The STEYR MONOBLOCK engine family consists of several design solutions which are the key for highest power density, reliability and safety in operation under all operational profiles and environments. The engines are built for special applications like Military and Light Commercial vehicles, Marine applications and Stationary power plants. Due to the exceptional robust cooling behaviour and the reliable operation even with poor fuel qualities the STEYR MONOBLOCK engines achieve a unique image with vehicle manufacturers and operators around the world.

- The STEYR MONOBLOCK is a highly efficient single casting from special high tensile alloy. The design shows a “free liner”, with a uniform and most effective cooling jacket, valve seats from “Stellit” material, inserted valve guides. Due to the fact that the design is free from high torque cylinder head bolts and cylinder head gasket there is no deformation to the roundness of the cylinders, no extra stress from different temperature levels.
- Only a MONOBLOCK design offers an unlimited flow of cooling water to provide a uniform and effective cooling in the most critical upper section of the cylinder line, while conventional cylinderblock / cylinder-head – design always result in “hot spots” and extra stress due to different temperature levels and cylinderhead bolts.
- Durability, Safety, robust Cooling behaviour were the guidelines of the design and led us to this unrivalled product range of compact High Speed Diesels.
- The STEYR MONOBLOCK engine family is equipped with a high pressure STEYR Unit Injector with two stage injection nozzle and up to 2000 bar injection pressure. Design and material selection have been specifically matched to operate the engines with many types and qualities of diesel fuels like Diesel (F54, EN 590ff), Kerosene (JP8 / F34) or Maritime Diesel fuel.

WHY TO CHOOSE
### Technical Data

#### 4-Cylinder

<table>
<thead>
<tr>
<th>Engine Type</th>
<th>54</th>
<th>84</th>
<th>94</th>
<th>114</th>
<th>144</th>
<th>164</th>
<th>174</th>
</tr>
</thead>
<tbody>
<tr>
<td>Displacement (cu. in.)</td>
<td>2.13 (130)</td>
<td>2.13 (130)</td>
<td>2.13 (130)</td>
<td>2.13 (130)</td>
<td>2.13 (130)</td>
<td>2.13 (130)</td>
<td>2.13 (130)</td>
</tr>
<tr>
<td>Bore/Stroke mm (inch)</td>
<td>85/94 (3.35'/3.7')</td>
<td>85/94 (3.35'/3.7')</td>
<td>85/94 (3.35'/3.7')</td>
<td>85/94 (3.35'/3.7')</td>
<td>85/94 (3.35'/3.7')</td>
<td>85/94 (3.35'/3.7')</td>
<td>85/94 (3.35'/3.7')</td>
</tr>
<tr>
<td>Max. power kW/HP</td>
<td>40/54</td>
<td>55/75</td>
<td>66/89</td>
<td>81/110</td>
<td>106/144</td>
<td>120/163</td>
<td>125/170</td>
</tr>
<tr>
<td>at speed rpm</td>
<td>3300</td>
<td>3200</td>
<td>3300</td>
<td>3300</td>
<td>3300</td>
<td>3300</td>
<td>3300</td>
</tr>
<tr>
<td>Max. torque Nm (ft ft)</td>
<td>255 (188)</td>
<td>315 (232)</td>
<td>320 (238)</td>
<td>325 (238)</td>
<td>325 (238)</td>
<td>320 (238)</td>
<td>320 (238)</td>
</tr>
<tr>
<td>at speed</td>
<td>2500</td>
<td>2600</td>
<td>2500</td>
<td>2500</td>
<td>2600</td>
<td>2800</td>
<td>2800</td>
</tr>
<tr>
<td>Weight dry kg (lb)</td>
<td>210</td>
<td>243 (535)</td>
<td>243 (535)</td>
<td>255 (562)</td>
<td>258 (568)</td>
<td>258 (568)</td>
<td>258 (568)</td>
</tr>
<tr>
<td>Bodensee II</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Amended by: EC/2003/44</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>US-EPA Tier 2</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

#### 6-Cylinder

<table>
<thead>
<tr>
<th>Engine Type</th>
<th>126</th>
<th>156</th>
<th>196</th>
<th>236</th>
<th>256</th>
<th>286</th>
<th>306</th>
</tr>
</thead>
<tbody>
<tr>
<td>Displacement (cu. in.)</td>
<td>3.2 (195)</td>
<td>3.2 (195)</td>
<td>3.2 (195)</td>
<td>3.2 (195)</td>
<td>3.2 (195)</td>
<td>3.2 (195)</td>
<td>3.2 (195)</td>
</tr>
<tr>
<td>Bore/Stroke mm (inch)</td>
<td>85/94 (3.35'/3.7')</td>
<td>85/94 (3.35'/3.7')</td>
<td>85/94 (3.35'/3.7')</td>
<td>85/94 (3.35'/3.7')</td>
<td>85/94 (3.35'/3.7')</td>
<td>85/94 (3.35'/3.7')</td>
<td>85/94 (3.35'/3.7')</td>
</tr>
<tr>
<td>Max. power kW/HP</td>
<td>88/120</td>
<td>110/150</td>
<td>140/190</td>
<td>170/230</td>
<td>184/250</td>
<td>205/279</td>
<td>215/292</td>
</tr>
<tr>
<td>at speed rpm</td>
<td>2500</td>
<td>2500</td>
<td>2500</td>
<td>2500</td>
<td>2500</td>
<td>2500</td>
<td>2500</td>
</tr>
<tr>
<td>Max. torque Nm (ft ft)</td>
<td>425 (313)</td>
<td>450 (331)</td>
<td>430 (317)</td>
<td>440 (325)</td>
<td>500 (368)</td>
<td>570 (420)</td>
<td>530 (391)</td>
</tr>
<tr>
<td>at speed</td>
<td>1800</td>
<td>1550</td>
<td>2800</td>
<td>2800</td>
<td>2800</td>
<td>2800</td>
<td>2800</td>
</tr>
<tr>
<td>Weight dry kg (lb)</td>
<td>325 (716)</td>
<td>325 (716)</td>
<td>305 (672)</td>
<td>305 (672)</td>
<td>322 (709)</td>
<td>322 (709)</td>
<td>322 (709)</td>
</tr>
<tr>
<td>Bodensee II</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Amended by: EC/2003/44</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>US-EPA Tier 2</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

The engines illustrated may not be entirely identical to production standard engine. All specifications are subject to change without notice.
WIDE PROPULSION SYSTEM RANGE

INBOARD

JET DRIVE

STERN DRIVE
STEYR Marine Diesel package available with BRAVO I, II, III

SAIL DRIVE

Repower Kits available for most common Stern Drives

HIGHLIGHTED APPLICATIONS

TAXIBOATS VENICE 2,000 hours/year...
WATERJET FAST RESCUE BOATS, China, Norway & Germany ...
PARASAILING BOATS, Turkey & Croatia ...
RESCUE & TENDER BOATS for Coast Guards and for Cruise ships on all seven seas...
SCC – STEYR CONTROL CENTER

REPRESENTS THE STATE OF THE ART

Engine Interface and Multipurpose Touch Screen-Display based on SAE J1939 CAN2.0 Databus

Features are:
- intuitive and logical user interface
- integrated Engine Diagnostic
- electronic switches for external inputs / outputs
- GPS speed / position / course / time
- Online Computing of fuel consumption / load / driving range / propeller slip
- Metric, British & US values
- 5,5’’ transflective polarized TFT Screen
- comes with GPS-Sensor, Installation, brackets, cables

WORLDWIDE FIRST SERIALIZED HYBRID PROPULSION SYSTEM FOR PLEASURE BOATS

The environmentally friendly HYBRID SOLUTION marks a new chapter in the history of pleasure boat propulsion systems. It not only assures zero emission and low speed manoeuvring in harbours, noiseless drive on inland waters and nature reserves, but also eliminates the need for separate generator units for other onboard equipment. The “zero emission” electric drive mode allows a speed of 5 knots using solely electric propulsion and switches to the combustion engine with an easy turn of the ignition key.

The ingenious propulsion then gets “boosted” by the electric drive and enables quicker acceleration, lowering fuel consumption, improving response and dynamics. Significantly reduced maintenance costs and improved ease of service are further irrevocable arguments that STEYR MOTORS is introducing a serious technological novelty.

THE ELECTRIC MOTOR OPERATES IN 4 MODES:

- STARTER MODE
  The conventional starter motor can be eliminated.

- GENERATOR MODE
  In Generator Mode, the extended battery pack is optimised and charged.

- ELECTRIC CRUISE MODE
  No emission, no noise.

- BOOST MODE
  An improved response of the drive unit occurs through the boost mode.
STEYR IFG POWER SYSTEM

COMFORT AND FEATURES

- **SAFE BOATING:** no gas on board necessary
- **MORE COMFORT:** because low speed part time generating
- **LOW COSTS:** no extra installation required, no extra service required
- **MORE SPACE:** integrated compact (30 mm / 1.18") solution
- **MORE RELIABILITY:** brushless permanent magnet technology
- **ADAPTABILITY:** simple adaptation for gel-batteries
- **SUATIBILITY:** easy application with off-the-shelf inverters up to 4.2 / 4.5 kW AC output (only for DC models)

INSTALLATION SCHEME

- 230 V / 50 Hz / 4.0 kW - INTEGRATED FLYWHEEL GENERATOR (IFG) LAYOUT
- DC 24 V / 4.5 kW - INTEGRATED FLYWHEEL GENERATOR (IFG) LAYOUT
- DC 12 V / 4.2 kW - IFG LAYOUT - WITH INVERTER