NEYK LUXURY- SUBMARINE

DESIGN FEATURES

After five years of development the most manoeuvrable submarine in the wor1d has been designed.
After many tests with models and engineering a submarine has been developed which is less complicated, cheaper and which has manoeuvrability as big as possible.
Though, in view of the above mentioned, the NEYK could be called a rather conventional submarine, this is only partly true. Already its exteroir is striking. The requirement of a big manoeuvrability implied, among other things, a spacious surface of the rudder while the rudderblade can be turned as a whole. However, the most remarkable thing is the hull, which lengthwise fluently changes into teardrop form. Even the superstructure had been made in this shape.

Once again for the sake of the manoeuvrability the sub-marines are simple to control with a single joystick, have rapid reactions to commands and the diving rudders automatically respond to changes in the angle of incidence. Within a few seconds, the rudders can be adjusted to an angle of 35 degrees.
This ocean-going diesel-electric submarine has two almost silent electric motors. As with conventional craft, the boat can turn completely on its axle in a few seconds by having the engines run in opposite directions.
Extensive viewing facilities will enable the passengers of fully experience the thrills of underwater sailing. Three flat acrylic viewports on either side and one spherical top viewport, dia 1,2 m angle 150 degrees.

For sailing underwater a number of safety provisions have been made to conform with Lloyds Register of shipping requirements.
There are two high-pressure pumps which can pump the water out of the submarine. Should this system not work two tong of ballast can be thrown overboard. If necessary, four big air-balloons can be inflated to make the ship coma to the surface.

AII components have been made of high-quality materials which are often used in military submarines. More than 70 companies which normally work for the Dutch navy are involved in the project. Because of this, it is possible to develop and build a submarine which meets the highest requirements.

PRINCIPAL PARTICULARS

Length, overall 19.340M
Width, overall 7.000M
Height 5.545M
Huil diameter 3.000M
Entrance diameter 0.600M
Displacement surfaced 90.920Tons
submerged 103.320Tons
Operational depth 300M
Propulsion.....
diesel engine 218KW
two electric motors..... 100KW
Speed surfased ..... 11 Kn (approx.)
submerged ..... 15 Kn (approx.)

DIMENSIONS FOR TRANSPORTATION

Length, overall 19.340M
Width, overall 4.680M
Height 3.700M
Payload.....5 -8 tong (approx.)
Crew ..... 1 Pilot
.....1 Co Pilot
Passenger area ..... 10 Comfortabie seats
Hydraulic power output ..... 15 KW
Max. hydr. pressure .....200 Bar

TOTAL ENERGY CAPACITY (EMERGENCY)

Battery blocks
in parallel ..... 600Volts; 255 KW
Type of batteries.....Lead acid; pressure
.....compensated
Weight of batteries.....11Tons (approx.)
Soft ballast tank.....-.....
capacity 12.400Tons
Compressed aircapacity .....12x50 Ltr, 200 Bar
Oxygen .....4x100 Ltr, 200 Bar
Life sypport autonomy ..... 72 manhrs
Auxiliary battery ..... 24 Volt; 8.9 KWh

MATERIAL, CORROSION PROTECTION

Pressure hull..... fine grain construction steel
Hull penetrations.....stainless steel
Equipment .....stainless steel
.....hard anodized aluminium

STANDARD EQUIPMENT; GENERAL INSTRUMENTATION AND OUTFIT:
Depth Gauges, Echosounder, Speed log, Compass, Gyro, Hard Ballast Content, Thruster Speed, Rudder Angle, Pressures, Temperatures, Volt- and Ampèremeters, Surface Radio, Underwater Telephone, Public Address , Surfacing Buoy, Flashlight, Navigation system, Dead Reckoning, Pinger, Gyro Compass, Autopilot, Sonar, Transponder Tracking system, Radar, O2 and CO2 Monitor, Dräger Reactive tube Kit, Fire Extinguisher, First Aid Kit, Life Vests.
SPECIAL EQUIPMENT (OPTIONAL):
Searchlights on Pan and Tilt Unit, Color Pan and Tilt CCD cameras, Video Recorder, Documentation Outfits, etc.

SAFETY PHILOSOPHY
Highly Conservative Safety factors for pressure hull and all vital systems installed in duplicate or more. Large energy and life support capacities.

CLASSIFICATION
Society may be chosen by customer. It is recommended that the submarine will be constructed in accordance with the Iatest rules for manned submarine vessels published by the Lloyd's Register of Shipping and under observation of the ABSIUS Coastguard rules.
NOTE:
This data sheet may be subject to changes without due to technical improvements of modifications.
It is not intended to be a complete description of the presented equipment.