

MI-14 Helicopter performances

Performances of these helicopters allow to operate them in any climate zone from the Extreme North to Tropics, under usual and hard weather conditions, in day-time and at night. The helicopter is equipped with satellite navigation system.

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| Allowable takeoff weight, kg: | |
| normal | 13000 |
| maximum..... | 14000 |
| Maximum load-lifting capacity, kg: | |
| in cargo cabin | 3000 |
| external store..... | 3000 |
| Maximum indicated air speed at: | |
| altitudes from 0 to 1000 m, km/h: | |
| at normal takeoff weight | 230 |
| at maximum takeoff weight..... | 220 |
| Cruising speed at: | |
| an altitude of 500 m, km/h at normal takeoff | |
| weight..... | 210 |
| at maximum takeoff weight..... | 205 |
| Service range, km..... | 1035 |
| Service ceiling, m..... | 3500 |
| Maximum helicopter weight for water and stage landing and takeoff, kg..... | 13000 |
| Passengers..... | 22-26 |

The first passenger modification sample of civil amphibian helicopter MI-14 (for 24 persons) had shown its unique performances at drilling denies stages on the Caspian sea shelf in the Republic of Azerbaijan and at the first International Hydro aviation Salon in Gelendjik at 1996.

The experience of Mi-14 operation over many years certifies their high flight performances, safety and reliability of their systems and units. The main feature of this helicopter is in its design for special flights over vast water areas. That's why the helicopter has a range of designer features. Its airframe is boat-shaped with sponsors, inflatable floats and retractable landing gear. It is the only helicopter in the world capable to conduct regular water landing, sailing and water takeoff. In accordance with the ICAO rules these helicopters are equipped with system of ejector ballonets, which adds water stability and allows to use these helicopters with sea swell being Beafort number up to 3. Design and service lines of the helicopter allow to re-equip it into different modifications and to use for:

- fulfillment of cargo and passenger transportation (24 passengers or 3 tons of cargo);
- search-and-rescue operations over a sea surface and at sea shelf areas (in a distance from the base up to 400 km with duration of operations in the working area up to 1 hour);
- fire-fighting operations (time of patrolling in the area including hopping time -4h.30m.);
- ambulance and medical care in emergency, calamity and disaster areas;
- ecological measures with use of infra-red scanners, UHF-radiometers, lasers and board-mounted sampling systems;
- geo-physics surveys using magnetometers, magnetographs, gravitation gauges and aerial cameras;
- providing of fishery measures;
- VIP transportation, remote control center, mobile office or communication station.

Independent DC and AC power courses allow to use board mounted equipment with shutdown engines. Retractable in flight gear reduces helicopter drag and as a consequence makes it more economical and stable at a speed range from economic to best. A crem consists of three members:

- a pilot (crew commander);
- co-pilot;
- flight technician-operator.

The crew personnel allow to conduct preflight preparation which provides autonomous based operation.

Mi -14 Helicopter is capable to fulfill regular tasks in day-time and at night, at normal and at hard weather conditions, from prepared and unprepared landing fields including soft ground), both plain and mountain regions with altitude up to 3500 meters above sea-level.

Use of the amphibian helicopter at a sea shelf oil and gas derricks is considered to be the most promising.

MI-14CP Helicopter (cargo-passenger)

Modification of the helicopter is equipped with additional folding ladder in rear part of the airframe and with 4 emergencies escape hatches. Airframe design allows providing of higher comfort in re-equipping it into passenger version. The helicopter is completed with 24 easily mounting passenger chairs and a loading hoist, is equipped with air-conditioner, heating system, bio-lavatory.

The helicopter may transport up to 24 passengers or load up to 3000 kg in cargo cabin or on external store. Limitation in a landing on a platform:

- maximum takeoff weight -13000 kg;
- wind speed at day-time up to 20 m/sec.

In case of 1 engine failure (with normal takeoff weight) horizontal flight in standard atmosphere conditions is possible during one hour. Individual and group life rafts (for every crew member and passenger) are the obligatory completion for each helicopter.

MI-14PS Helicopter (Search/Rescue)

Ways of use of Mi-14 PS Helicopter:

- searching;
- search-and-rescue in variants:
 - a) rescue of 2-9 men from hovering with placing them on chairs;
 - b) rescue of 2-9 men from hovering with placing them on stretchers;
 - c) rescue of 20 men with landing on ground field or on a water surface;
- rescue equipment transportation (drop up to 20 life rafts).

MI-14 PZh Helicopter (Fire-Fighting)

Experience of operation of Mi-14 re-equipped into fire-fighting modification showed its high efficiency.

From 1994 to 1996 Mi-14 Helicopters with fire-fighting systems were used in Spain and Portugal. They were used at temperature of air up to 50 C. In Spain sea (salted) water was used for extinguishing.

Performances of Fire-Fighting Version of the Helicopter:

1. Water tank volume – 4 cub.m.
2. Quantity of foaming agent – 250 litres, which has the same effect as 12 cub.m. of water.
3. Time of water filling when hovering – less than 100 sec.
4. Time of water drain:
 - water hammer– less than 3 sec;
 - tractable-15 sec.

Advantages of Fire-Fighting Version of Mi-14 Helicopter comparing with other helicopters both in Russia and abroad lay in possibility to fill water from rather shallow reservoirs and mountain rivers with minimum depth of 0.3 m.

