

TENDER

04/EU/2018/RS

REGARDING PURCHASE AND DELIVERY OF 2 REACHSACKERS

Q&A table regarding technical specification (Employer's requirements) in accordance with point 5.6 of Terms of Tender.

Please also refer to point II.1.C of the Notice: Detailed technical specification (Employer's requirements) constitute an integral part of the Tender Documentation and is available in the registered office of the Ordering Party and, at Bidder's written request, shall be sent to the Bidder by post or e-mail by the expiry of the bids' submission date set out in point 6.12 of the Terms of Tender.



No	Question	Answer
1	2.1 Operation – as for clarification purposes: 45 foot container are handled by reachstacker spreaders in their existing 40 foot twist-locks positions. Reachstacker spreaders do not spread more then 40 foot. Such reachstacker can only be offered. Please accept clarification.	Yes, we do accept.
2	2.1 Operation – please advice exact models of Over Height Frames DCT Gdańsk is using and is willing to use with new reachstackers.	Please note that DCT is using: 1. BROMMA OSX45 2 pcs.; 2. TEC CONTAINER BA-030E 6 pcs.
3	2.1 Operation – sentence 'Weight and recon cointaoners – as described further' – please advice what is meant by word 'recon'.	This is no longer valid.
4	5.1 Engine – wording after 'After turning ()' – please be advised that in modern diesel engines with engine management electronic systems glow plugs glow automatically without operator's influence. They can glow just after ignition is turned ON and also even during engine already working if a controller decides so. There is no buzzer or delay in startup. Thou there is a engine preheating information on display as below: 4.11.2.34 Wstępne podgrzewanie Wstępne podgrzewanie, opis Symbol ten pojawia się, gdy: Wstępne podgrzewanie jest aktywowane. Układ sterujący silnika aktywuje w razie potrzeby wstępne podgrzewanie na określony okres czasu. Wersja z silnikiem Cummins QSM11 posiada automatyczną funkcję podgrzewania wstępnego bez wskazania dla operatora.	Yes, we do accept.
	Please accept.	



5	5.1 Engine – wording after 'After switched OFF ()' – please be informed that diesel engines complying with present EU emission standard do have SCR system with AdBlue fluid. It is also controlled automatically without operator's actions. After engine is turned OFF SCR system is automatically draining AdBlue fluid from any circuits back to its tank. Pump is working for max 1-2 minutes after engine is switched OFF. That prevents AdBlue to eventually freeze in its lines in the system while a machine is left on cold temperatures. We can deliver an extra time relay that will run AdBlue pump for some time even when battery main switch is turned OFF. As for turbo saving it is also managed by controller automatically whether to turn off engine immediately after operator does so, or keep it running for additional short while. Please accept.	Yes, we do accept.
6	4 General requirements and 5.3 Axle – please advise for what purpose and in what scope DCT Gdańsk would like to see accordingly bearings and axles datasheets? Both scopes are understood as intellectual property of supplier and not to be shown to wider audience. Thank you for deleting those words.	We do accept this, however does spare part catalogue includes ISO standardized bearings name?
7	6.4 Lifting system; 6.4.1.1 Design – please be advised that there is no separate button for so called vertical lift of boom/spreader. There is a single button on joystick. While holding this button and pulling joystick vertical lift is activated automatically. This is handled with only right hand and very comfortable. Please accept.	Yes, we do accept.
8	6.4.3 Safety – in modern reachstackers there are as follow: 3 LED indication lights (green, yellow, red) on the mast tip + 3 duplicated LED lights inside cabin above front window where operator can see it very well + icons on color display inside cabin for all 4 spreader/container corners alignment indication. That is even more that is as minimum needed for proper and safe operations. There are no additional	Yes, we do accept.



'mechanical flags' on spreader corners as this is not needed in any addition. Please accept and see below display view: 4.11.2.27 Menu zdarzeń kontaktu Menu zdarzeń kontaktu osprzętu roboczego do podnoszenia od góry, opis Symbol ten pojawia się: - Gdy od jednego do trzech narożników osprzętu roboczego dotyka ładunku przy kontakcie. Narożniki, które mają kontakt, są wypełnione. Tzn. gdy zaczep kontenerowy znajduje się w polożeniu otwartym lub zamkniętym. Gdy wszystkie cztery narożniki będą miały kontakt, symbol zniknie i ładunek może zostać zablokowany. W razie pojawienia się tego symbolu: manewrować osprzętem roboczym do osiągnięcia pełnego kontaktu. Zanim to nastąpi, nie będzie możliwe zabezpieczenie ładunku (zablokowanie zaczepów kontenerowych). Ładunek można zablokować, gdy wszystkie cztery narożniki mają z nim kontakt. Wówczas symbol zniknie. Wskazanie można wyłączyć przyciskiem funkcyjnym	
6.5.1 Design, cabin – as for right hand arm rest – please accept electric adjustment of right hand arm rest (plus possibility to adjust it also manually to some positions) with electric adjustment of whole steering console on the right side and also electric adjustment of height and angle of steering wheel/column. Thank you.l	Yes, we do accept. However is it possible for receiving product card for seat with description?
6.5.1 Design, cabin – if engine is working and doors are open there is (as below) special icon on display (no buzzer). Description in text below. Please accept. 4.11.2.22 Otwarte drzwi Otwarte drzwi, opis Symbol ten pojawia się, gdy: Następuje ograniczenie funkcji z powodu niezamkniętych drzwi. W razie pojawienia się tego symbolu należy zamknąć drzwi – symbol wtedy zniknie. Wówczas symbol zniknie. Wskazanie można wyłączyć przyciskiem funkcyjnym .	Yes, we do accept.
6.6 Chassis – On both sides of a machine there are long footsteps as per photo below, those can eventually protect chassis from contact with obstacles. Please accept.	Yes, we do accept as long as those are with anti-slippery coating.
	addition. Please accept and see below display view: 4.11.2.27 Menu zdarzeń kontaktu Menu zdarzeń kontaktu osprzętu roboczego do podnoszenia od góry, opls Symbol ten pojawia się: - Gdy od jednego do trzech narożników osprzętu roboczego dokyla ładunku przy kontakcie. Narożniki, które mają kontakt, są wypełnione. Tzn. gdy zaczep kontenerowy znajduje się w położeniu otwartym lub zamkniętym. Gdy wszystkie cztery narożniki będą miały kontakt. symbol zniknie i ładunek może zostać zablokowany. W razie pojawienia się tego symbolu: manewrować osprzętem roboczym do osiągnięcia pełnego kontaktu. Zanim to nastapi, nie będzie możliwe zabezpieczenie ładunku (zablokowanie zaczepów kontenerowych). Ładunek można zablokować, gdy wszystkie cztery narożniki mają z nim kontakt. Wówczas symbol zniknie. Wskazanie można wyłączyć przyciskiem funkcyjnym . 6.5.1 Design, cabin – as for right hand arm rest – please accept electric adjustment of right hand arm rest (plus possibility to adjust it also manually to some positions) with electric adjustment of whole steering console on the right side and also electric adjustment of height and angle of steering wheel/column. Thank you. I 6.5.1 Design, cabin – if engine is working and doors are open there is (as below) special icon on display (no buzzer). Description in text below. Please accept. 4.11.2.22 Otwarte drzwi Otwarte drzwi, opis Symbol ten pojawia się, gdy: Następuje ograniczenie funkcji z powodu niezamkniętych drzwi. W razie pojawienia się tego symbolu należy zamknąć drawi – symbol wtedy zniknę. Wówczas symbol zniknie. Wskazanie można wyłączyć przyciskiem funkcyjnym . 6.6 Chassis – On both sides of a machine there are long footsteps as per photo below, those can eventually protect chassis from contact with



12	6.6 Chassis — wording after 'Counterweight of Reachstacker shall be painted as described below.' Do we understand right that rear counterweight looking for the rear of machine plus both upper sided right/left have to be painted in stripes black/yellow as described further in points 6.2.2 (painting drawing) and 6.3.5 and text in point 6.6 is only an addition meaning the same? Thank you.	Yes, point 6.6 there should be "as mentioned above" instead of "as mentioned below".
13	7.1 – ignition key. Please be informed that key type no. 014603 is nowadays outdated and not used anymore by many machine suppliers. It is superseded by modern type key (shown below). It is used for ignition and also for cabin door locking (same key). Please accept.	We do accept. Please quote 200 pcs. in spare parts list.
14	7.1 – main battery switch. Please advise what LOTO means.	It stands for: "Lockout- Tagout" system



15	7.2 – LED front driving lights. In modern reachstackers there are only single beam road front lights, no high/low beam. That is fully enough and very bright. Please accept.	We do accept as long as they are LED lights
16	7.3.1 – switches – last point. There is no solution that there can be 'emergency lowering' from the cabin. The only proper and safe way is that there are release valves at the lifting cylinders that in case needed can be manually turned on both sides separately to lower the boom. Any kind of additional button for this reason in cabin is not safe. Please adjust text accordingly.	Yes, we do accept.
17	8 Diagnostic tools — there are no separate PC tools needed for maintenance of a modern reachstacker. All calibrations and data check can be done via display in cabin. There is access to error codes too. Only external diagnostics (if really needed) is done by diesel engine manufacturer and DCT has it's separate and own access to it already. As for online spare parts access and ordering there is no problem to connect DCT's 4 users to it. Thank you for clarification.	Yest, we do accept. Clarification was made.
18	3.1.1 — optional central greasing. Please clarify text as there are no greasing points in front reachstacker axle. Greasing points available: rear turning axle and rear boom pivots/bearings. As for manual greasing (if needed) simple disconnect of particular line is needed and can be eventually done by DCT, but please note that usually central lubrication grease type is not OK to use in manual greasing as it is simply too light.	OK. Clarification was made.
19	10 Technical documentation – please be informed that due to copyrights and intellectual property we don't send out any autocad drawings. Some drawings can be delivered but only in pdf format. Thank you for understanding.	Yes, PDF format is acceptable if enables quality print in A1/A2 format.
20	Optional spare parts list – please note that not all listed by DCT parts can be or are in deed relevant to our machine. Please advise how to approach the list and quote properly. Thank you.	Please provide spare part list suggested by or according to Kalmar standard.



6.3.1 Painting – please accept below colors schematics: chassis RAL5005 cabin iron grey RAL7011 boom, spreader, axles, lower counterweights in the rear RAL7021 Rims iron grey RAL7011 All the other markings as requested would be painted yellow RAL1026. Also black/yellow stripes would be done according to DCT's specification/sketch. Thank you for confirmation	Yes, we do accept.
3 Optional equipment — 3.2 weighting system — we do not have experience with pin type scales (on twistlocks) in reachstackers as it sounds to be rare and rather used on cranes. As alternative we widely use certified by Finnish INSPECTA automatic scale in class Y(b). This scale takes signals from reachstacker hydraulic system. It is done in a way that there is no special interference into machine, system is fully add-on (no welding, machining etc.). There is display in cabin with Polish menu, easy to use. Data transfer to TOS is done via SIM card (standard APN, to be supplied by user). Integration into DCT's TOS (Navis) is possible. Required 'container weight from the container handling equipment to the terminal operating system automatically, without human interaction' — please be advise that there always need to be operator's action ex to confirm container being weighted from the list on display or to enter container number by operator etc. Please note that above used solution has certified accuracy of measurement up to 40000 kg, single scale plot 200 kg, min. weighting of 2000 kg load under spreader. Work related to assembly of scale on one reachstacker takes app 2 full days including scale adjustment with certified test loads (coming on separate trailer, polite request to DCT to ensure app. 3 tonn cap. forklift to be used min. 1 day for handling these test loads). Ingegration with	We accept weighting system which takes signals from reachstackers hydraulic system. Please include weighing integration with TOS (Navis N3 3.5.11 and upper) Please omit the last advised sentence. Solution accepted. Please include 3 year access and give detailed information how much it will cost when DCT will want to extend this period (provide quotation).

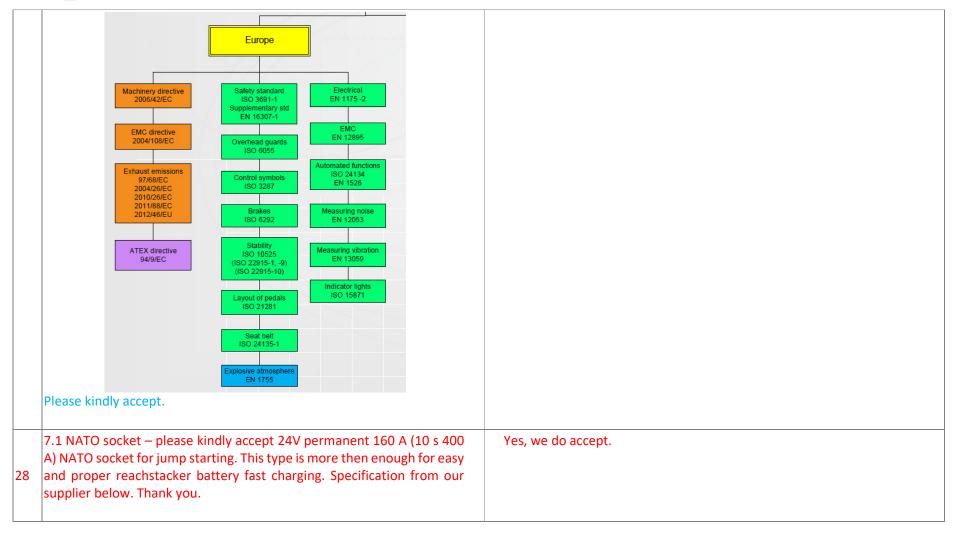


local DCT's TOS can take to our experience up to few weeks incl. all tests etc. System has an access to server in Finland and comes with 1 year access to it. For this reason describe please how many years of access should be included into quotation from beginning. Please accept above solution. Also please advise what sentence: 'The data from the weighing system' should be sent via the crane cable to the crane's PLC' means. 7.1 Emergency STOP button – please explain what does DCT mean by According to specification there should be additional emergency cut-off 'switch-off button installed nearby main battery switch'. Emergency cutbutton nearby main battery switch. off button is as standard by mean's of law inside operator's cabin of course. 3 Optional equipment – 3.8 – rear HD warning light. Instead of laser line Yes, we do accept BluePoint lamps. we suggest to use so called Blue Spot light widely used and proven in industry for its safety, which we also already mounted on reachstackers. As below per example. Laser lights with line as per DCT's request are only available on internet auction portals for very low price and we have doubts if those are any close to good quality, durability and performance. Please accept. 24



25	8 Hectronic system – please accept solution that DCT will purchase and assemble this system by themselves. We as reachstackers manufacturer will assist with service if only needed. That would be easier way for both parties as DCT has wast experience in Hectronic system and its programming. Thank you for acceptance.	Yes, we do accept as long as Reachstackers will be equipped with wiring needed for assembly.
26	General note. In a time of preparing best offer for above 2 reachstackers we see that eventually chosen optional equipment can 1. Be installed only after both machines are assembled on site in DCT and 2. There will be additional time (depending on chosen options) needed to put those on and test. Therefore please take that into consideration for availability of place and time and several visits from machine supplier service personnel as well as subcontractors. Thank you.	Yes, we do accept
27	2.3 Design standards - ISO 12100-1 and ISO12100-2 have been merged(in 2010) to the ISO 12100 which are an standard for general principles for design-risk assessment and mitigation, and we don't issue certificates for these. We apply the product standard for each machine that is harmonized to the machine directive and the standards indicated on CE-certificate for the machine together with the relevant EU directive. Belo you can find full list of design norms for container handling equipment (ex reachstackers).	Yes, we do accept.







(July			Stickdosa och Stickpropp, 2-polig. För hjälpstart eller batteriladdning. Med skruvlock. För kabelarea max. 35 mm² 2 lösa kontakthylsor för lödning. Monteras bl.a. på bussar och arméns fordon. Lackerad enligt RAL 6014. Belastbarhet 160 Amp. vid 24 V. 400 Amp. under 10s.	
	&JB 001 935-001	2	1	
	9HD 943 000-001 9MK 941 000-011		Reservdelar: Skruvlock Kontakthylsa	
7			för kabelarea max. 35 mm² 2 lösa kontaktstilt för lödning. Med kraftigt åndskydd av gummi, med dragavlastning.	
	* 8JA 001 931-001	1	Stickpropp, 2-polig	
	9MK 942 000-061		Reservdel: Kontaktstift	
	9MK 964 000-001		Adapter för 8JA 001 931-001, för skarvning av hjälpstartkablar	
			The second secon	
.3 Cameras and sen	isor system – p	olea	ase accept changes to DCT	Yes, we accept parameters given.

system suppliers and were deeply checked that last weeks. There are no systems on the market fulfilling in 100% DCT requirements.

- 3.3 monitor for 4 spreader cameras please accept 12" monitor instead of 7" monitor. – technical data enclosed. 7" monitor has too low resolution especially for four cameras images at one screen. Two cameras at one spreader would be enough and then could be used 7" monitor.
- 3.3.1 spreader cameras please accept resolution on cameras lower than requested - proposed model CMOS digital image sensor. 640 H x 480 V technical data attached.
- 3.3.2 reverse camera please accept rear view camera 118 deg CMOS digital image sensor. 640 H x 480 V technical data attached.

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	 3.3.3 reverse sensors – please accept sensor 'RadarEye' as in attached data specification Recorder position on a reachstacker – please accept a way that exact position of recorder will be decided during manufacturing phase as it might require other place then battery case (ex inside cabin for better protection). That needs to be agreed practically not yet in advance. 	
30	3.5 CCTV system in cabin – please be informed that there are no high class suppliers with quality products available nowadays on the market which would be willing to offer such system and comply with DCT requirements. Please kindly delete this position from options list.	We do accept.
31	OBLIGATORY SPECIFICATION 3. Whether it is allowed to install the machine more than 24 hours	Yes, we do accept.
32	4. Whether the width of the front axle can be 4160mm	Yes, we do accept.
33	5.2 Whether the maximum speed of 25km/h is to be set in the factory	Yes, we do accept.
34	6.2.1 Will the buyer provide the design of is logo	Yes, DCT will provide design of logo.
35	6.3 Is it possible to prepare the surface for small painting	Please explain further.
36	6.3.3 and 6.3.5 Black-yellow belts are to be painted vertically or at an angle	Those strips shall be painted at 45°
37	6.5.1. Whether the volume of the machine outside may be in accordance with the standard 2000/14/EC (dB(A) 111 at 7m Lwa)	Yes, we do accept.
38	6.5.1 Can the logbook is of size dimension 310x220x10mm (SMV standard)	Logbook shall be according to specified dimensions.



39	6.5.1 Whether a different dimension of the rearview mirror in the cab and on the mudguards is acceptable	Please provide dimensional drawing and/or product sheet.		
40	6.5.1 Whether the microphone for the radio can be placed in the SMV standard	Please provide schematics or picture of proposed solution.		
41	6.6 Which means a minor collision in the concept of DCT	Minor collision in our concept is an collision with obstacle/IMV tractor with speed less than 10 km/h.		
42	6.6 Who provides the ZVA 25,4l refueling nozzle with the HECTRONIC system sensor	As it is written in specification – "The inlet and breathing pipes installed on the fuel tank should be suitable for the existing fuel station with refuelling pump of capacity 130 [dm3/min] minimum and nozzle type ZVA 25.41and on it sensor of existing Hectronic system."		
43	6.6 Will the Buyer provide the flag and brace design on the counterweight	Yes, DCT will provide them.		
44	8 Will the Buyer provide the HECTRONIC transmitter	Yes, we will provide Hectronic transmitter.		
45	10 Whether drawings and diagrams can be provided only in PDF format	Yes, we do accept with restrictions of good quality printing in A1/A2 format from PDF file provided.		
46	3 OPTIONAL EQUIPMENT 3.3; 3.3.1; 3.3.2 Whether the cameras and monitor must be exactly the given parameters	Please explain solution further or propose your solution.		
47	To the point 2.2. The operational wind speed is specified as 25 m/s. This is 90 km/h which means very strong storm. It does not seem possible for any of the Reach Stacker manufactures to allow operate under such conditions. For Hyster trucks the maximum operating wind speed is 45 km/h. Is this acceptable?	Please answer, whether it is possible for operating at 1 st layer at wind at 25 m/s (i.e. taking containers down from trailers on the ground).		



48	To the point 5.2. The maximum speed recommended by the manufacturer is 22 km/h for safety reason. At the user request, it can be raised to 25 km/h. Is this solution acceptable?	We do accept 22 km/h.
49	To the point 5.2. The reversing signal is regulated automatically depending on the outside noise level. This solution does not require involvement of a mechanic to set the volume level. Is this solution acceptable?	Yes, we do accept.
50	To the point 5.6. In our forklift the braking system is supplied from the main hydraulic system. The braking system has its own hydraulic accumulator that actuate the system when needed. The main hydraulic system has very good cooling and filtration, which is of great importance for sensitive multi-piston pumps. A separate hydraulic system for the braking system complicates the system and does not improve reliability. Optimization of the hydraulic system also results in lower fuel consumption. Is this solution acceptable?	Yes, we do accept.
51	To the point 5.6. The service brakes for this lift truck are accomplished by the use of multiple friction discs which are hydraulically pressed together. The hydraulic pressure used to press the friction discs together is controlled by the brake treadle valve, which is directly connected to the right hand brake pedal. The left hand pedal first activates an electrical signal, and via the APC controller, will fully disengage the transmission. The service brakes will then be activated. The hydraulic pressure is supplied to the brake treadle valve through the functions inside the brake control manifold and the brake accumulator. Is this solution acceptable?	Yes, we do accept.
52	To the point 6.4.3. Spreader is equipped with four-lamp system. As standard, there are green and red LEDs which inform the operator about locking or unlocking the twistlocks. Additional two yellow LEDs indicate	Yes, we do accept.



	which side (left or right) of twistlocks are in the correct position above the container sockets. In case of one yellow diode, the operator does not have complete information about the position of the spreader. The solution with four LEDs simplifies and speeds up work of the operator. Is this solution acceptable?	
53	To the point 6.6. In the Hyster truck, the stairs are a replaceable element and are not integrated into the frame of the truck. In the case of mechanical damage, possible repair is much cheaper than in the case of stairs integrated with the frame. There is no need to weld elements. Is this solution acceptable?	Yes, we do accept.
54	To the point 4. The width measured on outside of front axle of Hyster truck is 4200mm. It is only 50mm more than you required. Do you accept this dimension?	Yes, we do accept.
55	To the point 6.5.1. We can offer extra safe seating in the operator cab but unfortunately it is not folding. Is this solution acceptable?	Please provide pictures of solution with dimensional drawing.
56	To the point 2.2. Do you accept maximum relative humidity up to 95%?	Yes, we do accept.
57	To the point 6.4.1.1. Do you accept rotating spreader 185° counterclockwise and 95° clockwise?	Yes, we do accept.