RISK ANALYSIS

Make	TADANO	Model	TM-ZR565S/EM5844	Description	Truck mounted hydraulic crane

Question? How can a person be injured?	Hazard Y or N?	What is the Hazard?	Hazard Rating No.	If Rating No is 15 or less – What is the CONTROL?
Mechanical failure of crane	Y	Crushing	15	Carry out routine maintenance as per the handbook. Never operate in excess of SWL. Overload protection valves are fitted.
Lowering of load onto ground	Y	Crushing	10	Slow operating speed. Operator away from load. Warning decals on crane. Do not lower load blind without qualified observer. Protect work area from pedestrians and other vehicles.
Toppling of crane due to instability	Y	Crushing	10 **	Always operate with legs down and on firm surface. Operate with vehicle level. Crane fitted to vehicle by qualified person in accordance with specifications.
Toppling of crane due to collision	Y	Crushing	10	Ensure traffic control is in place when operating crane.
Limb caught between load and obstacle	Y	Shearing	14	Slow operating speed. Do not place limbs between load and obstacles including truck tray. Operate from correct side of crane. Training in correct method of operation.
Limb Caught between boom when folding	Y	Shearing	14	Slow operating speed. Do not place limbs between load and obstacles including truck tray. Operate from correct side of crane. Training in correct method of operation.
Clothing or hair caught on load or hooks	Y	Entanglement	22	Ensure no entanglement exist before operating crane
Swaying of load	Y	Striking	6	Smooth, slow operation on controls. Keep clear of load.
Trip / fall on stabiliser legs	Y	Trip / fall	18	Operating area barricaded. Signage on stabiliser legs.
Contact with overhead electrical wires	Y	Electrocution	10	Electrical warning signs on crane to be adhered to.
Hydraulic leaks or hose failures	Y	High pressure wounds	14	Do not check for leaks with hands. Carry out visual checks as per the operator handbook. Do not operate if oil leak if evident.
Ensure hook safety clip is in closed position with rope or slings in place	Y	Crushing	14	Rope or sling could slip from hook and cause injury.
Stabiliser legs to be fully extended (maximum stability) ****	Y	Crushing	10	Maximum stability is achieved when reach operations conducted.

CALCULATION FOR RISK ASSESSMENT

For each identified hazard consider the maximum credible, but not absolute worst case risk that may result and select from each of the following list

	Severity of Result
A	Fatality
B	Permanent Disability
C	Lost Time Injury
D	Medical Treatment
E	First Aid Treatment

	Likelihood of Occurrence
1	Expected to happen
2	Common
3	Sometimes
4	Rarely
5	Highly unlikely

Plot the categories selected from "Likelihood of Occurrence" and "Severity of Result" onto the Hazard Rating Grid to determine the Hazard Rating Number. E.g. If we plot 4 & B on the Hazard Rating Grid, the Hazard Rating number will be 14

HAZARD RATING GRID

	A	B	C	D	E
1	**1**	**2**	**4**	**7**	**11**
2	**3**	**5**	**8**	**12**	**16**
3	**6**	**9**	**13**	**17**	**20**
4	**10**	**14**	**18**	**21**	**23**
5	**15**	**19**	**22**	**24**	**25**

The Hazard Number calculated for the risk assessment of an identified hazard is considered as follows:

a) Relatively High Risk 1 to 6

b) Medium Risk 7 to 15

c) Relatively Low Risk 16 to 25 (acceptable risk)