

ITEM	DESCRIPTION AND REQUIREMENTS	COMPLIANCE or PROPOSAL
1. SCOPE OF SUPPLY		
Introduction		
Manufacturer		Reference of the Bidder
Model		Reference of the Bidder
Location of manufacturing plant		Reference of the Bidder
Number of Spreaders	two (2)	Yes/No
General Description	Ship- to -Shore Twin Lift Spreader	Reference of the Bidder
Principal Operating	Electro-hydraulic telescope	Yes/No
ISO Container Handling	1x20ft, 2x20ft, 1x40ft, 1x45ft	Yes/No
Lifting Capacity	50tn SWL & Twin Lift: 2x25tn SWL	Yes/No
Spreader Tare Weight	in Kgs	
Operational Speeds	1. Twistlock 2. Flippers adjustable 3. telescopic 20ft-40ft 4. Telescopic 40ft-45ft 5. Center Speed -	proposal
Communication	Commercially available 2 or 4 wire open system included in the signal and power cable. Closed 'black box systems' is not accepted	Yes/No
Certifications, Design Criteria	EN 15056 / DIN 15018, Class H2B4, Class of Utilization-U6, loading-Q3, 1.000.000 cycles	FEM Rergulation: Spectrum class of Group classification-A7 proposal
Options		
Option 1	manually Pump for Emergency Twistlock Operation	Yes/No
Option 2	Camera System	Yes/No
Option 3	6 Flippers Upgrade	Yes/No
Option 4	Flexi Flippers	Yes/No
Option 5	Shock Absorb (SA)	Yes/No
2. Main Structure		
Applicable standards and codes		
Certification	CE marking , compliance with Machinery Directive 2006/42/EC or other more applicable.	Yes/No
Design Criteria	EN 10137-2 S690Q, EN 10025 S355 J2G3, EN 10025 S355 JR/S275 JR	proposal
Lifting Lugs /capacity	Equipment with suitable lifting lugs the number and each capacity will be filled by the Seller.	proposal
Beam design	Heavy Duty Mono-Beam Construction	Yes/No
Telescopic drive	Telescopic Belt System, guided at all 4 sides	Yes/No
Hydraulic Tank	Made in stainless steel (SS316)	Yes/No
Oil tank capacity	in Litres	
Protect Against Hits, Damages, Rain	Stainless Steel Hydraulic Tank and Electrical Box S690Q Secondary details: EN 10025S355JR/ S275 JR	Material: EN10137-2 EN10025 S355J2G3 proposal
Environmental conditions		
Temperature	Mediterranean climate:Ranging from -5°C to 40°C (direct sunlight)	Yes/No
Relative humidity	Ranging from 50 to 100%	Yes/No
Max wind speed during operations	24 m/s	Yes/No
Atmosphere	Salt laden marine environment with fine sand	Yes/No
Climate type	Mediterranean climate. Exposure to snow (up to 20 cm) and rarely ice during winter months	Yes/No
Applicable spreader devices		
Device when the cable is collected	A special device- basket- should be installed by the Contractor in the Spreader so as to protect the cable when it is collected. The Bidder has to apply about it a fully analytical technical description with the necessary drawing. This device should be mounted on the spreader with anti-vibration support.	Yes/No
Overheight latching bracket	The spreader must have overheight latching bracket compatible with overheight frames according to the attached of RFP File 5 and 6 .	Yes/No
Additional fixtures must be considered for enabling safe maintenance and efficient operations:	()-Flared guide for headblock connection -Hand rail brackets -Motor and space heater -Access ladder -Low level and high temperature gauges -Shock damper protection -Dummy socket for headblock connection	Yes/No
Requirements		
Number of Twistlocks	Four (8)	Yes/No
Certification	ISO Standard	Yes/No
Type	Forged and hardened certified steel, double collar twistlocks	Yes/No
90 rotation time	<= 1 second	
Speed up and down	seconds	
Max. hydraulic Pressure	bar	

Safety 1	Electric and Mechanical Interlock to prevent accidental rotation	Yes/No
Safety 2	Twistlocks shall not turn if all four corners have not landed on the container	Yes/No
Safety 3	The container shall not be lifted if the twistlocks have not been locked	Yes/No
Safety 4	Unlocking power of the twistlocks is exceeding the locking power by at least 40%.	
safety 5	The twistlocks shall not unlock if the container has been lifted	Yes/No
Safety 6	Extension/retraction is only possible with twistlocks unlocked and spreader not landed.	Yes/No
Safety 7	In case of emergency, the drive link of twistlock can be rotated manually.	Yes/No
Safety 8	The twistlocks should be able to operate for at least 200.000 moves.	Yes/No
Indicator lights	LED Indicator Lights : Red: Unlocked, Green: Locked, White: Landed	Yes/No
Twistlocks rotation time (90°)	in Seconds	proposal
gap between the two 20ft containers	adjusted gap from 0 to....mm	proposal
Twistlock mounting type/Micromotion range	in mm	proposal
Twistlock counter	Spreader twistlock counter shall be provided	proposal

3. Vibration Damping System		
Requirements		
Shock Absorbing	in %	proposal
Noise Reduction System	in dBA	proposal
Type of System	Mechanical, hydraulic or either type	proposal
attached Files about :	1. detailed technical data 2. functional characteristics. 3. detailed drawings. 4. advantages of the applied methods over others.	proposal

4. Flippers		
Requirements		
Number of Flippers	four(4), two(2) on the land side or the water side.	Yes/No
Torque of each Flipper/ Rotation Time	at least 5000Nm/s	proposal
Collection Distance of the Container	in mm	proposal
Safety	Protection System from impact load exists	proposal
Lifting-Lowering time (0-180°)	in seconds	proposal
Single button lift	If it is possible to lift all the flippers with a single button	Yes/No

5. Electrical System - Automation - Safety Devices		
Electrical Systems		
Communication	Can Open Communication	proposal
Control from Crane	Directly from PLC	
Control on Spreader		
Routed cables	Power cables routed so that they are protected against hits	proposal
HIS	Height Indication System	Yes/No
TTDS	Twin Twenty Container Detection System	Yes/No
ODS	OnBoard Diagnostic Screen . The Bidder has to apply all the technical analytical information about the system which should be of the closed - industrial type robust and vibration -resistant -needs the relevant certification-	Yes/No
Specific diagnostic spreader application	PLC with test and fault identification in the spreader	Yes/No
Specific diagnostic spreader application	Remote diagnosis of the source of the faults in case of spreader downtime occurs	Yes/No/ proposal
Led Lights	LED Indicating Lights	Yes/No
Local Functions	Twistlock and Telescope operate locally on spreader	Yes/No
Spreader ID information	Spreader ID information should be provided to Crane	Yes/No
Safety Device about the Central Cable	Anti-Vibration Supports	Yes/No
Voltage	in Volts	proposal
Power consumption	in KW	proposal
X1 Cabinet	should be facing outside so it is easily maintained	proposal
Automation		
Greasing	Auto Greasing System	Yes/No
Insulation		
Electrical Motors	IP 56	proposal
Electrical Boxes	IP 66	proposal
Sensors and Led indication lights	IP 67	
Remaining Components	IP 65 minimum	
PLC	PLC closed-industrial type and vibration resistant	Yes/No

Painting and corrosion protection		
	Suitable for marine environment	Yes/No
	Sandblasted SA 2 1/2 or newer according to Swedish Standards 055900	Yes/No

	All exterior surface coatings shall be of a high durability (>10 years), protective two-component EPOXY LINK RICH PRIMER	Yes/No
	Final thickness at least 210mm	Yes/No
Logos and Nameplates		
	Buyer's name and logo, to be validated during design review	Yes/No
	Manufacturer's name and date of manufacture	
	A plate showing main specifications will be installed at a notable location of the frame	
	Any danger / warning signs as per EU regulations, legends in Greek & English	

7. DOCUMENTATION		
Technical Documents		
	All documentation shall be provided in hard and electronic format copies	Yes/No
	2 Operator's Manual in Greek	Yes/No
	2 Maintenance Manual in Greek	
	2 Electrical Circuit Diagrams in English & Greek (24V & 220v)	Bidders proposal
	2 Hydraulic Circuit Diagrams in English & Greek	Yes/No
	2 Mechanical Circuit in English & Greek	Yes/No
	2 Automation Circuit Diagrams in English & Greek	Yes/No
	2 Detailed drawings of metal structure in English & Greek	Yes/No
	2 Detailed drawings in English and Greek	Yes/No
Maintenance Manual		
	2 copies in English & Greek	Yes/No
	Detailed maintenance plan including procedures, spare parts, schedule	Yes/No
	Procedure of assembly and disassembly of main components	Yes/No
	List of possible faults, causes, recovery actions	Yes/No
	List of alarms and faults codes with associated procedure	Yes/No
	Lubrication charts	Yes/No
	Detailed list of spare parts with references	Yes/No
	Manual for quickly worn-out parts and spare parts, including name, size, quantity, material, special requirement and shop drawings of the parts;	Yes/No

8. TOOLS- AFTER SALE SERVICES		
Tools	THE Bidder has to apply with an analytical list of required tools about the spreader electrical and hydraulic maintenance	proposal
Spare parts	Two (2) items of Spreader Flippers (2) Items will be included in the price.	Yes/No
Training		
Language	English and Greek	Yes/No
Training supports	Operation, Maintenance, Repair (safety, electrical, electronic, hydraulic, mechanical) Training with Manuals in hard and soft copies in Greek language	Yes/No
Location	On the Terminal facilities	Yes/No
Program	Training sessions shall include 2 groups for the maintenance staff (mechanicals, electricians) (3 days minimum, 4 persons per group) and 1 session for the operators (3 days minimum, 5 persons group)	Yes/No
Agency/representation in Greece		
	Name and contact details of local agent	proposal
	Location of local agent near Thessaloniki	proposal
	Stock of spare parts in Greece	Yes/No