience backing them up. Already their growth has been mammoth, with manufacturers in particular finding their mounts useful to improve their boats. Ewart says, "We have been working closely with Riviera, Kingfisher Cruisers and Caterpillar and appreciate their support. We have also been successful dealing with MTU, Sydney ferries, Sydney Pilot boats, Salthouse in NZ and a number of applications in the UK and many local users."

Ewart names one of the proudest moments in their business as when they were accepted by Riviera and hence Energy Power Systems Australia (Caterpillar) to supply engine mounting systems for their products. He also names his first happy customer as a special moment for the business. "The first personal note from an ecstatic customer in WA who had fitted our mounts to a troublesome boat and could finally sit down and hear again whilst aboard was definitely a memorable business moment!"

In relation to competitors, IsoFlex are lucky in the sense that there are few domestic companies who challenge their products, but abroad, it is a different story. "In mounts we mainly come up against Barry Control, Cushifloat, Bushings and Poly Flex. In couplings, we find R & D, Drivesaver and PolyFlex."

Ewart says their biggest challenge has been getting all their products designed, tested and marketed in a timely fashion. To remain competitive in the export market, Isoflex ensures they provide their customers with the best service, and market this as their selling point.

"The secret to our business is attention to customer needs by attention to detail. We have reviewed our products using market feedback leading to improvements and new designs to suit. We have developed in-house software to analyse customers' applications to remove the guesswork often encountered. So in a nutshell, our culture is to service the customer."

For product inquiries or further information on IsoFlex, call 1300 366 393 or go to <http://www.isoflex.com.au/>

