Product Risk Assessment

Flextool (Aust.) Pty Ltd, Brunswick, Vic.

Product Description	Artizan Cub Floor Grinder	Model Number	ART-CUB	Risk Assessment Date	19-Jun-08	Product Risk Assessment Number	0010

PRA Conducted By *(insert name/s):*	Signature:	Date:
Colin Metcalfe		20-Jun-08
Johnson Tai		20-Jun-08

General Manager *(insert name):*	Signature:	Date:

Consider all sides and faces of the Equipment – North, South, East, West, High & Low
Consider hazard exposure during Use – Normal and Emergency

Hazard or Injury Exposure	Identified Risk	Initial Risk			Current Controls	Residual Risk			Proposed Controls
		C	P	RR		C	P	RR	
Entanglement – 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?	Carpet, cardboard, & electric cable potential entanglement in grinding disc	3	C	13	new product, no controls specified.	4	D	21	Indentify potential hazard in operating instructions

Hazard or Injury Exposure	Identified Risk	Initial Risk			Current Controls	Residual Risk			Proposed Controls
		C	P	RR		C	P	RR	
Crush / pinch – Can anyone be crushed due to: (a) material falling off the plant. (b) uncontrolled or unexpected movement of the plant or its load. (c) lack of capacity for the plant to be slowed or immobilised. (d) the plant tipping or rolling over. (e) parts of the plant collapsing. (f) coming in contact with moving parts of the plant during testing, inspection, operation, or maintenance. (g) being thrown off or under the plant. (h) being trapped between the plant and materials or fixed structures. (i) other factors not mentioned.	(b) uncontrolled or unexpected movement of the plant or its load	3	C	13	new product, no controls specified.	4	D	21	Indentify potential hazard in operating instructions
Cutting, Stabbing and Puncturing – Can anyone be cut, stabbed or punctured due to: (a) coming in contact with sharp or flying objects. (b) coming in contact with moving parts of the plant during testing, inspection, operation or maintenance of the plant. (c) The plant or parts of the plant or working pieces disintegrating. (d) workpieces being ejected. (e) mobility of the plant. (f) uncontrolled or unexpected movement of the plant. (g) other factors not mentioned.	(b) moving parts during testing, inspection, operation or maintenance	3	C	13	new product, no controls specified	4	D	18	Indentify potential hazard in operating instructions
Shearing – Can anyone's body parts be sheared between two parts of the plant, or between a part of the plant and a structure?	not applicable								
Friction – Can anyone be burnt due to contact with moving parts or surfaces of the plant?	not applicable								
Striking – Can anyone be struck by moving objects due to: (a) uncontrolled or unexpected movement of the plant or material handled by the plant. (b) the plant, parts of the plant or pieces disintegrating. (c) workpieces being ejected. (d) mobility of the plant. (e) other factors not mentioned.	(a) uncontrolled or unexpected movement of the plant or material handled by the plant	3	C	13	new product, no controls specified	4	D	21	Indentify potential hazard in operating instructions
High pressure fluid – Can anyone come into contact with fluids under high pressure due to plant failure or misuse of the plant?	not applicable								

Hazard or Injury Exposure	Identified Risk	Initial Risk C	Initial Risk P	Initial Risk RR	Current Controls	Residual Risk C	Residual Risk P	Residual Risk RR	Proposed Controls
Electrical – Can anyone be injured by electrical shock or burnt due to: (a) the plant contacting live electrical conductors. (b) the plant working in close proximity to electrical conductors. (c) overload of electrical circuits. (d) damaged or poorly maintained electrical leads and cables. (e) damaged electrical switches. (f) water near electrical equipment. (g) lack of isolation contact with exposed terminals, overloaded circuits, damaged wires, water near circuits, poor insulation	(a) the plant contacting live electrical conductors. (f) water near electrical equipment	1	D	7	new product, no controls specified	4	D	21	Indentify potential hazard in operating instructions
Slips, Trips & Falls – Can anyone using the plant, or in the vicinity of the plant slip, trip or fall due to: (a) uneven or slippery work surfaces. (b) poor housekeeping e.g. spillage not cleaned up. (c) obstacles being placed in the vicinity of the plant. (d) other factors not mentioned. Can anyone fall from a height due to: (a) lack of proper work platform. (b) lack of proper stairs or ladders. (c) lack of guard rails or other suitable edge protection. (d) unprotected holes, penetrations or gaps. (e) poor floor or working surfaces. (f) steep walking surfaces. (g) collapse of the supporting structure. (h) other factors not mentioned.	(a) uneven or slippery work surfaces. (b) poor housekeeping. (c) obstacles being placed in the vicinity of the plant	3 3 3	C C C	13 13 13	new product, no controls specified	4	D	21	Indentify potential hazard in operating instructions
Manual Handling (Ergonomic) – Can anyone be injured due to: (a) frequent or prolonged reaching, bending, or stretching. (b) frequent or prolonged twisting. (c) an awkward posture is required. (d) inadequate or poorly placed lighting. (e) carrying loads over a long distance. (f)carrying a weight - over 4.5kg in a seated position, -over 16kg in a standing position, - over 55kg. (g)excessive force required pushing or pulling. (h) an awkward load due to size, shape, temp., or instability. (i) age or disability factors. (j) PPE interference.	(b) frequent or prolonged twisting	4	C	18	new product, no controls specified	4	D	21	Indentify potential hazard in operating instructions
Suffocation – Can anyone be suffocated due to the lack of oxygen, or atmospheric contamination?	not applicable								
High temperature or fire – Can anyone come into contact with objects at high temperatures? Can anyone be injured by fire?	Can anyone come in contact with objects at high temperatures?	4	C	18	new product, no controls specified	4	D	21	Indentify potential hazard in operating instructions
Temp. (thermal comfort) – Can anyone suffer ill health due to exposure to high or low temperature?	not applicable								

Other Hazards – Can anyone be injured or suffer ill health from exposure to: (a) chemicals. (b) toxic gas / vapour.(c) fumes. (d) dust. (e) noise. (f) vibration. (g) radiation. (h) other factors not mentioned.	(d) dust (e) noise	4 4	C C	18 18	new product, no controls specified	4	D	21	Indentify potential hazard in operating instructions

Measures of CONSEQUENCE					
Level		**People**	**Environment**	**Equipment**	**Production**
1	**Catastrophic**	Death or Permanent Disability	Toxic release off-site with detrimental effects.	Huge Financial Loss (>$1M)	>15 Days Production Lost
2	**Major**	Extensive Injuries / Admitted to Hospital	Off-site release with no detrimental effects OR On-site release contained with external assistance.	Major Fin. Loss ($250K - $1M)	10-15 Days Production Lost
3	**Moderate**	LTI / Medical Treatment	On-site release, requiring management involvement.	High Fin. Loss ($10K - $250K)	5-10 Days Production Lost
4	**Minor**	Minor MTI / First Aid	On-site release, immediately contained	Minor Fin. Loss ($1K - $10K)	1-5 Days Production Lost
5	**Insignificant**	No injury	No detrimental effects	Low Fin. Loss (<$1K)	<1 Day Production Lost

Measures of PROBABILITY		
Level		**Description**
A	**Almost Certain**	Common or Repeating (>12 per annum) / The event is expected to occur in most circumstances.
B	**Likely**	Will probably occur in most circumstances (<1 per month) / The event has happened on site.
C	**Possible**	Could Occur (>1 in 10 years) / Have heard of it happening elsewhere.

D	**Unlikely**	Not Likely (>1 in 100 years) / The event may occur at some time.
E	**Rare**	Practically Impossible (<1 in 100 years) / Unrecorded event that may only occur in exceptional circumstances.

RA Matrix		**Probability**				
		A	**B**	**C**	**D**	**E**
Consequence	**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**

Risk Rating	**Description**	**Risk Control Requirements**
1 - 3	**Critical**	Immediate action required. Cease work until risk control strategy is in place. Control measures must be signed-off by senior management.
4 - 10	**High**	The risk must be eliminated or a control strategy must be in place within 48 hours.

11 - 19	**Medium**	Appropriate control strategy to be in place within 21 days.
20-25	**Low**	No action required / Attempt to reduce risk further within 12 months.