

ENMARES Aviation Marine and Land Defense Incorporate

Universal Towbarless Aircraft Movers

for fixed and rotary wings



Model Series: SPIDER-X20

Towbarless Helo Mover

SPIDER CE

Technical Features | SPIDER-X20

Model	SPIDER-X20
Product Definition	Battery-Powered Towbarless Helicopter Carrier Vehicle
Maximum Serviceable Aircraft SLG* Loading	8.000 kg
Electric Supply	24 off SLA/VRLA Tractive Electric Batteries
Movement Modes in Azimuth	Vertical, Horizontal, Diagonal, Classic, Carousel
Traction	High-Torque Electric Traction Motors
Steering	Independent 4-Wheels Hydraulic Steering
Electronic Control System	PLC-Based CANBus Network
Command Panel	Wireless Radio Joy-stick Command Console
Vehicle Electronic Access Interface	7" Touchscreen
Maximum Vehicle Speed	7,5 km/h
Minimum Turning Circle	0 mt
Wheels	Heavy-Duty Solid Polyurethane Coated Steel Wheels
SLG* Contact/Handling Feature	Rubber Coated Rollers with Bearing
Integrated Illumination Projectors	6 off LED RGB Projectors
Approximate Weight	2.300 kg
Fasteners	A4 Grade
Surface Finish	Marine Quality Electrostatic Paint
Aircraft Undocking at Stationary Vehicle Position (STARS™)**	■
Infographic Screen on Wireless Command Console	■
Command Console Illumination	■
Aircraft Contact Sensors for Automatic Stop	■
SLG* Hydraulic Safety Fixation	■
Integrated 110/220 VAC Battery Charger	■
Landing Gear Over-Rotation Protection System	■
Automatic Aircraft Positioning System (APOS™)	■
Active Brake	■
Buzzer	■

* Steering Landing Gear

[■] Available [-] Not Available

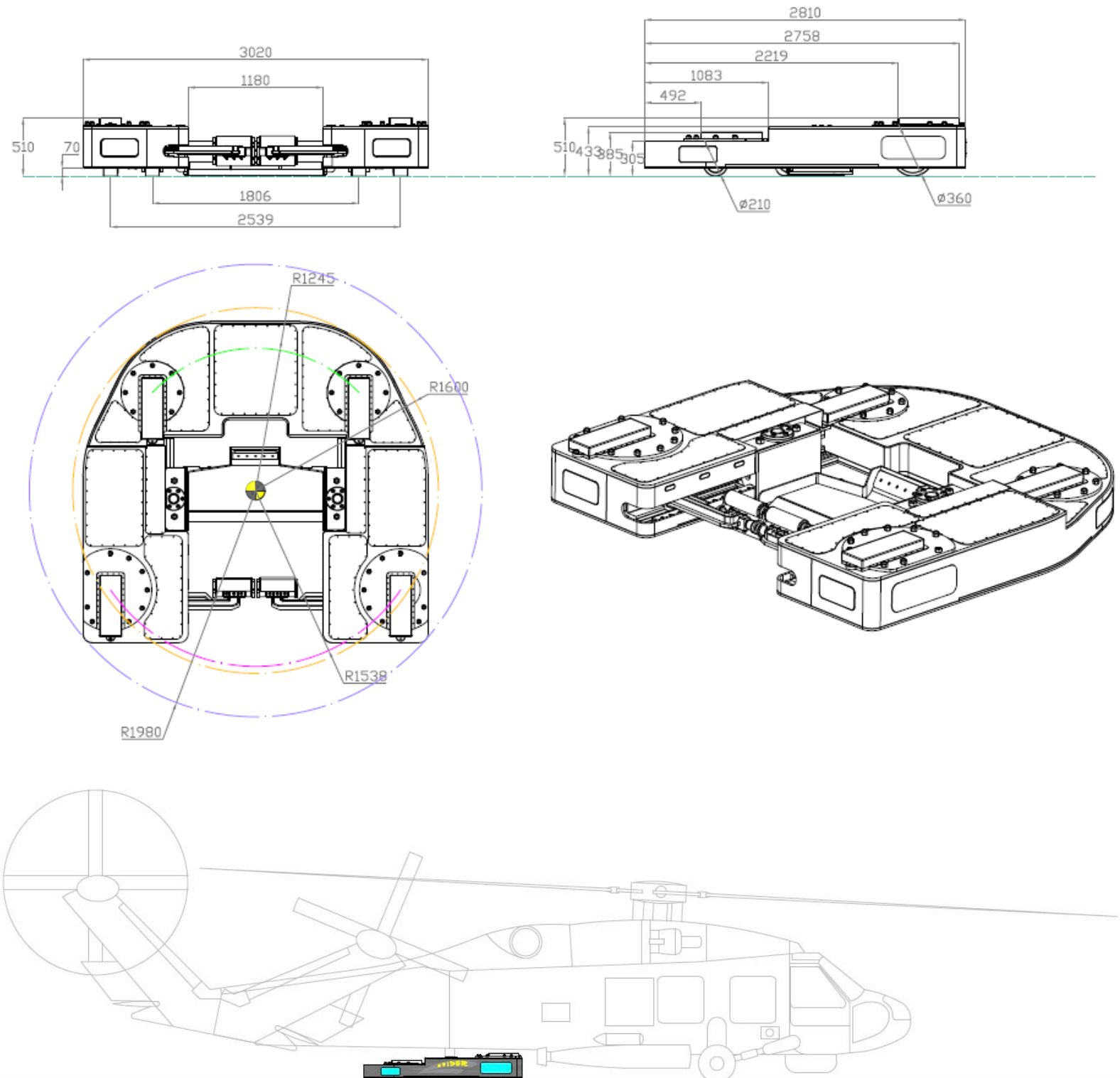
** Stationary Aircraft Release System (STARS™)

- *Ultimate-moveability with 4-Wheel independent steering system*
- *Encrypted radio frequency controlled wireless command console*
- *Infographic touchscreen vehicle electronic interface*
- *Vertical, horizontal, diagonal, classic, carousel movement modes*
- *Automatic aircraft positioning and handling with just one tap on the command console (APOS™)*
- *Enabling aircraft undocking without moving the vehicle (STARS™)*
- *RGB LED projectors*

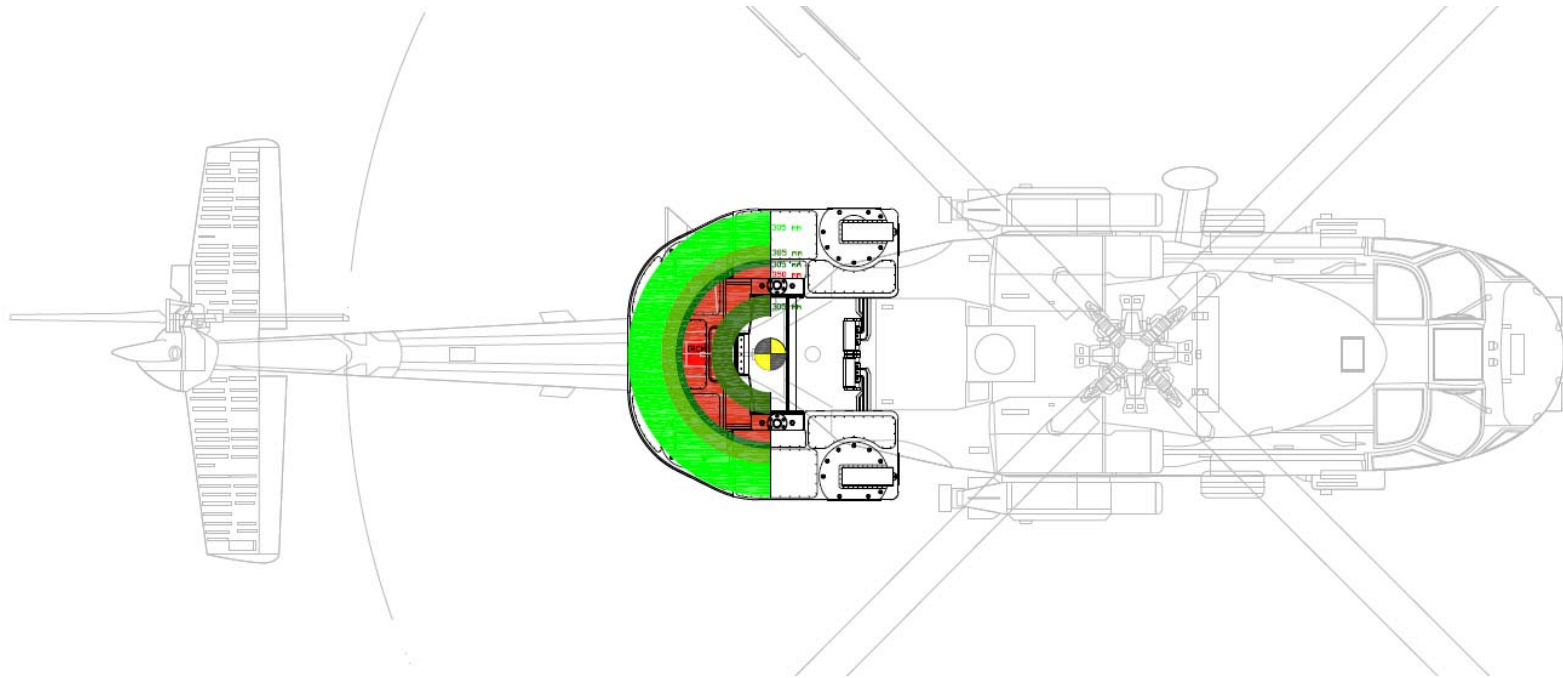
Towbarless Helo Mover

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Main Dimensions | SPIDER-X20



Height Topology | SPIDER-X20

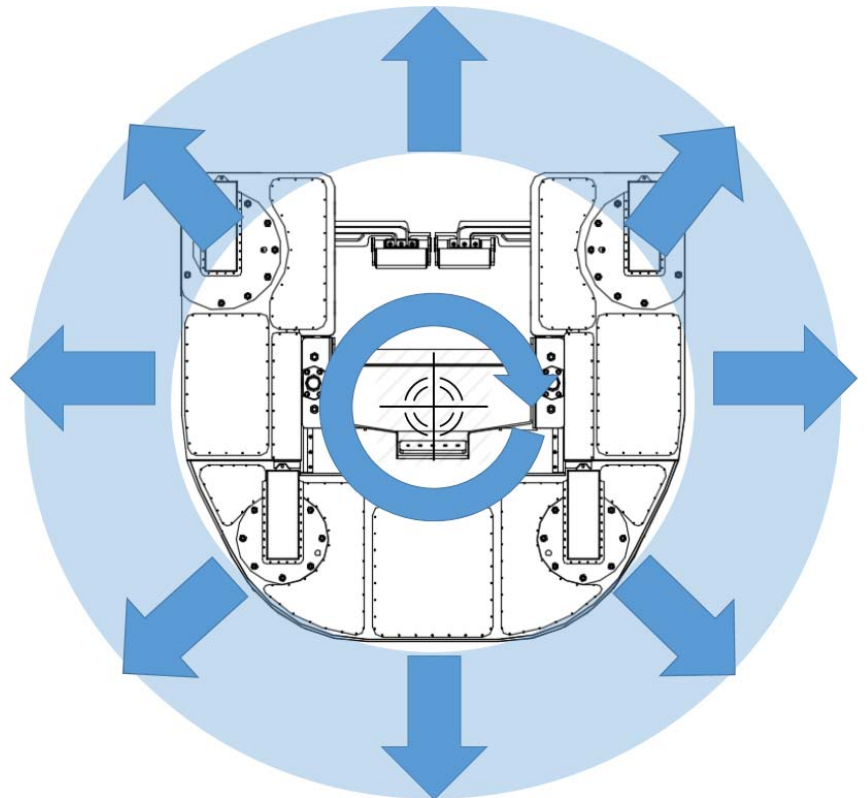


Capabilities | SPIDER-X20

Exemplary Aircraft Handling Capability List

	Aircraft Type
1	F-35B
2	AV-8 (Harrier)
3	S-60B-F/S-70B (Sea Hawk)
4	H-60S/S-70A (Blackhawk)
5	Atak
6	AH-1 (Cobra)
7	H-64 (Apache)
8	SH-3 (Sea King)
9	CH-46 (Sea Knight)
10	CH-47 (Chinook)
11	CH-53D (Sea Stallion)
12	CH-53E (Super Stallion)
13	TH-57 (Sea Ranger)
14	MH-65 (Dolphin)
15	MH-6A (MD)
16	OH-58D (Kiowa Warrior)
17	H-1N (AB-212)
18	NH-90
19	MRH90
20	AW-149
21	EH-101
22	AS 665 (Tiger)
23	AS 532 (Cougar)
24	SH-2G (Super Seasprite)
25	LYNX
26	SA321 (Super Frelon)
27	SA330 (Puma)
28	SA332 (Super Puma)
29	V-22 (Osprey)

SPIDER-X20 Movement Capability



Towbarless Helo Mover

SPIDER CE



"As a NATO supplier engineering company, we design and manufacture a wide variety of aircraft maintenance, painting and assembly lines, special ground support equipment and mechanical systems for both civil and defense industries. Our complete scope of project implementation covers design, analysis, manufacturing, testing, documentation, shipment, commissioning and aftersales support. This becomes ENMARES' distinguishing power in many prestigious aviation and defense projects for years."

Rotary and Fixed Wing Aircraft Towing Vehicles

- Helicopter Operation Equipment
- Aircraft Assembly Line Solutions
- Special Aircraft Docking Systems
- Aircraft Painting Docking Systems
- Aircraft Tire Inflation Cages
- Aircraft Engine Components Clean Lines
- On-the-vessel Helicopter Platforms
- Special Electromechanic Weapon Systems
- Composite Ballistic Armouring
- Mobile Diesel Fire Extinguishing Pumps

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