

### Loading, Transportation and Tipping Guidance

TO BE USED IN CONJUNCTION WITH OPERATORS OWN SPECIFIC RISK ASSESSMENTS

### SAFE LOADING RULES

- 1. Ensure the vehicle being loaded is suitable for the products to be carried.
- 2. Always report to responsible person on site and obey site safety and traffic rules.
- 3. Follow all instructions and position vehicle safely at loading point.
- 4. If possible, supervise loading process, always being aware of site Health & Safety requirements.
- 5. Never stand on the body while vehicle is being loaded.
- 6. Ensure that load is distributed evenly from side to side and from front to rear. This should prevent unsafe or illegal loading.

When loaded, ensure that any levelling and sheeting requirements are carried out safely, using the site designated area, if appropriate.

If there are any concerns with regards to the load, either gross or individual axle weights, or load security, then report to site staff for guidance. Report all details to your transport office.

### **TRANSPORTATION**

IF AT ANY TIME DURING THE TRANSPORTATION OF THE LOAD, YOU HAVE CONCERN WITH LOAD SAFETY OR SECURITY, STOP IN A SAFE CONTROLLED AREA AND REPORT TO YOUR TRANSPORT OFFICE.

### **SAFE TIPPING RULES**

### PRE-DELIVERY CHECKS

On arrival at site, report to a responsible person for instructions.

- 1. Follow all instructions, including any traffic, health & safety and loading requirements.
- 2. Proceed to designated unload point, taking care of others working in the area.
- 3. Before starting the unload process, check that the load is evenly distributed across the body, and from front to rear to prevent sideways tip, and unnecessary overloading of tipping gear.
- 4. Be aware of any load that may not flow easily during the tipping process.
- 5. Make sure that the vehicle is parked on firm level ground from side to side, and not facing downhill.
- 6. Articulated vehicles should ALWAYS be tipped with the tractor unit and semi-trailer in a straight line.
- 7. Before beginning to tip check for any overhead cables or other obstructions.
- 8. <u>NEVER AGREE TO TIP IN HIGH WINDS OR OTHER WEATHER CONDITIONS THAT YOU CONSIDER DANGEROUS.</u>

IF YOU HAVE NOT COME ACROSS ANY PROBLEMS THE TIPPING PROCESS CAN BEGIN.
IF HOWEVER THERE ARE ANY CONCERNS WITH REGARDS TO OPERATING A SAFE TIPPING
PROCESS, THESE CONCERNS SHOULD BE REPORTED TO THE SITE RESPONSIBLE PERSON AND
ALSO TO YOUR TRANSPORT OFFICE.



# Loading, Transportation and Tipping Guidance <u>DELIVERY / TIPPING PROCEDURE</u>

- 1. Release rear tailgate or doors before engaging the PTO.
- 2. Engage PTO and start to tip vehicle body.
- 3. There is no need to rev the engine excessively while tipping.
- 4. If the load has not started to flow/discharge when the tipping angle exceeds expectation, stop the tipping process and investigate the problem.
- 5. To ensure that this checking process can be completed safely, the haulier should have compiled a safe system of work and instructed all drivers on the procedure to be adopted.
- 6. NEVER REACH UNDER THE BODY IN THE RAISED POSITION WITHOUT ADEQUATE PROPS.
- 7. NEVER WALK BEHIND OR ALONGSIDE THE VEHICLE WHEN THE BODY IS TIPPED.
- 8. If the cause of the sticking load is found and can be rectified safely, resume the tipping / discharge procedure.
- 9. If not, slowly lower the body back down and assess the requirement to be able to complete the unloading / discharge.
- 10. If there is a requirement to access the top of the load, guidance should be obtained from the site responsible person.
- 11. Once the tipping process is resumed, follow same procedure, checking that the load is flowing / discharging.
- 12. During the tipping / discharge process, always be aware of the possibility of the vehicle toppling sideways. If at anytime there are signs of possible sideways toppling, the process should be stopped immediately and the body lowered.
- 13. INVESTIGATE AND REPORT TO SITE RESPONSIBLE PERSON AND YOUR TRANSPORT OFFICE.
- 14. Once the vehicle body is fully raised, the PTO should be disengaged.
- 15. Ensure that the load is fully discharged.
- 16. Lower body and secure rear tailgate / doors.
- 17. Report to site responsible person.

### SUPPLEMENTARY INSTRUCTIONS

- 1. NEVER tip a vehicle if in any doubt.
- 2. NEVER discharge a load if in any doubt.
- 3. NEVER walk behind or to the side of a vehicle when tipping.
- 4. NEVER leave the vehicle unattended during the unloading process.
- 5. NEVER attempt to clear any obstructions without lowering the vehicle body.
- 6. NEVER reverse the vehicle without ensuring that it is safe to do so and use a banksman wherever possible.
- 7. NEVER enter the vehicle body whilst it is being loaded or if it is raised.
- 8. AVOID moving any vehicle with its body raised unless it is unavoidable (i.e. tipping into a paving machine). If you do have to move forward during tipping always keep full control of the vehicle at all times, gently braking and ensuring that the vehicle remains level.
- 9. You should ALWAYS take as wide a berth as possible when walking back from the cab to the rear of a raised body.
- 10. If the vehicle begins to topple over brace yourself against the back of the driver's seat and hold firmly to the steering wheel. NEVER attempt to jump out of a vehicle that is toppling over – you could be crushed.

FOLLOWING A SUCCESSFUL TIP / DISCHARGE ALWAYS REPORT TO SITE RESPONSIBLE PERSON AND ARRANGE TO SWEEP OUT ANY RESIDUE OF DELIVERED PRODUCT IN AN APPROPRIATE AREA.



## **Loading, Transportation and Tipping Guidance**

## Approximate weights, measurements ALL THE WEIGHTS AND ANGLES SHOWN ARE FOR GUIDANCE ONLY

Material		tonne/cu.m	ton/cu.yd	cu.m/tonne	cu.yd/ton	
ashes	damp/dry	0.80 – 1.03	0.60 – 0.78	1.00 – 1.25	1.30 – 1.70	
asiles	wet	1.01 – 1.33	0.76 – 1.00	0.75 – 1.00	1.00 – 1.30	
asphalt	WEL	1.59	1.20	0.73 = 1.00	0.80	
ballast	dn.	1.53 – 1.73	1.15 – 1.30	0.60 - 0.70	0.80 - 0.90	
Dallast	dry					
1	wet	1.73 – 1.93	1.30 – 1.45	0.50 - 0.60	0.70 - 0.80	
barley	(bulk)	0.63	0.48	1.60	2.10	
bricks	weight / 1,000:					
		Facing	3.56t – 4.06t (			
		Rustic 4.06t – 4.46t (4.0 – 4.5T)				
bricks	stacked	1.48 – 1.99	1.11- 1.50	0.60	0.80	
	tipped	1.26 – 1.66	0.95 – 1.25	0.60 - 0.80	0.80 – 1.00	
cement	natural	0.90	0.68	1.10	1.50	
	portland (loose)	1.45	1.09	0.70	0.90	
clay	dry	1.01	0.76	1.00	1.30	
	wet	1.76	1.33	0.60	0.75	
coal	anthracite	0.90	0.68	1.10	1.50	
	bituminous	0.76	0.58	1.30	1.75	
	pulverised	0.55	0.40	1.80	2.40	
coke	loose	0.60	0.45	1.70	2.20	
	breeze	0.40 - 0.55	0.30 - 0.40	1.80 – 2.50	2.40 - 3.30	
concrete	dry mix	1.25	0.94	0.80	1.10	
CONTORCE	wet mix	2.38	1.80	0.40	0.60	
corn	rye (bulk)	0.76	0.58	1.30	1.75	
earth (soil)	dry (loose)	1.11	0.84	0.90	1.20	
fertiliser (bulk)	ury (1003e)	1.03	0.78	1.00	1.30	
flour (bulk-loose)		0.45	0.78	2.20	3.00	
fluedust (furnace)		1.76 – 1.99	1.33 – 1.50	0.50 - 0.60	0.70 – 0.75	
,		0.68	0.51	1.50	2.00	
garbage		1.68	1.26	0.60	0.80	
gravel	-1		1.10 – 1.30			
gravel & sand	dry	1.46 – 1.73		0.60 - 0.70	0.80 - 0.90	
h a u da a u a	wet	1.93	1.45 1.25	0.50	0.70	
hardcore	fine	1.66		0.60	0.08	
	rough	1.20 – 1.46	0.90 – 1.10	0.70 - 0.80	0.90 – 1.10	
iron	hemalite	2.12 – 2.56	1.58 – 1.93	0.40 - 0.50	0.50 - 0.60	
lime	gypsum	1.53	1.15	0.70	0.90	
oats	bulk	0.42 – 0.51	0.31 – 0.39	1.90 – 2.40	2.60 - 3.20	
asphalt	mastic/rolled	2.39	1.80	0.40	0.55	
macadam	bitumen	2.13	1.60	0.50	0.60	
macadam	tar	1.88 – 2.51	1.41 – 1.89	0.40 - 0.50	0.50 - 0.70	
rubble		1.05	0.79	1.00	1.30	
sand	dry pit	1.33	1.00	0.75	1.00	
	wet washed	1.66	1.25	0.60	0.80	
	dry silica	1.45 – 1.59	1.09 – 1.20	0.60 - 0.70	0.80 - 0.90	
	foundry	1.45 – 1.59	1.09 – 1.20	0.70	0.90	
shale	crushed	1.43	1.06	0.70	0.90	
shingles	dry	1.73	1.30	0.60	0.80	
	wet	1.93	1.45	0.50	0.70	
slag	furnace	1.26 – 1.66	0.95 – 1.25	0.60 - 0.80	0.80 - 1.10	
<u> </u>	street	0.50	0.40	2.00	2.70	
	sweeping	0.00	0.10	2.00		
stone	crushed	1.59	1.20	0.60	0.80	
sugar	ref.bulk	0.80 - 0.88	0.60 - 0.66	1.10 – 1.30	1.50 – 1.70	
urea	powder	0.60 - 0.73	0.45 - 0.55	1.40 – 1.70	1.90 – 2.20	
wheat	bulk	0.76	0.43 0.56	1.30	1.75	
micat	Dail	0.70	5.5	1.00	1.75	

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