Helicopter and UAV flight deck securing and handling devices

AIRCRAFT SUPPORT SYSTEMS

Missions

- Ensure safe helicopter, ammunition and UAVs* transfers from landing spot to hangar and vice versa.
- Provide means to land and take-off quickly and safely without crew assistance, even in heavy weather and seas.

COMPATIBLE WITH ANY HELICOPTER, UAV*, VTOL** TYPE

SIMPLE AND SAFE

HIGHLY RELIABLE AND WITH VERY LOW MAINTENANCE

EASY TO OPERATE AND MAINTAIN

* Unmanned Aerial Vehicles.
** Vertical Take-Off and Landing.
Optimised design
Made of high tensile stainless steel, the 27-07 MKII grid is dedicated to medium and heavy helicopters (NH90, EH101, Sea Hawk) and has already been selected by several navies and coastguards; the 18-UAV grid has been specifically developed for UAVs.

DCNS is the grids’ Original Equipment Manufacturer (OEM).
All of DCNS’ grids can easily be fitted on all types of flight decks and are designed and manufactured to last the platform’s lifetime (requiring very low maintenance). They are compatible with any helicopter handling system.

More than 465 devices over 40 years
Near 30 maritime operators

CHARACTERISTICS

<table>
<thead>
<tr>
<th>Type</th>
<th>27-07 MKII</th>
<th>27-07</th>
<th>27-08</th>
<th>18-08</th>
<th>18-UAV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diameter (mm)</td>
<td>2,750</td>
<td>2,750</td>
<td>2,750</td>
<td>1,800</td>
<td>1,800</td>
</tr>
<tr>
<td>Rockwell hardness (HRC)</td>
<td>≥ 40</td>
<td>29</td>
<td>29</td>
<td>29</td>
<td>29</td>
</tr>
<tr>
<td>Weight (tons)</td>
<td>2.00</td>
<td>2.00</td>
<td>1.60</td>
<td>0.65</td>
<td>0.27</td>
</tr>
<tr>
<td>Mechanical behaviour:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– harpoon traction (daN)</td>
<td>11,000 40,000</td>
<td>11,000 40,000</td>
<td>6,500 12,000</td>
<td>6,500 12,000</td>
<td>3,000 4,000</td>
</tr>
<tr>
<td>– vertical loading (daN)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helicopters category</td>
<td>&lt; 18 tons (EH101, NH90, Sea Hawk)</td>
<td>&lt; 18 tons (Super Puma, Sea King)</td>
<td>&lt; 10 tons (Alouette III, Panther, Lynx)</td>
<td>&lt; 10 tons (Alouette III, Panther, Lynx)</td>
<td>&lt; 3 tons (UAV-VTOL)</td>
</tr>
</tbody>
</table>

Bureau Veritas approved

Compliant with NATO STANAG 1276 Edition 2 (June 2014).
Compatibility with all types of helicopters and UAVs equipped with a harpoon.

With courtesy of Northrop Grumman
Absolute safety
After locking into the landing grid, the helicopter remains secured to the deck thanks to Samahe® moving on its rails (flush mounted or built on the deck).

More than 60 Samahe® sold
Up to sea state 6
Selected by 9 navies

Modular
The Samahe® modular system can be tailored to suit different types of vessel, new building and upgrades.

Easy to operate and maintain
Samahe® was designed to ease operations and reduce maintenance. Samahe® can be operated by one person.

Solutions for all types of operational needs
Accommodates all naval helicopter types up to 16 metric tons, including Dauphin/Panther, Lynx/Super Lynx, Sea King, NH90, Seahawk, Super Puma/Cougar.
HOW IT WORKS

Easy to operate
After landing, the helicopter is harpooned in the landing grid, or not, tied down (lashed to the deck).
The helicopter is caught on the handling interface, whether by the main landing gear or by a strong point.
The helicopter is secured, the lining up of the helicopter is achieved with the deck guidance rail.
The helicopter is guided safely to the hangar.
The same process is repeated to handle the helicopter from the hangar to the deck.