The Korean Coast Guard’s fleet of waterjet-powered patrol boats has grown rapidly in recent years. Both the highly regarded 50T vessel and the new 100T flagship vessel utilise twin HamiltonJet propulsion. And with more than 60 of these vessels in service, the KCG is the world’s most prolific user of HamiltonJet HM Series waterjets.

Formed in 1953, the Korean Coast Guard is tasked to preserve national safety and security, and assist in and prevent maritime accidents.

The 50T and 100T vessels are designed to carry out both patrol and rescue duties, as well as assist with environmental protection and pollution control, maritime traffic safety and international affairs. Operating conditions can extend to Seastate 4, with the vessels patrolling up to 30km offshore and for up to 5 days at a time.

Designer Kang Nam Shipbuilding has designed more than 600 vessels including a wide range of research, naval and patrol boats. The 50T vessels were built by four different boatyards to ensure the delivery schedule was achieved.

Both the 50T and 100T vessels use HamiltonJet’s MECS electronic control system to operate the waterjets’ Steering and Astern deflectors, engines’ RPM and gearboxes from two separate control stations.
### KCG 100 Tonne Patrol Boat

**CLASS:**
100 Tonne Patrol Boat

**LENGTH:**
30.30 metres

**BEAM:**
6.10 metres

**CONSTRUCTION:**
Steel

**SPEED:**
45 knots

**WATERJETS:**
Twin HamiltonJet Model HM811

**ENGINES:**
Twin MTU diesel engines
Model 16V 4000, each
2720kW (3698hp) @ 2100rpm

**GEARBOXES:**
ZF 7550 2.241:1

**DESIGNER:**
Kang Nam Shipbuilding, Busan, Korea

**BUILDER:**
Kang Nam Shipbuilding, Busan, Korea

**OWNER/OPERATOR:**
Korean Coast Guard, Incheon, Korea

**HamiltonJet DISTRIBUTOR:**
Dong Kang M-Tech Co. Ltd, Seoul, Korea

The fleet of 100 Tonne patrol boats has grown rapidly over recent years, quickly becoming the mainstay of the KCG operation. The first two vessels were launched in 2002, five more were built in 2003, a further 15 in 2004, 20 in 2005 and 22 in 2006.

The high speed performance of the 100T vessel make it a formidable weapon in the KCG’s operations against smugglers, pirates and other naval threats, and mean it can respond quickly in emergency rescue and security situations. Belying their size the boats are very nimble and manœuvrevable, with each vessel accommodating 16 crew.

Several more 100T class boats are scheduled to join the KCG fleet within the next couple of years.

### KCG 50 Tonne Patrol Boat

**CLASS:**
50 Tonne Patrol Boat

**LENGTH:**
28.00 metres

**BEAM:**
4.80 metres

**CONSTRUCTION:**
Steel

**SPEED:**
32 knots

**WATERJETS:**
Twin HamiltonJet Model HM611

**ENGINES:**
Twin MTU diesel engines
Model 16V 2000 M90, each
1323kW (1799hp) @ 2300rpm

**GEARBOXES:**
ZF 3650 2.027:1

**DESIGNER:**
Kang Nam Shipbuilding, Busan, Korea

**BUILDER:**
Kang Nam Shipbuilding, Busan, Korea

**OWNER/OPERATOR:**
Korean Coast Guard, Incheon, Korea

**HamiltonJet DISTRIBUTOR:**
Dong Kang M-Tech Co. Ltd, Seoul, Korea

The fleet of 50 Tonne patrol boats has grown rapidly over recent years, quickly becoming the mainstay of the KCG operation. The first two vessels were launched in 2002, five more were built in 2003, a further 15 in 2004, 20 in 2005 and 22 in 2006.

Its steel-hull design has an excellent reputation for sea keeping and performance, with the twin HM611 waterjets offering additional benefits such as fast acceleration, high and low speed manoeuvrability, safety and shallow draught.

Each boat is manned by a crew of 9.