



SP 7015TRX STUMP GRINDER

HAZARD EVALUATION

 **RED ROO**TM
Commercial Environmental Equipment

Online Demonstration Available at: www.redroo.com/products/grinders

QUESTION? 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?
A. ENTANGLEMENT 1. Can anyone's hair, clothing, gloves, necktie, jewellery, cleaning brushes, rags, or other materials become entangled with moving parts of the plant, or materials in motion?	Y	Wheel movement		
B. CRUSHING 1. Can anyone be crushed due to				
a. Material falling off the plant?	N			
b. Uncontrolled or unexpected moving of the plant or its load? Remote Control Option	Y Y	Inadvertent engagement of controls	21	
c. Lack of capacity for the plant to be slowed, stopped or immobilised?	Y	Human Involvement	21	
d. The plant tipping or rolling over?	Y	Use with Single Wheels High centre of gravity if on an unlevel surface	21	
e. Part of the plant collapsing?	Y	Trucks Failure	21	
f. Coming in contact with moving parts of the plant during testing, inspection, operation, maintenance, cleaning or repair?	Y	Inadvertent engagement of controls	21	
g. Being thrown off or under the plant?	Y	Human Involvement	21	
h. Being trapped between the plant and material or fixed structures?	N	Inadvertent engagement of controls	21	
i. Other factors not mentioned? (<i>Spectators must be kept away</i>)	N			Until knowledge becomes available
C. CUTTING, STABBING & PUNCTURING? 1. Can anyone be cut, stabbed or punctured due to				
a. Coming in contact with sharp or flying objects?	Y	Cutting Teeth	21	
b. Coming in contact with moving parts of the plant during testing, inspection, operations, maintenance, cleaning or repair of the plant?	Y	Cutting Teeth	21	
c. The plant, parts of the plant or work pieces disintegrating?	Y	Cutting Teeth	21	
d. Work pieces being ejected?	Y	Cutting Teeth	21	
e. The mobility of the plant?	Y	Cutting Teeth	21	
f. Uncontrolled or unexpected movement of the plant?	Y	Cutting Teeth	21	
g. Other factors not mentioned? (<i>Spectators must be kept away</i>)	N			Until knowledge becomes available
D. SHEARING 1. Can anyone's body parts be sheared between two parts of the plant, or material handled by the plant?	Y	Cutting Teeth	18	
E. FRICTION 1. Can anyone be burnt due to contact with moving parts or surfaces of the plant, or between a part of the plant and a work piece or structure?	Y	Engine Exhaust	20	
F. STRIKING 1. Can anyone be struck by moving objects due to :				
a. Uncontrolled or unexpected movement of the plant?	Y	Cutting Teeth	21	
b. The plant, parts of the plant or work pieces disintegrating?	Y	Cutting Teeth	21	
c. Work pieces being ejected?	Y	Cutting Teeth	21	

QUESTION? 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?
d. The mobility of the plant?	Y	Cutting Teeth	21	
e. Other factors not mentioned (<i>Spectators must be kept away</i>)	N			Until knowledge becomes available
G. HIGH PRESSURE SUBSTANCES 1. Can anyone come into contact with substances under high pressure, due to plant failure or misuse of the plant?	Y	Fuel Tank Explosion Hydraulic Fluid	21	
H. ELECTRICAL 1. Can anyone be injured by electrical shock or burnt due to:				
a. The plant contacting live electrical conductors?	Y	Grounding Interrupted	21	
b. The plant working in close proximity to electrical conductors?	Y	Grounding Interrupted	21	
c. Overload of electrical circuits?	Y	Remote Controls	21	
d. Damaged or poorly maintained electrical leads and cables?	Y	Grounding Interrupted	21	
e. Damaged electrical switches?	Y	Grounding Interrupted	21	
f. Water near electrical equipment?	Y	Grounding Interrupted	21	
g. Lack of isolation procedures?	Y	Human Factors	21	
h. Other factors not mentioned?	N			Until knowledge becomes available
I. EXPLOSION 1. Can anyone be injured by explosion of gases, vapours, liquids, dusts or other substances, triggered by the operation of the plant or by material handled by the plant?	Y	Fuel Tank Explosion Hydraulic Tank Explosion Area Not Properly Checked For These Hazards	21	
J. SLIPPING, TRIPPING & FALLINGS 1. Can anyone using the plant, or in the vicinity of the plant, slip, trip or fall due to				
a. Uneven or slippery work surfaces?	Y	Human	21	
b. Poor housekeeping, eg swarf in the vicinity or the plant spillage not cleaned up?	Y	Human	21	
c. Obstacles being placed in the vicinity of the plant, other factors not mentioned?	Y	Human	21	
2. Can anyone fall from a height due to:				
a. Lack of proper work platform?	N			
b. Lack of proper stairs or ladders?	N			
c. Lack of guardrails or other suitable edge protection?	N			
d. Unprotected holes, penetrations or gaps?	N			
e. Poor floor or walking surfaces, such as the lack of slip-resistant surface?	N			
f. Steep walking surfaces?	N			
g. Collapse of supporting structure?	N			
h. Other factors not mentioned?	N			Until knowledge becomes available
K. ERGONOMIC 1. Can anyone be injured due to:				
a. Poorly designated seating?	N			
b. Repetitive body movement?	N			

QUESTION? 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?
c. Constrained body posture or the need for excessive effort?	N			
d. Inadequate or poorly placed lighting?	N			
e. Lack of consideration given to human error or human behaviour?	Y	Unknown, Lazy, Cocky	24	
f. Mismatch of the plan with human traits and natural limitations?	Y	Unknown, Under the Influence, Aged, Disabled, Tired.	24	
g. Other factors not mentioned:				
L. SUFFOCATION 1. Can anyone be suffocated due to lack of oxygen, or atmospheric contamination?	N			
M. HIGH TEMPERATURE OR FIRE 1. Can anyone come into contact with objects at high temperature?	Y	Engine Exhaust, Grinding Teeth immediately after grinding is finished	20	
N. OTHER HAZARDS 1. Can anyone be injured or suffer ill health from exposure to:				
a. Chemicals?	N			
b. Toxic gases or vapours?	Y	Engine Exhaust	21	
c. Fumes?	Y	Engine Exhaust	21	
d. Dust?	Y	Human	20	
e. Noise?	Y	Human Lack of Maintenance	20	
f. Vibration?	Y	Lack of Maintenance	20	
g. Radiation?	N			
h. Other factors not mentioned?	N			Until knowledge becomes available

CALCULATION FOR RISK ASSESSMENT

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

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

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

Plot the categories selected from 'Likelihood of Occurrence' and 'Severity of Result' onto the Hazard Rating Grid to determine the Hazard Rating Number.

eg. If we plot 4 and 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	23
4	10	14	18	21	23
5	15	19	22	24	25

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

- a) Relatively High Risk 1 to 6
- b) Medium Risk 7 to 15
- c) Relatively Low Risk 16 to 25 (acceptable risk)