TEST REPORT

Machinery Directive 2006/42/EC

Applicant	
Name	Tianjin Anson International Co., Ltd
Address	207, No.65, East Road, in Cheng, Development Zone, Tianjin, P.R.C.
Manufacturer	
Name	Tianjin Anson International Co., Ltd
Address	207, No.65, East Road, in Cheng, Development Zone, Tianjin, P.R.C.
Test specification	
Standard	EN 280:2001+A2:2009
Test procedure	Functional test Measurement Witness examination Inspection of documentation
Procedure deviation	N/A
Non-standard test method	N/A
Product information	
Name	SELF-PROPELLED AERIAL WORK PLATFORM
Models applied	GTJZ10; GTJZ08; GTJZ06
Samples tested	GTJZ10
Serial No.	13011025
Test case verdicts	
Test case does not apply to the test object	N/A(Not Applicable)
Test item does meet the requirement	Y(Yes)
Test item does not meet the requirement	N(No)
Report	
Report reference No	MD13750/A1
Tested by (+ signature)	
Reviewed by (+ signature)	Alex Xiang
Approved by (+ signature)	Jane Gong
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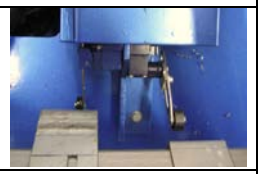
Part 1 - EN 280:2001+A2:2009 Checklis

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
5		**Safety requirements and/or measures**				-	
	5.1	General				-	
		The manufacturer shall meet the requirements detailed in this clause.	☑			The manufacturer has been checked in meeting the requirements detailed in this clause.	
		In addition, machines shall comply, as appropriate, with EN ISO 12100-1: 2003, EN ISO12100-2: 2003 for hazards which are not covered by this standard.	☑			The relevant requirements of EN ISO 12100 have been checked in compliance with.	
	5.2	Structural and stability calculations	☑			Please refer to the calculation report.	
	5.3	Chassis and stabilizers				-	
	5.3.1	An automatic safety device in accordance with 5.11 shall be fitted to prevent the travel of pedestrian controlled MEWP and power driven MEWP of type1 when the work platform is out of the transport position.	☑			Position switch has been used to monitoring the lifting device when the work platform is out of the transport position.	
		Any travel speed restriction for self propelled MEWP, when the work platform is out of the transport position, shall be automatic.	☑			The speed during out of the transport is 0.162m/s	
	5.3.2	Every MEWP shall have a safety device in accordance with 5.11 (e.g. spirit level) to indicate whether the inclination of the chassis is within the limits permitted by the manufacturer. This device shall be protected against damage and accidental change of its setting.	☑			The inclination monitoring system to indicate whether the inclination of the chassis is within the limits permitted by the	

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						manufacturer. It is protected against damage and accidental change of its setting.	
		For MEWPs with power driven stabilizers the indication shall be clearly visible from each control position of the stabilizers.			☑		
		On MEWPs of type3 reaching the extreme limits of inclination this shall be indicated by an acoustic signal audible at the work platform.	☑			An acoustic signal audible at the work platform	
	5.3.3	Any locking pins shall be secured against unintentional disengagement (e.g. spring pin) and loss (e.g. chain).			☑		
	5.3.4	Control-bars of pedestrian controlled MEWP and tow bars shall be securely fastened to the chassis；unintentional detachment shall not be possible if detachable locking pins in accordance with 5.3.3 are used.			☑		
	5.3.5	If control-bars and tow bars, when not in use, are raised to vertical position (e.g. by hook), an automatic device shall be provided to hold the bars in this position；unintentional release shall not be possible.			☑		
		For multi-axle chassis the minimum clearance between the fully lowered control-bar or tow bar and the guard shall be 120mm.			☑		
	5.3.6	For MEWPs which are constructed for operation with stabilizers, the stabilizers shall be capable of leveling the chassis to within the maximum allowable inclination when operating on the maximum slope permitted by the manufacturer.			☑		
	5.3.7	The stabilizer feet shall be constructed to accommodate ground unevenness of at least 10 degrees.			☑		
	5.3.8 5.3.8.1	MEWPs shall be fitted with a safety device in accordance with 5.11 which prevents the work platform operating outside permitted positions unless the stabilizers are set in accordance with the			☑		

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		operating instructions.					
	5.3.8.2	MEWPs which are constructed for operation without stabilizers for a limited range of operation shall be equipped with safety devices in accordance with 5.11 which prevent operation outside that limited range without stabilizers.			☑		
	5.3.9	The requirements of 5.3.8 are not mandatory to MEWPs which are totally manually operated and have a height of the floor of the work platform above ground level not exceeding 5 m (see7.2.15).			☑		
		These MEWPs are also exempted from all safety requirements which cannot be met without power supply.			☑		
	5.3.10	MEWPs with powered stabilizers shall be fitted with a safety device in accordance with 5.11 to prevent movement of the stabilizers unless the work platform is in the transport position or within the limited range in accordance with 5.3.8. When the work platform is inside the limited range, the operation of the stabilizers shall not create an unstable situation.			☑		
	5.3.11	Manually operated stabilizers shall be designed to prevent unintentional movement (e.g. by self-sustaining screw).			☑		
	5.3.12	Self propelled MEWP shall be equipped with brakes on at least two wheels on the same axis which engage automatically when power to the brakes is removed or fails, and shall be able to stop the MEWP in accordance with 5.3.17 and keep it in stopped position.	☑			Brakes on two wheels on the same axis.	
		Brake shall not rely on hydraulic or pneumatic pressure or electric power to remain engaged.	☑			Brake relies on non-return valve to remain engaged.	
	5.3.13	The movements of stabilizers shall be limited by mechanical stops. Hydraulic cylinders fulfill this requirement if designed for that purpose.			☑		

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		Mechanical means shall be provided to prevent uncontrolled movements of the stabilizers from the transport position.			☑		
		The stabilizers shall be locked in the transport position by two separate locking devices for each stabilizers, at least one of which operates automatically, e.g. a gravity locking pin plus a detent.			☑		
		Powered stabilizers meeting the requirements of 5.5.1.1 and 5.10 are regarded to meet this requirement.			☑		
	5.3.14	Vehicle mounted MEWP shall be equipped with an indicator visible from the traveling controls within the cab to indicate if any component of the MEWP is not in its transport position.			☑		
	5.3.15	MEWPs shall be equipped with a device to prevent unauthorized use (e.g. lockable switch).	☑			A lock key has been provided to prevent unauthorized use.	
	5.3.16	By the use of safety device(s) in accordance with 5.11 it shall not be possible to exceed the following travel speeds with manned work platforms out of the transport position on MEWPs of type 2 and 3 ： a)1.5 m/s for vehicle mounted MEWP when using the traveling controls inside the cab； b)3.0 m/s for rail mounted MEWP； c)0.7 m/s for all other self-propelled MEWP of type2 and 3.	☑			Less than 0.7 m/s for self-propelled MEWP of type 3.	
	5.3.17	MEWPs traveling at the aforesaid maximum speeds on the maximum slope allowed by the manufacturer shall be capable of being stopped in distances not greater than given in Figure 10. This figure is based on an average deceleration of 0.5 m/s^2.	☑			Less than given in Figure 10.	
	5.3.18	Maximum travel speed of pedestrian controlled MEWP with the work platform in the transport position shall not exceed 1.7 m/s.			☑		
	5.3.19	MEWPs which are operated in public traffic areas shall satisfy the local traffic regulations [see 7.1.1.2(f)]			☑		

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	5.3.20	Guards shall be provided to prevent persons at control positions, or standing adjacent to the MEWP at ground level or at other points of access, touching hot parts or dangerous parts of drive systems. Opening or removal of these guards shall only be possible by devices located in fully enclosed and lockable enclosures (e.g. cabs, compartments) or by the use of tools or keys provided with the MEWP. When it is foreseen (e.g. maintenance) that the fixed guard rail will be removed regularly then the fastenings shall remain attached to the guards or to the machine.	☑			Guards are used.	
		This requirement does not apply to the exhaust systems of vehicles conforming with road traffic regulations.			☑		
	5.3.21	The exhaust from internal combustion engines shall be directed away from control positions.			☑		
	5.3.22	The filling points of gas and fluid reservoirs (other than for fire resistant fluids) shall be positioned to avoid any fire from spillage onto very hot parts, e.g. engine exhausts.			☑		
	5.3.23	Any control position at the base or ground level shall provided the operator with visual contact with the resulting movements where these might create a hazard.	☑			It is in compliance with this requirement.	
		This especially is valid for the operating position for powered stabilizers which make contact with the ground and/or move beyond the width of the chassis.			☑		
		Travel controls fixed to the chassis and operated from ground level shall be positioned as to cause the operator to stand of at least 1 m from the vertical tangent to wheels or crawlers.			☑		
	5.3.24	Any driving seat shall enable the driver to maintain a stable position and be designed with due regard to ergonomic principles.			☑		
		The seat shall be designed to reduce vibrations transmitted to the driver to the lowest level that can be reasonably achieved.			☑		
		The seat mountings must withstand all stress to which they can be subjected.			☑		

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			Y	N	N/A		
		Where there is no floor beneath the driver's seat the driver shall have footrests covered with a slip-resistant material.			☑		
	5.3.25	Batteries and containers of all MEWP shall be constrained to prevent displacement which gives rise to danger. Means shall be provided so that in the event of overturning the battery assembly will be constrained, so as to avoid the risk of injury to the operator which could occur by the battery being displaced or electrolyte being ejected.	☑			The type with battery of this MEWP has been constrained by holes and covers.	
		Suitable ventilation holes shall be provided in the battery container, compartment or cover so that dangerous accumulations of gases do not occur in places occupied by operators.	☑			Suitable ventilation holes are provided	
	5.3.26	Rail mounted MEWP shall be provided with devices which act on the rails to prevent derailment and devices o remove obstacles on the rails which might cause derailment (e.g. b track clearers).			☑		
	5.3.27	A means shall be provided to disconnect MEWP safely from any external power supply (see also 5.8.2).	☑			With power switch.	
	5.4	Extending structure				-	
	5.4.1	Methods to avoid overturning and exceeding permissible stresses				-	
	5.4.1.1	General				-	

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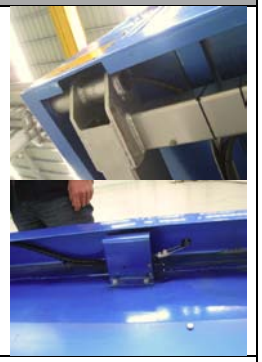
			Y	N	N/A		
		In addition to the provisions of 5.2.4.4 MEWP shall be provided with control devices that reduce the risk of overturning and the risk of exceeding permissible stresses by one of the following equivalent solutions indicated by a cross in Table3	☑			Position switches and load sensors are used.	
	5.4.1.2	Load sensing system				-	
		The load sensing system is a safety device and shall operate in the following way; a) It shall prevent any normal movement of the work platform from a stationary working position after the rated load is reached and before 120% of the rated load is exceeded.	☑			Load sensing system is reached before 120% of the rated load.	
		b) When normal movement is prevented according to a) a warning consisting of a flashing red light at the preselected control position together with an acoustic signal audible at each control position shall be activated. The light shall sound for periods of at least 5 seconds repeated every minute.	☑			A warning consisting of a flashing red light at the preselected control position together with an acoustic signal audible at each control position.	
		c) Normal movement can only restart if the overload is removed.	☑			Normal movement can only restart if the overload is removed.	
	5.4.1.3	Position control				-	

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			Y	N	N/A		
	5.4.1.3.1	To avoid overturning of the MEWP or exceeding the permissible stresses in the structure of the MEWP, the permissible positions of the extending structure shall be limited automatically by mechanical stops (see 5.4.1.3.2), non-mechanical limiting devices (see 5.4.1.3.3).	☑			Position switch and mechanical stop with hydraulic cylinder are used.	
	5.4.1.3.2	Where permissible positions are limited by mechanical stops, these shall be designed to resist without permanent deformation the maximum forces exerted. Hydraulic cylinders fulfill this requirement if designed for that purpose.	☑			The design of hydraulic cylinder could fulfill this requirement.	
	5.4.1.3.3	Where non-mechanical limiting devices are used, permissible positions of the extending structure shall be limited by a device which measures positions of the extending structure, and operates through the control systems to limit movements to the working envelope.	☑			Pass The use of position sensor meets this requirement.	
		This device shall be backed up by a safety device in accordance with 5.11.			☑	The position switch just as a auxiliary protect device.	
	5.4.1.4	Moment sensing system			☑		

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			Y	N	N/A		
		The moment sensing system is a safety device and shall operate in the following way: When the permissible overturning moment (see 5.2.4.4)is reached a visual warning shall be given and further movements shall be prevented except those which reduce the overturning moment.			☑		
	5.4.1.5	Enhanced stability criteria for limited size of work platforms			☑		
		MEWPs for up to 2 persons may be excluded from requirement of load and moment sensing systems if they follow “enhanced stability requirements”.			☑		
		To meet the requirement of “enhanced stability”, the MEWP shall be designed according to the following criteria: 1) Outside dimensions of the work platform at any horizontal section shall: -For 1 person: give a surface not more than 0,6m² with no side more than 0,85 m.			☑		
		-For 2 persons: give a surface not more than 1,0m² with no side more than 1,4 m.			☑		
		2) For the overload test described in clause 6.1.4.3, the test load shall be 150% of the rated load.			☑		
	5.4.1.6	Enhanced overload criteria for limited size of work platforms				-	
		MEWPs for up to 2 persons may be excluded from requirement of load sensing systems if they follow “enhanced overload requirements”			☑		
		To meet the requirement of “enhanced stability “, the MEWP shall be designed according to the following criteria: 1) Outside dimensions of the work platform at any horizontal section shall: -For 1 person: give a surface not more than 0,6m² with no side more than 0,85 m. -For 2 persons:			☑		

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		give a surface not more than 1,0m² with no side more than 1,4 m.					
		2) For the overload test described in clause 6.1.4.3, the test load shall be 150% of the rated load.			☑		
	5.4.1.7	Variable working envelope with more than one rated load			☑		
		MEWPs with more than one rated load and more than one working envelope shall have an indicator of the selected combination that is visible at the work platform.			☑		
		Selection by manual means is acceptable. In that case the selection can only be done if the work platform is in the working envelope for the new selected rated load.			☑		
		The MEWP shall be fitted with load and moment sensing systems (see 5.4.1.4) or load sensing system and position control (see 5.4.1.2 and 5.4.1.3).			☑		
	5.4.1.8	Variable working envelope with one rated load			☑		
		For MEWPs with one rated load and a variable working envelope (e.g. MEWP with variable positions of stabilizers) selection by manual means is acceptable.			☑		
		In that case the selection shall only be possible with the extending structure in the transport position.			☑		
	5.4.2	When the extending structure needs to be extended or retracted in a specific sequence to avoid overloading and/or overturning, this sequence shall be automatic. The automatic sequence shall be part of the position control (see 5.4.1.3) or moment sensing system (see 5.4.1.4).			☑		
	5.4.3	MEWPs with tiling masts shall have means to secure the mast in both the transport and working positions It shall not be possible to move the work platform in its working position until the mast is in its working position.			☑		

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		MEWPs with tiling masts shall be fitted with a safety device in accordance with 5.11 to prevent tilting movements of the mast unless the work platform is in its access position.			☑		
	5.4.4	Trapping and shearing points between parts of the extending structure, the chassis and work platform shall be avoided by providing guarding or safe clearances in accordance with EN349.			☑		
		When it is foreseen (e.g. maintenance) that the fixed guards will be removed regularly then the fastenings shall remain attached to the guards or to the machine.			☑		
		Trapping and shearing points need only be considered at those areas within reach of persons on the work platform or standing adjacent to the MEWP at ground level, or at other points of access.			☑		
		For areas such as: - turntables crossing stabilizers/chassis; - resting points for extending structures in transport position; - stabilizers moving into transport position.			☑		
		Where neither safe clearance in accordance with EN349 nor guarding is possible, warning notices shall be fitted.	☑			Warning notices label has been fitted.	
		Instead of a rigid or flexible guard on MEWP designed to pass through openings with a width of about 1,2m and a height of about 2m the following solution is permitted: The downward movement shall be automatically stopped in a position where between the outer ends of the scissors the vertical distance is not less than 50 mm, so that crushing and shearing of fingers cannot occur.	☑			The downward movement will stop automatically in a position between the outer ends of the scissors the vertical distance is more than 50mm.	
		Further downward movement shall only be possible after a suitable time delay, giving the operator the opportunity to see whether persons beside the MEWP could be injured, and a further command of the operator.	☑			A further command of the operator can continue the downward movement.	

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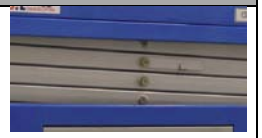
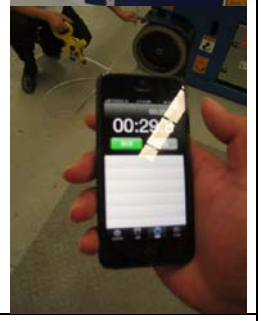
			Y	N	N/A		
	5.4.5	When the work platform of a MEWP needs to be raised for routine servicing purposes, a captive chock shall be provided to enable the extending structure to be held in the required position. This chock shall be capable of supporting an unladed work platform and of being operated from a safe position; it shall not cause damage to any part of the MEWP (see 7.2.14).	☑			A captive chock is provided.	
	5.4.6	It shall not be possible to exceed the following speeds: a) 0,4m/s for raising and lowering of the work platform ; b) 0,4m/s for telescoping of the boom; c) 0,7m/s for slewing or rotation (horizontal speed at the outer edge of the work platform measured at maximum range).	☑			Pass. The speed for raising the work platform in type test is 0.16m/s and the speed for lowering is 0.19m/s.	 
	5.4.7	The extending structure shall be supported in the transport position in such a way as to avoid harmful vibrations during transport (see 5.2.5.3.3).			☑		
	5.5	Extending structure drive systems				-	
	5.5.1	General				-	

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			Y	N	N/A		
	5.5.1.1	Drive systems shall be designed and constructed to prevent any inadvertent movements of the extending structure.	☑			It is in compliance with this requirement.	
	5.5.1.2	If the power source is capable of producing greater power than the extending structure and/or work platform drive system requires, protection shall be provided to the extending structure and /or work platform drive system to prevent damage (e.g. by pressure limiting device).	☑			Pressure limit valve is fitted.	
		The use of friction couplings doesn't fulfil the requirement.			☑		
	5.5.1.3	Transmission chains or belts shall only be used in drive systems provided inadvertent movements of a work platform are automatically prevented if failure of a chain or belt occurs. That can be achieved by a self-sustaining gear box or monitoring the chain/belt by a safety device in accordance with 5.11.			☑		
		Flat belts shall not be used.			☑		
	5.5.1.4	Manual drive systems shall be designed and constructed to prevent kick-back of handles.			☑		
	5.5.1.5	If both powered and manual drive systems are provided for the same movement (e.g. in over-riding emergency system) and if there is a risk of injury from engaging both systems at the same time, this shall be prevented, e.g. by interlocks, shout-off valves or bypass valves.			☑		

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	5.5.1.6	A braking system shall be provided on all drives. For raising movements this system shall be an automatic lock or self-sustaining device. The braking system shall be automatically applied when the drive is no longer energized.	☑			Two brakes.	
		The braking system shall ensure that the work platform, loaded with 1.1-times the rated load can be stopped and held at any position under all possible conditions of operation. Unintentional release of these devices shall not be possible.	☑			1.1-times the rated load can be stopped and held at any position under all possible conditions of operation.	
	5.5.2	Wire rope drive systems			☑		
	5.5.2.1	Wire rope, drum and pulley diameters shall be calculated in accordance with annex C, assuming that all the load is taken on one wire rope system. Traction drive systems shall not be used.			☑		
		Wire rope drive systems shall have a device or system which in the event of a wire rope drive system failing limits the vertical movement of the fully loaded work platform to 0,2 m. This requirement shall be met by: a) a mechanical device operating by engaging with the extending structure. This safety device shall gradually bring the work platform plus the rated load to a stop and hold it in the event of the wire rope drive system failing. The average deceleration shall not exceed 1,0 gn. The proper functioning of the device shall be demonstrated by calculation and test(s). Any spring operating this device shall be a guided compression spring with secured ends, or with wire diameter more than half the pitch in the operating condition, to limit the shortening of the spring if it should fail, or			☑		
		b) 1)a second wire rope system designed according to the first system with a device to give approximately equal tension in the two wire rope systems, thus doubling the working coefficient; or			☑		

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		2) a second wire rope system designed according to the first system with a device to ensure that the second system takes less than half of the load in the operating condition, but is able to take the full load if the first system fails; or			☑		
		3) a second wire rope system according to b)1)with larger drum and pulley diameters to increase the fatigues life of the second system to at least twice the calculated life time of the first system.			☑		
		Failure of the first system shall be self-revealing.			☑		
	5.5.2.2	Load carrying wire ropes shall be made from galvanized steel wires and have the following characteristic. a) diameter: 8 mm minimum; b) number of wires: 114 minimum; c) tensile grade of the wires: 1570 N/mm² minimum; 1960 N/mm² maximum.			☑		
		The minimum breaking load of the wire ropes shall be shown on a certificate.			☑		
		Wire ropes used directly for lifting or supporting the work platform shall not include any splicing except at their ends.			☑		
		Stainless steel wire ropes may be used with appropriate provisions.			☑		
	5.5.2.3	If more than one wire rope is attached at one point a device shall be provided for approximately equalizing the tension of the wire ropes.			☑		
	5.5.2.4	It shall be possible to re-tension wire ropes.			☑		
	5.5.2.5	For the terminations of wire ropes only: - splices; - aluminium pressed ferrules; - non-ageing steel pressed ferrules; - or wedge socket anchorages; may be used.			☑		
		U-bolt grips shall not be used as wire rope terminations for load			☑		

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			Y	N	N/A		
		carrying wire ropes.					
		The junction between the wire rope and the wire rope termination shall be able to resist at least 80% of the minimum breaking load of the wire rope.			☑		
	5.5.2.6	Visual examination of wire ropes and wire rope terminations shall be possible preferably without the removal of the wire ropes or major disassembly of the structural components of the MEWP.			☑		
		If this is proved not to be possible by inspection openings, the manufacturers shall provide detailed instructions for examination [see 7.1.1.7 f]].			☑		
	5.5.2.7	MEWPs with work platforms which are raised and lowered by means of wire ropes shall be equipped with a safety device in accordance with 5.11 which interrupts movements causing slack rope conditions.			☑		
		Movements in the opposite direction shall be possible.			☑		
		This device is not necessary if no slack rope condition can develop.			☑		
	5.5.2.8	Rope drums shall be grooved and means shall be provided to pr0vent the wire rope from leaving the ends of the drum, e.g. flanges extending to a height of at least twice the wire rope diameter above the highest layer.			☑		
	5.5.2.9	Only one layer of wire rope shall be wound on the drum unless a special spooling system is used.			☑		
	5.5.2.10	At least 2 turns of wire rope shall remain on the drum when the extending structure and/or the work platform is in its most extreme position.			☑		
	5.5.2.11	Each wire rope shall be properly fastened to the drum. The fastened shall be able to take 80% of the minimum breaking load of the wire rope.			☑		
	5.5.2.12	Means shall be provided to prevent unintentional displacement of wire ropes from pulleys, even under slack rope conditions.			☑		

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			Y	N	N/A		
	5.5.2.13	The cross section of the bottom of the grooves in wire rope drums and pulleys shall be circular over an angle of not less than 120 degrees.			☑		
	5.5.3	Chain drive system			☑		
	5.5.3.1	Chain drive systems shall have a device or system which in the event of a chain drive system failing limits the vertical movement of the fully loaded work platform to 0,2 m. This requirement shall be met by:			☑		
		a) a chain drive system with a working coefficient of at least 5 plus a mechanical device operating by engaging with the extending structure. This safety device shall gradually bring the work platform plus the rated load to a stop and hold it in the event of the drive system failing. The average deceleration shall not exceed 1.0 gn. The proper functioning of the device shall be demonstrated by calculation and test(s). Any spring operating this device shall be a guided compression spring with secured ends, or with wire diameter more than half the pitch in the operating condition, to limit the shortening of the spring if it should fail, or			☑		
		b) 1)two chain drive systems each system having a working coefficient of at least 4 (a total of 8minimum) and with a device to give approximately equal tension in the two chain systems; or			☑		
		2)two chain drive systems the first system with a working coefficient of at least 5 when carrying the full load and a second drive system with a working coefficient of at least 4 (a total of 9 minimum when carrying the full load) and with a device to ensure that the second system takes less than half the load in the operating condition, but is able to take the full load if the first system fails.			☑		
		Failure in the first system shall be self-revealing.			☑		
	5.5.3.2	Round link chains shall not be used.			☑		
		The minimum breaking load of the chain shall be shown on a certificate.			☑		

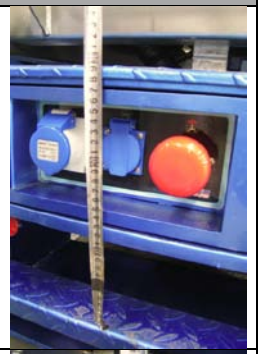
Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
	5.5.3.3	If more than one chain is attached at one point, a device shall be provided to equalize approximately the tension in the chains.			☑		
	5.5.3.4	It shall be possible to re-tension chains.			☑		
	5.5.3.5	The junction between the chain and the chain termination shall be able to resist at least 100% of the minimum breaking load of the chain.			☑		
	5.5.3.6	Visual examination of chains and chain terminations shall be possible preferably without the removal of the chains or major disassembly of structural components of the MEWP.			☑		
		If this is proved to be not possible by inspection openings, manufacturers shall provide detailed instructions for examination [see 7.1.1.2 f]].			☑		
	5.5.3.7	MEWPs with work platforms which are raised and lowered by means of chains shall be equipped with a safety device in accordance with 5.11 which interrupts movements causing slack chain conditions. Movements in the opposite direction shall be possible. This device is not necessary if no slack chain condition can develop.			☑		
	5.5.3.8	Means shall be provided to prevent unintentional displacement of the chain from the sprockets or pulleys, even under slack chain conditions.			☑		
	5.5.4	Lead-screw drive systems			☑		
	5.5.4.1	The design stress of lead-screws and nuts shall not be more than 1/6 of the ultimate tensile stress of the material used. The lead-screw material shall have a higher abrasion resistance than the load bearing nut material.			☑		
	5.5.4.2	The lead-screw mechanism shall be designed to prevent separation of the work platform from the mechanism during normal use.			☑		
	5.5.4.3	Each lead-screw shall have a load bearing nut and an unloaded safety nut			☑		

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		The safety shall only be loaded if the load bearing nut fails.			☑		
		It shall not be possible to raise the work platform from its access position when the safety nut is under load.			☑		
	5.5.4.4	It shall be possible to detect the wear of the load bearing nuts without major disassembly.			☑		
	5.5.4.5	Lead-screws shall be fitted with devices (e,g, mechanical end stops) at both ends to prevent the load bearing and safety nuts from leaving the lead-screws.			☑		
	5.5.5.	Rack and pinion drive systems			☑		
	5.5.5.1	The design stress of racks and pinions shall not be more than 1/6 of the ultimate tensile stress of the material used.			☑		
	5.5.5.2	Rack and pinion drives shall have a safety device in accordance with 5.11 actuated by an over-speed governor.			☑		
		This safety device shall gradually bring the work platform plus rated load to a stop and hold it in the event of the lifting mechanism failing.			☑		
		The average deceleration shall not exceed 1,0 gn.			☑		
		If this safety device is actuated, the power supply shall be interrupted automatically.			☑		
	5.5.5.3	In addition to the normal work platform guide rollers positive and effective devices shall be provided to prevent any driving or safety device pinion from coming out of engagement wit the rack.			☑		
		These devices shall ensure that axial movement of the pinion is so limited that a minimum of 2/3 of the tooth width is always in engagement with the rack.			☑		
		They shall also restrain radial movement of the pinion from its normal meshing position by more than 1/3 of the tooth depth.			☑		
	5.5.5.4	Visual examination of the pinions shall be possible without the removal of the pinions or major disassembly of structural components of the MEWP.			☑		

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
	5.6	Work platform				-	
	5.6.1	The level of the work platform shall not vary by more than 5° from the horizontal or the plane of the chassis or any turn table during movements of the extending structure, or due to loads and forces during operation			☑		
		The leveling system shall incorporate a safety device in accordance with 5.11 which in case of a failure within the system keeps the platform level within further 5°.			☑		
		Mechanical leveling systems using rods or levers fulfil this requirement if they are designed to take at least twice the load imposed to them. For wire ropes and chains see 5.5.2.1 and 5.5.3.1.			☑		
		Hydraulic cylinders in hydraulic leveling systems shall comply with 5.10.2.			☑		
	5.6.2	Protection shall be provided on all sides of each work platform to prevent the fall of persons and materials.	☑			Protections have been provided on all sides of each work platform to prevent the fall of persons and materials.	
		The protection shall be securely fastened to the work platform and shall, as a minimum, consist of guard-rails at least 1,1 m high, toe-guards at least 0,15 m high and intermediate guard-rails not further than 0,55 m from either guard-rails or toe-guards.	☑			The protection have been checked securely fastened to the work platform and consist of guard-rails at least 1,1 m high, toe-guards 0,15 m high and intermediate guard-rails0,5 m from either guard-rails or toe-guards.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		At points of access to the work platform the height of the toe-guards may be reduced to 0,1 m.	☑			The point of access to the work platform the height of the toe-guard is 0.13m.	
		The guard-rails shall be constructed to withstand concentrated loads of 500 N per person applied at the least favorable positions in the least favorable direction at 0,5 m intervals without causing permanent deformation of the guard-rails.	☑			The protection guard has been checked in compliance with this requirement.	
		The work platform shall be made of at least self-extinguishing material(s).	☑			The work platform is made of self-extinguishing material(s).	
		When it is foreseen that the fixed guard rails will be removed regularly then the fastenings shall remain attached to the guard rail sections or to the platform.			☑		
	5.6.3	Any part of the protection movable for the purpose of access to the work platform shall not fold or open outwards.	☑			The access part of the protection of the work platform is by vertically hinged intermediate guard-rails which return automatically to their protective position.	
		It shall be so constructed as to either return automatically to the closed and fastened position, or be interlocked by a safety device in accordance with 55.11 to prevent operation of the MEWP until it is closed and fastened.	☑			The access part of the protection of the work platform is by vertically hinged intermediate guard-rails which return automatically to their protective position.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		Inadvertent opening shall not be possible. Sliding or vertically hinged intermediate guard-rails which return automatically to their protective position do not need fastening and interlocking.	☑			The access part of the protection of the work platform is by vertically hinged intermediate guard-rails which return automatically to their protective position.	
	5.6.4	The floor of the work platform including any trapdoor shall be slip-resistant and self–draining (e.g. chequer plate or expanded metal).	☑			The floor of the work platform could be slip-resistant and self –draining.	
		Any opening in the floor or between the floor and toe-guards or access gates shall be dimensioned so as to prevent the passage of a sphere of 15 mm diameter.	☑			It is in compliance with this requirement.	
		The floor of the work platform and any trapdoor shall be able to take the rated load distributed in accordance with 5.2.3.1.	☑			It is in compliance with this requirement.	
	5.6.5	Chains or ropes shall not be used as guard-rails or access gates.	☑			No chains or ropes are used as guard-rails or access gates.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
	5.6.6	When the distance between the access level and the floor of the work platform in the access position exceeds 0,4m, the MEWP shall be equipped with an access ladder.	☑			Less than 0.4m	
		The steps or rungs shall be not more than 0,3m apart and shall be spaced equally over the distance between the bottom step/rung and the floor of the work platform.	☑			Not more than 0.27m	
		The bottom step/rung shall be not more than 0,4m above the access level. Each step or rung shall be at least 0,3m wide, at least 25 mm deep, and shall be slip-resistant.	☑			35mm	
		The front of the steps or rungs shall be at least 0,15m horizontally away from the supporting structure or any other components of the MEWP.	☑			0.16m	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		The access ladder shall be symmetrical with the access gate.	☑			Pass.	
	5.6.7	Handholds, handrails or similar adequate devices shall be provided to facilitate climbing the access ladder to the work platform.	☑			It is in compliance with this requirement.	
		They shall be arranged to avoid the set of controls and piping as handholds or footsteps.	☑			It is in compliance with this requirement.	
	5.6.8	Trapdoors in work platforms shall be securely fastened to the work platform so that no inadvertent opening is possible.			☑		

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		It shall not be possible for trapdoors to open downwards or to slide sidewards.	☑				
	5.6.9	Protection shall be provided to prevent injury to the hands of persons operating the controls, e.g. when a work platform is moving in close proximity to other objects.	☑			Control panel is in the platform.	
	5.6.10	MEWPs of type 3 shall be equipped with an audible warning device (e.g. a horn) operated from the work platform.	☑			Be equipped with an audible warning device.	
	5.6.11	MEWPs of type 2 shall be equipped with a means of communication (e.g. walkie-talkie) between the persons on the work platform and the driver.			☑		
	5.6.12	The movements of work platform(s) relative to the extending structure shall be limited by mechanical stops. Hydraulic cylinders fulfill this requirement if designed for that purpose.	☑			The hydraulic cylinder is designed for this purpose to fulfill this requirement.	
	5.6.13	The work platform shall be supported in the transport position in such a way as to avoid harmful vibrations during transport(see 5.2.5.2.3)	☑			The work platform can be supported in the transport position in such a way as to avoid	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
						harmful vibrations during transport	
	5.7	Controls					
	5.7.1	MEWPs shall be provided with controls such that all movements of the MEWP can only take place whilst the controls are being actuated.	☑			This MEWP has been provided with controls such that all movements of the MEWP can only take place whilst the controls are being actuated.	
		The controls, when released, shall automatically return to the neutral position.	☑			The controls, when released, could automatically return to the neutral position.	
		The travel controls in the cabs of vehicle mounted MEWP do not need to be of this type.			☑		
		All controls, particularly foot operated controls, shall be constructed to prevent inadvertent operation.	☑			All controls have been constructed to prevent inadvertent operation.	
		Foot controls shall have slip resistant surfaces and be easy to clean.			☑		

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		Controls shall be positioned to avoid danger to the operator from moving parts of the MEWP.	☑			Controls are in safety position.	
	5.7.2	On MEWPs of types 2 and 3 it shall not be possible for the traveling controls to be operated simultaneously with any other controls. This does not apply to rail mounted MEWP. This shall be achieved by a safety device in accordance with 5.11.	☑			Select switch is used to select control position.	
	5.7.3	The direction of all movements of the MEWP shall be clearly indicated on or near the controls by words or symbols.	☑			The direction of all movements of the MEWP has been clearly indicated near the controls by words or symbols.	
		All controls shall be arranged for logical operation where possible.	☑			It is in compliance with this requirement.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
	5.7.4	The control devices shall be situated on the work platform.	☑			The control devices have been situated on the work platform.	
		This does not preclude the provision of duplicate controls operated from the base or ground level.	☑			The duplicate controls operated have also been provided from the base or ground level.	
		Duplicate controls shall be protected against unauthorized operation and may be used to serve as the emergency device (see 5.7.9).	☑			The duplicate controls operated from the base or ground level is protected against unauthorized operation by using the key and could serve as the emergency device.	
		If movement can be controlled from different control positions, the controls shall be interlocked at the duplicate control position in such a way that control is only possible from one pre-selected control position. This shall be achieved by a safety device in accordance with 5.11.	☑			It is in compliance with this requirement.	
	5.7.5	MEWPs shall be provided with emergency stop controls in accordance with EN 418 at each control position.	☑			Emergency stop controls have been provided at each control position.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		Emergency stop controls are not required on MEWP with full-flow control valves with control handles connected mechanically to the control valve spools (manual override).			☑		
	5.7.6	Pilot and solenoid operated control valves shall be so designed and installed that they stop the corresponding movement in the event of power failure.	☑			It is in compliance with this requirement.	
	5.7.7	On starting, or restoration of the power after failure of the power supply, no movement shall occur unless there is a deliberate action by the operator.	☑			The use of contactor could meet this requirement.	
	5.7.8	MEWPs shall be fitted with an over-riding emergency system (e.g. a hand pump, a secondary power unit, gravity lowering valves) appropriate to ensure that, if the main power supply fails, the work platform can be returned into a position from which it is possible to leave it without danger, taking into account the need to manoeuvre the platform clear of obstructions (see 7.2.4).	☑			This kind of over-riding emergency system has been fitted with in this MEWP.	
		The position of the controls of the emergency system shall be in a position easily accessible from the ground (see 5.7.4).	☑			The position of the controls of the emergency system is in such a position that can be easily accessible from the ground.	
		The above requirements, need not apply if leaving or reaching any position of the work platform is possible in another way (e.g. by means of fixed ladders).			☑		
	5.7.9	A device shall be provided to ensure that the speed of movement of the work platform is restricted to 1,4 times normal speed even under emergency operations.	☑			It is less than 1,4 times normal speed even under emergency operations.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
	5.8.	Electrical equipment	☑			-	
	5.8,1	Electrical equipment of MEWP shall comply with the relevant CENELEC standards especially with the requirements of EN 60204-1:1997: a) 4.3.2 d.c. supplies; b) 4.4.2 ambient air temperature; c) 4.4.4 altitude; d) 15.4.3 connection to moving elements of the machine;	☑			The electrical equipment of this MEWP has been checked.	
		Deviations are necessary and manufacturer shall take the necessary safety measures and /or state any operating limitations in the instruction handbook.	☑			The information required in this clause has been provided in the instruction manual.	
		The relevant electromagnetic compatibility requirements shall be observed.	☑			The relevant electromagnetic compatibility requirements have been observed.	
	5.8.2	A main switch shall be fifed in an easily accessible position. It shall be possible to secure it in the isolated position, with the use of a padlock or equivalent, to ensure no inadvertent operation.	☑			A main breaker is fifed in an easily accessible position. It is possible to secure it in the isolated position, with the use of a key-lock to ensure no inadvertent operation.	
	5.8.3	Cable shall be multi-stranded when flexibility is necessary and, where required, shall be oil-resistant.	☑			Cables are multi-stranded oil-resistant.	
	5.8.4	Batteries shall be protected against damage by short circuits and against mechanical damage. The disconnection (isolation) of the battery, i.e. breaking of the electrical supply (e.g. when charging),	☑			The type of battery has been checked in compliance with this	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		shall be easily possible and without the use of a tool.				requirement.	
	5.8.5	When necessary to prevent ingress of water the minimum degree of protection provided by enclosures shall be IP 54 in accordance with EN 60529:1991. Manufacturers shall take into account any foreseeable conditions of use (e.g. fluids other than water)necessitating higher degrees of protection.	☑			The degree of protection provided by enclosure is IP54.	
	5.9	Hydraulic systems				-	
	5.9.1	The hydraulic system shall include the pressure limiting device (e.g. pressure relief valve) before the first control valve. If different maximum pressures are used in the hydraulic system, more than one pressure limiting devices shall device be provided.	☑			The pressure limiting device has been used in the hydraulic system.	
		The adjustment of pressure limiting devices shall require the use of tools and be capable of being sealed.	☑			justment of pressure limiting device requires the use of tools and is capable of being sealed.	
	5.9.2	Pipes and their connections which may be subjected to the maximum pressure permitted by any pressure limiting device shall be designed to withstand at least that pressure without permanent deformation ($R_{p0.2}$).	☑			In normal operation components may be subjected to higher pressures than permitted by the pressure limiting device, they are designed to withstand over twice that higher pressure without permanent deformation.	
		If in normal operation components may be subjected to higher pressures than permitted by the pressure limiting device, they shall be designed to withstand at least twice that higher pressure without permanent deformation ($R_{p0.2}$), but see 5.10.1.2 for failure conditions.	☑			In normal operation components may be subjected to higher pressures than permitted by the pressure limiting	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
						device, they are designed to withstand over twice that higher pressure without permanent deformation.	
	5.9.3	The bursting pressure of hoses, including fittings, which may be subjected to the maximum pressure permitted by any pressure limiting device shall be not less than three times that pressure.	☑			Not less than three times that pressure.	
	5.9.4	All components of the hydraulic system other than those specified in 5.9.2, 5.9.3 and 5.10 shall be rated for at least the maximum pressure to which they will be subjected, including any temporary increase of pressure setting necessary for carrying out the overload test (see 6.1.4.3).	☑			It is in compliance with this requirement.	
	5.9.5	Each hydraulic circuit shall be provided with sufficient connections for pressure gauges to allow checking for correct operation.	☑			Sufficient connections for pressure gauges to allow checking for correct operation have been attached in each MEWP.	
	5.9.6	The design of the hydraulic system shall enable entrapped air to be vented.	☑			The design of the hydraulic system could enable entrapped air to be vented.	
	5.9.7	Any fluid reservoir open to atmosphere shall be equipped with an air inlet filter.	☑			The fluid reservoir open to atmosphere has been equipped with an air inlet filter.	
	5.9.8	Each fluid reservoir thank shall be equipped with easily accessible devices indicating both the permissible maximum fluid level and the necessary minimum level when the MEWP is in the transport position.	☑			The fluid level meter has been attached in each MEWP.	
	5.9.9	Each hydraulic system shall have means to ensure the fluid cleanliness level necessary for safe operation of the system and its components.	☑			Filter is fitted.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
	5.9.10	In hydraulic systems incorporating gas-loaded accumulators means shall be provided to vent the liquid pressure automatically or to positively isolate the accumulator when the system is in the non-pressurized state.			☑		
		If the gas-loaded accumulator pressure is required by design to be retained when the system is shut off, complete information for safe servicing shall be given on or near the accumulator in a visible location.			☑		
		Information shall include the statement “Caution-Pressurized vessel”. Duplicate information shall be provided in the instruction handbook [see 7.1.1.7 d]] on the circuit diagram.			☑		
		There shall be a warning label on the gas-loaded accumulator “Caution-Pressurized vessel. Discharge prior o disassembly”.			☑		
	5.9.11	Hydraulic hoses shall be designed or identified or located to avoid any incorrect connection causing a hazard, e.g. to reverse the direction of movement of a hydraulic cylinder.			☑		
	5.10	Hydraulic cylinders				-	
	5.10.1	Structural design				-	
	5.10.1.1	The design of load supporting cylinders shall be based on an analysis of the pressures, loads and forces during normal operation and failure conditions(see 5.10.1.3).	☑			See calculation manual	
	5.10.1.2	Normal operating conditions				-	
	5.10.1.2.1	Buckling				-	
		It is the responsibility of the manufacturer to identify the operating conditions which produce the combinations of extended length, pressure, deflections and externally applied loads and forces creating the maximum buckling conditions.	☑			See calculation manual	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
	5.10.1.2.2	Constructional detail				-	
		The design of welded joints shall conform to 5.2.5.2. Load-carrying threaded joints shall comply with relevant standards, and stress calculations shall take into account the reduced shear areas due to manufacturing tolerances and the elastic deformation caused by hydraulic pressures. The design of threaded joints subjected to varying tensile loads shall take into account the effects of fatigue and prevent inadvertent separation.	☑			See calculation manual	
	5.10.1.2.3	Conditions causing pressure above pressure limiting device pressure limiting device pressures (see Figures11 to 15): a) the effect of devices which reduce the speed of cylinders below the speed which could result from the full fluid supply to the cylinders, causing internal pressure loading additional to the normal pressure due to externally applied loads. This additional pressure can be determined by the ratio: $D^2 /(D^2 -d^2)$ where D is the diameter of the piston and d is the diameter of the piston rod, when a cylinder is in tension and the speed control device acts o the annulus. The speed control device may take the form of the control valve being partially open or closed;	☑			See calculation manual	
		b)the effect of thermal expansion of fluid confined in the cylinder when at rest.	☑			See calculation manual	
	5.10.1.3	Failure conditions				-	
	5.10.1.3.1	The normal generated pressure can increase by the ratio D^2 /d^2 due to oil leaking past piston seals in double acting cylinders under compressive loads.	☑			See calculation manual	
		This affects particularly the stresses in the cylinder tube and the head, and these shall not exceed the yield stress (Rp0,2).	☑			See calculation manual	
		This ratio is the minimum safety factor for valves, hoses and pipes which are at the same pressure as the cylinder, unless the pressure	☑			See calculation manual	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		increase is limited by other hydraulic components.					
	5.10.1.3.2	When more than one cylinder operates the same mechanism (see Figures 14 and 15) consideration shall be given to the effect of one cylinder being blocked and taking or causing greater loads.			☑		
		In the case of double acting cylinders this includes the force(s) generated by the other cylinder(s) or the force required to move the other cylinder.			☑		
		Under failure conditions the calculated maximum stress shall not exceed the yield stress of the material (Rp0,2).			☑		
	5.10.2	Load holding cylinders shall be fitted with a safety device in accordance with 5.11 to prevent unintended movement caused by failure of an external pipe [excluding those indicated in c)] until it is released by an external force.	☑			Pressure relief valves are fitted.	
		If lock valves are used for that purpose they shall close automatically to prevent fluid leaving the cylinders until they are opened by an external force.	☑			Pressure relief valves are fitted shall close automatically to prevent fluid leaving the cylinders until they are opened by an external force.	
		They shall be either: a)integral with the cylinder; or b)directly and rigidly flange-mounted; or c)placed close to the cylinder and connected to it by means of rigid pipes (as short as possible), having welded or flanged connections and being calculated in the same way as the cylinder.	☑			They are integral with the cylinder.	
		Other types of fittings such as compression fittings or flared pipe fittings are not permitted between the cylinder and the lock valve.			☑		
	5.11	Safety devices	☑			-	
	5.11.1	In the standard, wherever reference is made to this clause, the performance of safety-related parts shall, in the event of faults,	☑			The use of limit switch and the design of	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		conform to the categories (taken from EN 954-1) that are given in Table 4.				hydraulic circuit could meet this requirement.	
	5.11.2	The validation of the safety functions and categories in 5.11.1 is given in EN ISO 13849-2:2003. As shown by Figure 16 below, taken from CR 954-100, a safety function can be achieved by a combination of a number of components of different technologies (e.g. mechanical, hydraulic, pneumatic, electronic), selection of the category of each component taking into account the technology used. It is to be noted, as an example, that a category 3 safety function may be achieved by an appropriate combination of category 1 components.	☑			Safety devices are so located that they are not damaged or made ineffective during any foreseeable operating procedure.	
		Figure 16 is a schematic diagram of the safety-related parts to provide one of the functions to control a machine actuator. This is not a functional/working diagram and is included only to demonstrate the principle of combining categories and technologies in this one function.	☑			It is in compliance with this requirement.	
		The control is provided through an electronic control logic and a fluidic directional valve checked at suitable intervals (see EN 954-1:1996, 6.2.3). The risk is reduced by an interlocking guard which prevents access to the hazardous situation when the guard is closed and prevents start-up of the fluidic actuator when the guard is open.	☑			It is in compliance with this requirement.	
		For this example, the combined safety-related parts of the control system begins at point 7 and ends at point 1 (see Figure 16).	☑			Pass.	
		The safety-related parts which provide the safety function are: guard cam, position device, electronic control logic, fluidic directional valve and the interconnecting means.	☑			Position device, electronic control logic, fluidic directional valve	
		These combined safety-related parts provide a stop function (see EN 954-1:1996, 5.2) as a safety function (for definition see EN 954-1:1996, 3.6). As the guard opens, the contacts in the position device open and the electronic control logic provides a signal to the fluidic directional valve to stop the fluidic flow as the output of the safety related parts of the control	☑			Pass.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		system. At the machine, this stops the hazardous movement of the actuator.					
		This combination of safety-related parts creates a safety function to demonstrate the categorisation based on the requirements of EN 954-1:1996, clause 6. It considers the possibility and the probability of the faults that can occur which may affect the ability of those combined parts to perform the safety function. Using these principles, the safety-related parts shown in figure 16 can be categorised as follows: —— Category 1 for the electro-mechanical position device. To reduce the probability of faults this device is comprised of well-tried components applied using well-tried safety principles, e.g. positive opening operation, over-dimensioning (see EN 954-1:1996, clause 3 and 6.2.2); —— Category 3 for the electronic control logic. To increase the level of safety performance of this electronic control logic, the structure of this safety related part of the control system is designed so that it is able to detect most single faults, e.g. redundancy (see EN 954-1:1996, 6.2.4); —— Category 2 for the checked fluidic directional valve. To achieve the required level of safety performance, this safety-related part uses components which are periodically checked, e.g. monitoring, in order to detect the faults which have not been avoided using well tried safety principles (see EN 954-1:1996, 6.2.3).	☑			Pass.	
		The overall objective is that each of the safety-related parts achieves a similar level of safety performance so that the contribution of the safety-related parts of the control system provides the required reduction in risk. Therefore the reliability and structure within the safety-related parts of the control system	☑			Pass.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		have both to be considered.					
	5.11.3	The combined effect of correct use by a trained operator, the control system, the operating system and the safety system shall be to achieve a category of safety as shown in Table 4.	☑			Pass.	
		It shall only be possible to override a safety device listed in Table 4 in a safe manner by using a separate device of the same category or better.	☑			Safety switches acting as information giving components have been checked in compliance with this requirement.	
		Other than preferred categories shown in Table 4 can be used (see 6.3 of EN 954-1:1996), but the intended system behaviour in case of fault(s) should be maintained. Reasons for deviating should be given. These reasons, to select other than the preferred categories, can be the use of different technologies, e.g. well-tried hydraulic or electro-mechanical components (category 1) in combination with electrical or electronic systems (category 3 or 4).	☑			Pass.	
		The manufacturer may use a safety device of a lower category than shown in Table 4. In this case he/she shall undertake a risk analysis and obtain approval by a Notified Body.	☑			Pass. A risk analysis had been taken.	
		For safety devices which incorporate mechanical parts only, no specific category is required.	☑			Pass	
6		**Verification of the safety requirements and/or measures**				**-**	
	6.1	Examinations and tests				-	
	6.1.1	General				-	
		Examinations and tests to ensure that the MEWPs comply with this standard shall consist of a) design checks (see 6.1.2); b) manufacturing checks (see 6.1.3); c) tests (see 6.1.4).	☑			Please see the following test report.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		The results of examinations and tests, and tests, and the name and address of person(s) making them shall be recorded in a signed report.	☑			Please see the following clauses.	
	6.1.2	Design check				-	
		The design check shall verify that the MEWP is designed in accordance with this standard. It will include the check of the following documents: a) drawings containing the main dimensions of the MEWP; b) description of the MEWP with necessary information about its capabilities; c) information about the materials used; d) diagrams of the electrical, hydraulic and pneumatic circuits; e) instruction handbook; f) calculations.	☑			The design check has been done follow this requirement.	
		The documents shall give all necessary information to enable the calculations to be checked.	☑			The necessary document has been provided in this TCF.	
	6.1.3	Manufacturing check				-	
		The manufacturing check shall verify that:				-	
		a) the MEWP is manufactured in accordance with the checked documents; b) the components are in accordance with the drawings; c) test certificates are available for each type of rope, chain and hydraulic or pneumatic hose. These certificates shall indicate the minimum breaking force or bursting pressure as appropriate; d) the quality of welds particularly in load bearing components is ensured by use of the appropriate European Standard(s); e) construction and installation of parts (especially safety devices) are in accordance with this standard.	☑			The manufacturing check has been done follow this requirement.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
	6.1.4	Tests				-	
	6.1.4.1	General				-	
	6.1.4.2	Stability tests				-	
	6.1.4.2.1	Static tests				-	
		The MEWP shall be set up on the maximum allowable inclination of the chassis defined by the manufacturer plus 0,5° with any stabilizers used as specified by the manufacturer. Test load(s) shall be applied to represent all the least favorable load and force combinations specified in 5.2.4.1, 5.2.4.3 and 5.2.4.4.	☑			The static tests have been done follow this requirement	
		The test may be carried out on level ground if the test loads are re-calculated to include the effects of the maximum allowable inclination of the chassis defined by the manufacturer plus 0,5°.	☑			The static tests have been done follow this requirement	
		The test load(s) may be applied at any suitable strong point, if necessary, to avoid over-stressing any part of the MEWP.	☑			The static tests have been done follow this requirement	
		The test is to be repeated in all the most unfavorable extended and/or retracted positions. Examples are shown in Table 2 and Figures 5 to 8.	☑			The static tests have been done follow this requirement	
		The MEWP is stable if it can come to a stationary condition without turning over while supporting the test load(s).	☑			When testing, the MEWP is stable and can come to a stationary condition without turning over while supporting the test load(s).	
		Additionally it shall be demonstrated that, following application of	☑			After testing, the work	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		manual forces according to 5.2.3.4 in any position of the work platform, the work platform shows no permanent deformation.				platform shows no permanent deformation.	
	6.1.4.2.2	Dynamic tests on MEWP of types 2 and 3				-	
	6.1.4.2.2.1	General				-	
		MEWP of types 2 and 3 shall be subjected to kerb tests and braking tests with the rated load distributed evenly over the half of the work platform creating the greatest overturning moment in the specific test case.	☑			The dynamic tests been done follow this requirement	
	6.1.4.2.2.2	Kerb tests				-	
		MEWPs of types 2 and 3, except rail-mounted MEWPs, shall be driven on level ground at the maximum permitted travel speed to drive a) each leading wheel in turn into contact with a kerb with a height of 0,1 m perpendicular to the driving direction; and b) both leading wheels simultaneously into contact with the same kerb; and c) each leading wheel in turn off the same kerb; and d) both leading wheels simultaneously off the same kerb. The tests are to be repeated driving in both forward and reverse directions, in each extended position of the MEWP and, if different travel speeds are allowed for different heights, at each of those heights at the maximum permitted speeds for those heights. During these tests it is not necessary to simulate the effect of the permissible wind speed.	☑			The kerb tests been done follow this requirement	
		During the above tests the MEWP shall not overturn.	☑			The kerb tests been done follow this requirement	
	6.1.4.2.2.3	Braking tests				-	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		MEWPs of types 2 and 3 shall be stopped as rapidly as the controls allow in both forward and reverse directions in each MEWP position and combination of slope, loads and forces which together create conditions of minimum stability and, if different travel speeds are allowed for different heights, at each of those heights at the maximum permitted speeds for those heights. During these tests it is not necessary to simulate the effect of the permissible wind speed.	☑			The braking tests been done follow this requirement	
		During the above tests the MEWP shall not overturn and the stopping distance shall comply with 5.3.17.	☑			The braking tests been done follow this requirement	
	6.1.4.3	Overload test				-	
		The test load shall be 125% of the rated load for power operated MEWPs, and 150% of the rated load for manually operated MEWPs.	☑			The overload test have been done follow this requirement	
		All movements with the test loads shall be carried out at accelerations and decelerations appropriate with safe control of the load. Where several movements with the test load have to be carried out (i.e. lifting, lowering, slewing, traveling), the intended movements shall be carried out separately and with are taking into due account the least favourable positions and when vibrations associated with preceding movements have subsided.	☑			The overload test have been done follow this requirement	
		When, due to the various combinations of loads or outreaches of a MEWP, tests with different test loads are necessary, all movements shall be carried out with all test loads except where the least favorable conditions can be sufficiently simulated by one performance test.	☑			The overload test have been done follow this requirement	
		During the overload test the MEWP shall be on level ground and the extending structure put into each position which creates maximum stress in any load carrying part of the MEWP.	☑			The overload test have been done follow this requirement	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		During this test it is not necessary to simulate the effect of the permissible wind speed.	☑			The overload test have been done follow this requirement	
		During the overload test the braking systems shall be capable of stopping and sustaining the test load(s). After removing the test load(s) the MEWP shall show no permanent deformation.	☑			After removing the test load(s) the MEWP show no permanent deformation.	
	6.1.4.4	Functional tests				-	
		Functional tests shall demonstrate that: a) the MEWP can operate smoothly for all motions whilst carrying 110% of the rated load at the rated speeds; b) all safety devices work correctly; c) maximum permitted speeds are not exceeded; d) maximum permitted accelerations and decelerations are not exceeded.	☑			The functional test have been done follow this requirement	
	6.2	Type tests of MEWP	☑			-	
		The first MEWP made to a new design or incorporating significant changes to an existing design shall be subjected to the: a) design check (see 6.1.2) b) manufacturing check (see 6.1.3) c) tests (see 6.1.4)	☑			The manufacturer has added this requirement to their quality system document.	
	6.3	Tests before placing on the market	☑			-	
		MEWP built in accordance with a type tested model shall be subjected to the: a) brake test (see 6.1.4.2.2.3) b) overload test (see 6.1.4.3) c) functional tests (see 6.1.4.4) before they are placed on the market.	☑			The manufacturer has added this requirement to their quality system document.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
7		**Information for use**				**-**	
	7.1	Instruction handbook				-	
	7.1.1	General				-	
		The manufacturer or his authorized representative established in the Union shall draw up an instruction handbook complying with 6.5 in EN ISO 12100-2: 2003.	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	
		Instructions for maintenance operations which are to be carried out only by specialist maintenance personnel shall be separated from the other instructions.	☑			The instruction manual mentions the general maintenance. Any specialist maintenance should be carried out by manufacturer or his authorized representative.	
	7.1.1.2	Operating instructions which shall give details for safe use, e.g.:				-	
		The instruction handbook shall include the following information:				-	
		a) characteristics and description of the MEWP and intended use; b) information about setting up the MEWP and the necessary bearing strength of the ground; c) location, purpose and use of all normal controls, emergency lowering and any emergency stop equipment; d) prohibition of overloading the work platform; e) prohibition of use as a crane; f) national traffic regulations; g) keeping clear of live electric conductors;	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		h) avoidance of contact with fixed objects (buildings, etc.) or moving objects (vehicles, cranes, etc.); i) prohibition of any increase in reach or working height of me MEWP by use of additional equipment, e.g. ladders; j) prohibition of any addition that would increase the wind loading on the MEWP, e.g. notice boards (for exception see 5.2.3.5); k) environmental limitations [see 5.8.1 b) and c)]; l) information on vibration; m) important daily checks on the safe condition of the machine (oil leaks, loose electrical fittings/connections, chafed hoses/cables, condition of tyres/brakes/batteries, collision damage, obscured instruction plates, special safety devices, etc.); n) installation of removable guard-rails; o) prohibition of getting on and off the work platform when elevated; v, p) precautions for traveling with elevated work platform. q) the operating method to be followed in the event of accident or breakdown; if a blockage is likely to occur, the operating method to be followed so as to enable the equipment to be safely unblocked; r) the specification of spare parts to be used, when these affect the health and safety of operators; s) a test report detailing the static and dynamic tests carried out by or for the manufacturer or his authorised representative; t) the A-weighted emission sound pressure level at the specified workstation(s) when this value exceeds 70 dB. If the A-weighted emission sound pressure level does not exceed 70 dB this fact should be stated. These values must be either those actually measured for the MEWP or those established on the basis of measurements taken for a technically comparable MEWP which is representative of the MEWP to be produced. Where the harmonised standards are not applied, sound levels must be measured using the most appropriate method for the machinery.					

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		Whenever sound emission values are indicated the uncertainties surrounding these values must be specified. The operating conditions of the machinery during measurement and the measuring methods used must be described. Where the workstation(s) are undefined or cannot be defined, A-weighted sound pressure levels must be measured at a distance of 1 metre from the surface of the machinery and at a height of 1,6 metres from the floor or access platform. The position and value of the maximum sound pressure must be indicated. Where specific Community Directives lay down other requirements for the measurement of sound pressure levels or sound power levels, those Directives must be applied and the corresponding provisions of this section shall not apply.					
	7.1.1.3	Transport handling and storage information, e.g.:				-	
		a) any special provisions for securing parts of the MEWP for transport between places of use; b) the method of loading onto other vehicles/vessels for transport between places of use, including lifting points, mass, centre of gravity, etc. for lifting purposes;	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	
		c) precautions to be taken before periods of storage indoors or out-of-doors; d) checks to be made prior to use after periods of storage, exposure to extremes of ambient conditions - heat, cold, moisture, dust, etc.	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	
	7.1.1.4	Commissioning, e.g.:	☑			-	
		a) tests before placing on the market (see6.3) b) checks to be made on power supply, hydraulic oils, lubricants, etc. on first use, after long period of	☑			It is in compliance with the relevant requirements.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		storage or changes in environmental conditions (winter, summer, changed geographical location, etc.)				Please make reference to the instruction manual.	
	7.1.1.5	Periodical examinations and tests, e.g.:				-	
		a) periodical examinations and tests to be carried out according to the operating conditions and frequency of use;	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	
		b) the content of periodical examinations and test, i.e. 1) a visual examination of the structure with special attention to corrosion and other damage of load-bearing parts and welds; 2) an examination of the mechanical, hydraulic, pneumatic and electrical systems with special attention to safety devices; 3) a test to prove the effectiveness of brakes and/or overload devices; 4) functional tests (see 6.1.4.4);	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	
	7.1.1.6	Examinations and tests after major alterations or major repair to a MEWP already in use which shall consist of: a) design check (see 6.1.2); b) manufacturing check (see 6.1.3); c) practical tests (see 6.1.4); to an extent corresponding to the type of alterations or repair.	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	
	7.1.1.7	Maintenance information for use by trained personnel (see introduction), e.g.: a) technical information on the MEWP including electric/hydraulic circuit diagrams; b) consumable items requiring regular/frequent checks for attention (lubricants, hydraulic oil level and condition, batteries, etc.); c) safety features to be checked at specified intervals including safety devices, load holding actuators, over-riding emergency device, any emergency stop equipment;	☑			It is in compliance with this requirement. Please make reference to the instruction manual.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		d) measures to be taken to ensure safety during maintenance; e) checking for any dangerous deterioration (corrosion, cracking, abrasion, etc.); f) criteria for method and frequency of examination and repair/replacement of parts, e.g.: 1) wire rope drive systems. Single wire ropes in accordance with 5.5.2.2 a), or first and second ropes in systems according to 5.5.2.2.b)1) or 2) or b) 3) shall be replaced when the criteria of wear indicated in ISO 4309 are detected in an one of those ropes; 2) chain drive systems. Single chains in accordance with 5.5..3.2 a), or pairs of chains in accordance with 5.5.3.2 b) 1) or b) 2) shall be replaced when the chain manufacturer's limits of wear are detected in any one of those chains; 3) other components if applicable (e.g. expected life time); g) the importance of using only manufacturer approved replacement parts, particularly for load-supporting and safety-related components; h) the necessity of obtaining manufacturer's approval of any alteration which might affect stability, strength or performance; i) parts requiring adjustment, including setting details; j) any necessary tests/checks after maintenance to ensure a safe operating condition.					
	7.1.1.8	Modification to the intended use				-	
		At least advice shall be given that the user shall obtain the guidance and approval of the manufacturer in the event of any special working methods or conditions which are outside those specified by the manufacturer [see 7.1.1.2]a].	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	
	7.1.2	There shall be provisions in the instruction handbook to record; a) the results of examinations and tests; b) major alterations and repairs and to keep certificates.	☑			It is in compliance with the relevant requirements.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
						Please make reference to the instruction manual.	
	7.2	Marking				-	
	7.2.1	One or more durable manufacturer's plates(s) giving the following indelible information shall be permanently attached to the MEWP in an easily visible place: a) the business name and full address of the manufacturer and, where applicable, his authorized representative; b) country of manufacture; c) model and designation of the machinery; d) serial or fabrication number; e) year of construction, that is the year in which the manufacturing process is completed; f) non-loaded mass in kilogram; g) rated load in kilogram; h) rated load given as the allowable number of persons and mass of equipment in kilogram; maximum allowable manual force in Newton; i) maximum allowable wind speed in meter per second; j) maximum allowable inclination of the chassis; k) hydraulic supply information if an external hydraulic power supply is used; electrical supply information if an external electric power supply is used.	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	
	7.2.2	The following information shall be permanently and clearly marked on each work platform in an easily visible place: a) the rated load in kilogram; b) the rated load given as allowable number of persons and mass of equipment in kilogram; c) the maximum allowable manual force in Newton;	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
		d) maximum allowable wind speed in meter per second; e) allowable special loads and forces, if applicable. If more than one rated load is designated, they shall be tabulated in relation to the configuration of the MEWP.					
	7.2.3	MEWP with a work platform which can be extended, enlarged or moved relatively to the extending structure shall be marked with the rated load which can be carried in all positions and configurations of the work platform.	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	
	7.2.4	Instructions for use of the over-riding emergency system (see 5.6.9) shall be fitted near its controls.	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	
	7.2.5	MEWP with main and secondary work platforms shall be marked with the total rated load as well as with the rated loads of each work platform.	☑			It is in compliance with the relevant requirements.	
	7.2.6	MEWP which are designed for indoor use only (wind loads need not to be taken into consideration) shall be permanently and clearly marked in an easily visible place to that effect.	☑			It is in compliance with the relevant requirements.	
	7.2.7	Points for connection of external power supplies shall be permanently and clearly marked with the essential power supply information (see 7.2.1).	☑			It is in compliance with the relevant requirements.	
	7.2.8	Parts which may be detached for functional reasons (e.g. work platforms, stabilizers) shall be permanently and clearly marked in an easily visible place with: a) manufacturer's or supplier's name; b) model designation of the MEWP; c) serial or fabrication number of the MEWP.	☑			It is in compliance with the relevant requirements.	

Article	Sub-article	Requirement	Fullfilment			Remark	Test photo
			Y	N	N/A		
	7.2.9	An abridged version of the instructions for using the MEWP shall be permanently and clearly affixed in a suitable position. This abridged version shall, as a minimum, refer the operator to the instructions for use.	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	
	7.2.10	All projecting extremities of MEWP shall be marked with hazard colors (see ISO 3864:1984).	☑			It is in compliance with the relevant requirements.	
	7.2.11	Each stabilizer/wheel shall be permanently and clearly marked in an easily visible place with the maximum load on the ground it may be required to support during operation of the MEWP.	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	
	7.2.12	The pressure for pneumatic tyres shall be indicated on the MEWP.			☑	Not applicable.	
	7.2.13	Where safe clearances or adequate guarding are not possible warning notices shall be fitted (see 5.4.4).	☑			It is in compliance with the relevant requirements. Please make reference to the instruction manual.	
	7.2.14	A notice shall be fitted to a MEWP equipped with a captive chock in accordance with 5.4.5 warning persons not to enter the space beneath a raised work platform and extending structure during maintenance unless the chock is in place.	☑			This kind of warning has been provided for this MEWP.	
	7.2.15	MEWP in accordance with 5.3.9 requiring the use of stabilizers shall be provided with a warning notice at the operator's position to make the operator aware of the need to position the stabilizers.	☑			This kind of warning has been provided for this MEWP.	
	7.2.16	Hydraulic systems with a gas-loaded accumulator shall have a warning label on the gas-loaded accumulator "Caution-Pressurized vessel. Discharge prior to disassembly".			☑		

Part 2 - EN 280:2001+A2:2009 Test report

Design check & Manufacturing check report

- Manufacturer : Tianjin Anson International Co., Ltd .
- EUT : SELF-PROPELLED AERIAL WORK PLATFORM
- Test model : GTJZ10
- Test according to : Clause 6.1.2 & 6.1.3 of EN 280
- Date : May 15, 2013

I. Design check

- Drawings containing the main dimension of the MEWP

■ Pass ☐ Fail ☐ Not applicable

- Description of the MEWP with necessary information about its capabilities

■ Pass ☐ Fail ☐ Not applicable

- Information about the materials used

■ Pass ☐ Fail ☐ Not applicable

- Diagrams of the electrical, hydraulic circuits

■ Pass ☐ Fail ☐ Not applicable

- Instruction handbook

■ Pass ☐ Fail ☐ Not applicable

- Calculations

■ Pass ☐ Fail ☐ Not applicable

II. Manufacturing check

- The MEWP is manufactured in accordance with the checked documents

■ Pass ☐ Fail ☐ Not applicable

- The components are in accordance with the drawings

■ Pass ☐ Fail ☐ Not applicable

- Test certificates are available for each type of chain. These certificates shall indicate the minimum breaking force or bursting pressure as appropriate.

■ Pass ☐ Fail ☐ Not applicable

- The quality of welds particularly in load bearing components is ensure by use of the appropriate European Standard

■ Pass ☐ Fail ☐ Not applicable

- Construction and installation of parts (especially safety device) are in accordance with EN 280

■ Pass ☐ Fail ☐ Not applicable

Functional Test Report

- Manufacturer : Tianjin Anson International Co., Ltd .
- EUT : SELF-PROPELLED AERIAL WORK PLATFORM
- Test model : GTJZ10
- Test according to : Clause 6.1.4.4 of EN 280
- Date : May 15, 2013

I. Description of test situation :

- The MEWP carry 110% of the rated load.

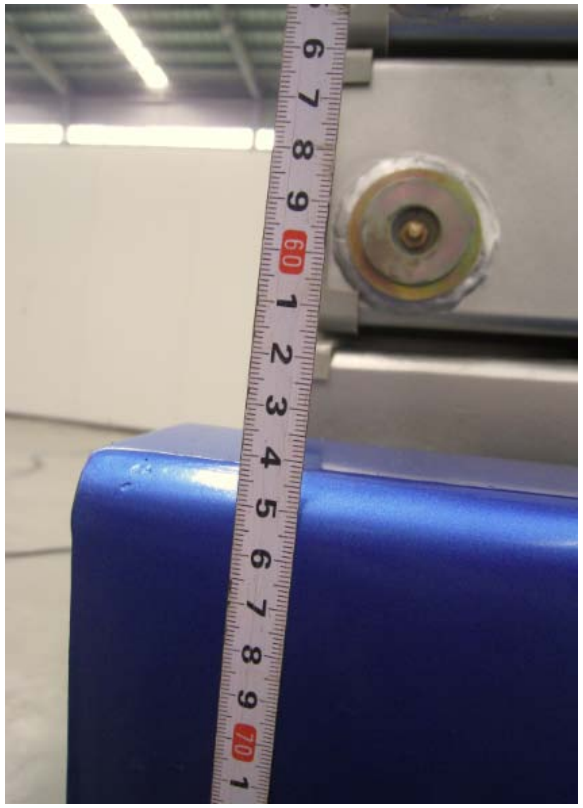
II. Test load:

- Rated load : 320kg
- Test load : 320*110%=352kg

III. Test result

- **The test sample can operate smoothly for all motions.**
  ■ Pass □ Fail
- **All safety devices of the test sample work correctly.**
  ■ Pass □ Fail
- **The maximum permitted speeds of the test sample are not exceeded**
  ■ Pass □ Fail
- **The maximum permitted acceleration and deceleration are not exceeded**
  ■ Pass □ Fail

IV. Test photo



Overload Test Report

- Manufacturer : Tianjin Anson International Co., Ltd .
- EUT : SELF-PROPELLED AERIAL WORK PLATFORM
- Test model : GTJZ10
- Test according to : Clause 6.1.4.3 of EN 280
- Date : May 15, 2013

I. Description of test situation :

- The test load is 125% of the rated load.

- During the overload test the MEWP is on level ground and extending structure put into each position which creates maximum stress in any load carrying part of the MEWP.

II. Test load:

- Rated load : 320kg
- Test load : 320*125%=400kg

III. Test result

- All movement(lift/lower) with the test loads is carried out at speed appropriate with safe control of the load.

■ Pass □ Fail

- During the overload test the braking systems can be capable of stopping and sustaining the test load.

■ Pass □ Fail

- After removing the test load the MEWP can show no permanent deformation.

■ Pass □ Fail

IV. Test photo

Stability test report

˙Manufacturer : Tianjin Anson International Co., Ltd .
˙EUT : SELF-PROPELLED AERIAL WORK PLATFORM
˙Test model : GTJZ10
˙Test according to : Clause 6.1.4.2.1, 6.1.4.2.2.2, 6.1.4.2.2.3 of EN 280
˙Date : May 15, 2013

Static test

I. Description of test situation:

- The test load is the combination of all the least favourable load and force specified in 5.2.4.1, 5.2.4.2, 5.2.4.3 and 5.2.4.4.
- The test is carried out on level ground because the test load are calculated to include the effects of the inclination of the chassis by 3.5˚
- The test is done in all the most unfavourable position, such as the boom stretches to its limit in horizontal and lateral of machine separately.

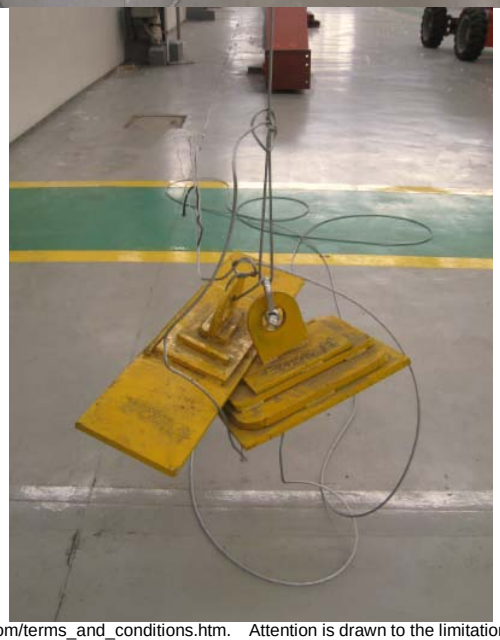
II. Test load:

- M1 : 8711470N.mm
- Test load1 : 82kg*10.8m=8856000N.mm
- M2 : 8082330N.mm
- Test load2 : 82kg*10.8m=885600N.mm

IIII. Test result

- **The test sample can come to a stationary condition without turning over while supporting the load. It is stable.**
  ■ Pass □ Fail
- **Following application of manual forces according to 5.2.3.4 in any position of the work platform the work platform shows no permanent deformation.**
  ■ Pass □ Fail

IV. Test photo



Kerb tests

I. Description of test situation:

MEWPs of types 2 and 3, except rail-mounted MEWPs, shall be driven on level ground at the maximum permitted travel speed to drive:
a) each leading wheel in turn into contact with a kerb with a height of 0,1 m perpendicular to the driving direction; and
b) both leading wheels simultaneously into contact with the same kerb; and
c) each leading wheel in turn off the same kerb; and
d) both leading wheels simultaneously off the same kerb.
The tests are to be repeated driving in both forward and reverse directions, in each extended position of the MEWP and, if different travel speeds are allowed for different heights, at each of those heights at the maximum permitted speeds for those heights.

II. Test load:

- Rated load : 320kg
- Test load : 320kg

IIII. Test result

III. Test result:

During the above tests the MEWP shall not overturn.

■ Pass □ Fail

IV. Test photo:

Braking tests

I. Description of test situation :

MEWPs of types 2 and 3 shall be stopped as rapidly as the controls allow in both forward and reverse directions in each MEWP position and combination of slope, loads and forces which together create conditions of minimum stability and, if different travel speeds are allowed for different heights, at each of those heights at the maximum permitted speeds for those heights.

II. Test load:

- Rated load : 320kg
- Test load : 320kg

III. Test result:

During the above tests the MEWP shall not overturn and the stopping distance shall comply with 5.3.17.

■ Pass □ Fail

IV. Test photo: