

# Tough, simple and cost-effective starting for marine engines

# **DIESEL ENGINE STARTING**

For engines up to 150 litres

You expect one thing from your on-board engines and that's for them to start every time. You trust them to power essential systems such as:

- Navigation systems
- Communications and alarms
- Emergency bilge and fire pumps
- Loading systems and pumps
- Propulsion

But what if they don't start? Electric starters can fail after shut-downs and in damp, cold or humid conditions - exactly what you face on waterways and at sea. Delays cost you revenue and customers.

IPU's engine starting systems are a robust and ultra -reliable solution for marine engines in any environment.

#### **Spring Starters**

IPU's spring starter motors are a simple, solid and cost-effective method for starting diesel engines up to 12 litres. They are perfect for marine applications as they can start an engine even in temperature extremes or damp conditions.

Engine Starting

#### Hydraulic and Air Starting Solutions

IPU's hydraulic and air starters are a solution for starting larger engines up to 150 litres. Made from coated cast iron, they are built for durability and guaranteed starting in all conditions, even after a long shutdown.



#### **ENGINE STARTING**

### **MARINE**

# Advantages of IPU starting solutions

# **Greater reliability**

Have you ever had a genset fail because the starter motor battery had lost its charge? Do you know someone whose engine failed to start because a battery was weakened by the cold? IPU's spring, hydraulic and air starting solutions offer unbeatable reliability because they don't need a battery.

**Reliability in all environmental conditions** - Batteries can be severely impacted by environmental conditions. They produce less power in colder temperatures because their chemical processes slow down. They may not have enough energy to crank the engine. IPU's engine start systems are independent; they do not need a battery. Their reliability has been proven in extreme conditions from sub-zero temperatures off the Russian coast to the baking heat of the Arabian deserts.

**Reliability even after long shut-downs** - Older batteries can struggle to hold their charge. This could leave your vessel out of commission. IPU's starting solutions are reliable even after long shut-downs. Our spring starter motors are manually primed by winding a handle and our hydraulic and air starting systems can hold their energy indefinitely.

#### **Durable construction**

IPU's starting solutions are designed to last as long as your engine. The spring starter range is zinc plated with a powder-coated paint finish to withstand all marine environments. Our hydraulic and air starter motors are made from coated cast iron for maximum durability in rough environments.

## IPU's engine starting expertise

IPU's high level of expertise has been grown through 40 years of supplying starting systems:

**Spring starting expertise** - Spring starters are a tried and tested method of engine starting. They are cost-effective and fit almost any engine. They need no pipes, oils, fluids or power supply and no specialist expertise is required to fit them. They are so simple, compact and economical that many clients put a spare on each vessel, just in case.

**Complete hydraulic and air packages** - If your starting requirements exceed the capabilities of a spring starter a hydraulic or air starting solution will suit you. This does not mean you need specialists to install it. IPU can provide you with a complete 'fit-and-forget' system built by our expert engineers. When it arrives on-site you simply bolt it down and plug it in.

**Remanufactured air starter motors** - Don't wait weeks for a new IR, TDI, Austart or Pow-R-Quik air starter motor when IPU can supply you with a remanufactured replacement in days. Thanks to a large stock holding we have access to over 3,500 air starters that covers all major makes and models.

Our rebuilt starter motors are tested, certified and come with 6 months warranty. When you purchase a remanufactured air starter from IPU we'll even give you a rebate for your old one.

For more information please visit: www.ipu.co.uk/reman



#### **ENGINE STARTING**

#### **MARINE**

# IPU's range of engine starting systems

### **Spring (Mechanical) Starter Motors**

IPU's SureStart spring starter motors provide reliable and cost-effective starting for diesel engines up to 12 litres. They deliver reliability through simplicity. To start an engine you simply wind the handle then release the trip lever. They are reliable in temperature extremes or damp conditions and there's no risk of waterway pollution.



**Guaranteed starting -** Spring starters are reliable after shutdowns or in damp, humidity, cold or heat. They even work after full immersion in water.

**Space and weight saving -** Spring starters are incredibly compact. Starting at only 12kg they are less than half the weight of electric starters.

**Ease of use -** Spring starters are a direct 'bolt-on' alternative to electric starters. They can even be fitted while the vessel is on the water.

For more information please visit www.ipu.co.uk/spring-starters



# **Hydraulic Starting**

IPU's hydraulic starting systems provide guaranteed starting for diesel engines up to 80 litres. They offer reliability, durability and independence from electrical systems.

**Unbeatable reliability** - Hydraulic energy can be stored indefinitely. After discharge, it can be quickly and easily re-charged via hand pump.

**Quick delivery and easy installation** - IPU can deliver complete systems so you can fit and forget. No specific technical expertise is required.

**Low maintenance** - Hydraulic starting systems are enclosed. Internal components are immersed in oil, protecting them from adverse conditions.

For more information please visit: www.ipu.co.uk/hydraulic-starting

# Engine up to: 80 litres Max torque: 84 Nm (62 ft/lb)



# Air (Pneumatic) Starting

IPU's air starters are a lightweight, powerful and compact solution for diesel engines up to 150 litres. They need no lubrication and are low maintenance. They can operate using your existing air supply, saving space and costs by reducing the need for reduction valves or large air tanks.

**Flexible installation** - IPU's air starters are flexible enough to suit any application with the option of using an existing air supply.

**Performance in all situations** - Air starter motors operate in extreme temperatures and continue to operate independently if electrical systems fail.

Low maintenance - Developed as an easy to install, fit-and-forget solution.

For more information please visit: www.ipu.co.uk/air-starting



Engine up to: 150 litres

Max torque: 338 Nm (249 ft/lb)

















