**Cox Powertrain - FLIBS 2019 Press Briefing – Q&A’s**

**Q. When will the CXO300 be available?**

A. We have just entered production and the first phase of delivery is expected at the end of 2019.

**Q. What performance data is available from recent sea trials of the pre-production engines?**

The following data has been collected from comparison tests of a pre-production twin CXO300 installation and a comparable gas installation on Intrepid’s Nomad 345 34” Center Console.

At cruise speeds between 40-46mph the CXO300 performed fuel burns of between 20-28gph, compared to the twin gas 300hp on the same boat, which produced a fuel burn of 24-35gph, at the same cruise speeds.

**Q. How much does the first production CXO300 weigh?**

A. Keeping the weight low for the CXO300 has been one of the biggest challenges we have faced. Being our first product we preferred to err on the side of caution and have probably over engineered the CXO300, as a result of this our weight for production is 380kg/840lbs, similar to a 350hp gasoline outboard, however, we are confident that this will come down further as we bring out future generations of the CXO300.

**Q. What is the price and warranty?**

A. The CXO300 will retail at $55,000 USD excluding local tax and duties. The warranty is 1500 hours or 18 months for commercial users and 5 years for recreational.

**Q. What cowling color options are there?**

A. We offer black and white cowling options. Our sleekly designed cowlings are constructed with extremely durable and lightweight carbon fiber.

**Q. Who is the Florida distributor for Cox?**

A. Ring Power is our exclusive distributor for Florida. We have a large network of distributors and dealers throughout the USA, further details of which can be found here [**www.coxmarine/distributors**](http://www.coxmarine/distributors)

**Q. What models are available?**

A. We have launched a 300hp diesel outboard, however we are also working towards bringing higher horsepower diesel outboards to the market, above the 300hp range.

**Q. What other markets or users are you hoping to target in the future?**

A. We have plans to expand our product portfolio to offer more powerful outboards, primarily to accommodate the growing demand for higher hp and bigger vessels.

**Q. What about noise – is there any substantial difference between the two engines (gasoline vs. diesel)?**

A. There really is very little difference in noise between the CXO300 and the quietest gasoline equivalent. Noise levels will not exceed those of their gasoline counterparts, and in practice the deeper hum of the diesel is much more bearable than that produced by high-pitched gasoline outboards. If anything, the CXO300 is slightly quieter when at full throttle.

**Q. Where will the CXO300 be produced?  Are there any plans for a North American manufacturing base? If so, tell us about your potential North American expansion plans.**

A. The CXO300 will initially be assembled and distributed from Cox Powertrain’s UK headquarters, which is based at Shoreham Airport on the South Coast of England. We have our new state-of-the-art assembly and testing facilities in which we have invested heavily.

North America is predicted to be our biggest market, so plans are under way to open a dedicated US assembly and distribution facility in Florida in the near future, to facilitate a smoother delivery service for its customers in this region. Our US headquarters will service North, Central and South America as well as the Caribbean.

**Q. You say a Cox diesel lasts three times longer than traditional petrol outboards. How did you prove that?**

A. In order to meet EPA commercial requirements, the engine must last at least 3 times longer than for gasoline recreational use. Therefore, it’s not that current outboards can’t extend the life of their outboards, they simply don’t have to comply with legal or customer requirements, however we don’t have this option.

**Q. What is the fuel economy compared to an equivalent petrol?**

A. We say the CXO300 is 25% more fuel efficient than a petrol equivalent, however this is more likely 30%. We like to undersell and over deliver.

**Q. Diesels have a perception of being slow, with black smoke on take-off. How does the CXO300 compare in that regard?**

A. Engine is not defined by engine speed but by propeller speed and torque. Our propeller speed is around 3400rpm, similar to that of Yamaha, yet with a much higher crank torque, so there is no reason to believe the boat will be any slower, if anything it will speed up quicker due to the higher torque. As for the smoke we have an incredibly clean combustion, very close to meeting IMO 3 emissions requirements. However, the best way to prove it is to take a sea trial, you cannot tell the difference with a gasoline outboard.

**Q. Do you agree that outboard motors are now the preferred power source for saltwater and sports fishing and if so why?**

A. That would be the case in North America, albeit still not the case in Europe. It would appear that the operator prefers the flexibility and reduced down time risk that comes with outboard engines. When an engine failure occurs, the ease of repair or even replacement seems to be of higher value than the fuel savings you get with diesel sterndrives, not to mention the many reliability issues operators seem to have with sterndrive legs.

**Q. How important will the saltwater fishing market be to Cox?**

A. The saltwater fishing market will be the main application in markets such as Florida, Texas and Georgia. Overall it might represent between 15% - 20% of engines provided to the US market.

**Q. What features on the motor should make it appeal to saltwater anglers?**

A. The key feature is the extended range. The engine has a fuel savings of approximately 25% in comparison to a similar 300hp gasoline outboard therefore allowing fisherman to go that much further. There are also other features such as the increased low-end torque that will push the heavy loaded hulls through rough waters with less strain on the engine and improving even further the fuel performance in comparison to similar gasoline outboards which are notorious for the lack of low-end torque. Some boat builders have also highlighted the advantage of diesel-powered engines for some fishing boats that are equipped with diesel generators and therefore allowing everything to be fuelled from the main tank.

**Q. With the torque generated by your motor, would it be good for use on a heavier offshore fishing boat such as a 39’ or 40’ center console.**

A. That is the key advantage. The CXO300 have 100% higher peak torque at the crankshaft than the leading gasoline 300hp outboards, 60% higher when comparing with a leading 350hp, this difference is amplified when looking below the mid-range rpm. Where you traditionally might have needed a quad 300hp installation or triple 350’s, you can now operate with triple CXO300’s and enjoy fuel savings of well over 25% at the same cruise speed. So, the larger vessels will benefit from the higher torque curves, both at the low end and the high end.

**Q. The CXO300 is based on the proven technology of a 4-stroke, V8 architecture. Can you describe some of its advantages compared with an equivalent gasoline outboard?**

A. The Cox Powertrain diesel engine has 100% higher peak torque than the leading gasoline 300hp outboards and is 60% higher when compared with a leading 350hp gasoline outboard. This difference is amplified when looking below the mid-range rpm.

The increased low-end torque will push heavy loaded hulls through rough waters with less strain on the engine and improve even further the fuel performance in comparison to similar gasoline outboards which are notorious for their lack of low-end torque. Larger vessels will clearly benefit from the higher torque, both at the low end when getting over the hump as at the high end when trying to achieve peak speeds when heavily loaded.

Where traditionally a quad 300hp or triple 350hp installation is needed, a triple CXO300 installation can offer fuel savings at the same cruise speed. The engine offers fuel savings of approximately 25% in comparison to a similar 300hp gasoline outboard, therefore allowing boaters to go that much further.

Most importantly, it is designed to last two to three times longer than equivalent gasoline outboard engines and eases the servicing process by allowing a “dry” service every 1,000 hours or once a year, whichever comes sooner.

There are several other secondary drivers such as fuel commonality, as more and more vessels carry diesel generators, or space savings as more vessels carry gyro stabilizers.

**Q. The CXO300 has a 100% higher peak torque at the crankshaft than the leading gasoline 300hp outboards, which enables the craft to move more weight more efficiently and reach peak torque and top power more quickly. For the non-engineer, can you explain that concept in layman’s terms?**

A. Boat speed depends on how much blade surface your propeller has and how quickly it’s spinning. This results in thrust that pushes the boat. If we consider that the bigger the propeller or the faster it spins (without slipping) the more hp we need, it then all comes down to what does the power curve look like.

Hp is a function of engine speed and torque, the higher the speed or the torque, the higher the hp, which translates into thrust onto the transom through the prop. A typical gas outboard will have very low torque and will spin up to 6000rpm, therefore you don’t get any real hp, and thrust, until the engine is spinning at high rpm and consuming high levels of fuel.

Diesel on the other hand has very high torque throughout the whole power curve and therefore delivers high levels of hp and thrust at low engine speed and continues to add thrust as the rpm’s rise because the torque to stays high throughout the whole range.

**Q. What sales have been generated so far? Where, geographically and sector-wise (US / EU / Asia / etc), are these orders coming from?**

A. Our order books officially opened in November 2018 and we filled this very quickly due to such a high demand. Our first orders are now in production with delivery expected at the end of Q4 2019.

From the orders we have received so far, around 60% have come from the US and the remainder from EU and Asia. We have received an overwhelmingly enthusiastic response from recreational boaters, particularly in the US.

**Q. What steps have you taken to make sure that your customers receive an effective after-sales service?**

A. The Cox CXO300 has been developed from a blank piece of paper, specifically for marine application and after sales is one of the three pillars upon which we have built our business model. The whole reason the outboard market has taken over boat propulsion is as a result of ease of service and overhaul. Therefore, if our after sales service is not as good as our product our offering will just crumble. Our customers will only be happy if they can use the engine to go out to sea reliably.

We have put in place stringent customer service milestones throughout our service network to try to offer a quicker service and more pleasant experience.