



EKAMANT SOUTH AFRICA

TROUBLE SHOOTING GUIDE FOR WIDE BELT MACHINES

PROBLEM	POSSIBLE CAUSE	SUGGESTED SOLUTION
INADEQUATE BELT LIFE:		
Dulling or Glazing	Grit too fine Grinding pressure too high or low Insufficient belt flex Incorrect abrasive specification Contact wheel not aggressive enough Excessive belts and/or contact roller speed Insufficient infeed pressure	Use coarser grit Adjust grinding pressure Order correct specification Order correct specification Change to more aggressive contact wheel Reduce belt and/or roller speed Increase infeed pressure
Loading	Incorrect abrasive product or join specification Excessive grinding pressure Excessive infeed pressure or speed Insufficient extraction	Order open coat product Decrease pressure Decrease infeed pressure or speed Increase extraction
Shedding	Incorrect abrasive specification Excessive product flex Excessively heave cut Infeed too fast Contact roller too aggressive Worn contact roller Grinding in one area of belt only	Order correct specification Order correct specification Adjust cutting depth Reduce infeed speed Use less aggressive contact roller Dress or replace contact roller Scillate belt - use entire belt surface
Belts breaking	Belt creased or edge damaged in handling Incorrect product or join specification Belt tension too high Excessively heave cut Belt tension too low (usually accompanied by heave load on one side of belt) Belt direction incorrect (lap join) Improper storage of belts Excessive pounding or chatter Workpiece thickness variation Erratic belt tracking Frictional heat build up Accumulation of swarf or chips	Inspect belts prior to installing Order correct specification for application Reduce tension Adjust cut or reduce infeed speed Increase tension Find arrow on belt backing and install in correct running direction Store belts properly (discuss with Ekamant rep) Less aggressive contact wheel and check machine for vibration Run similar thickness workpieces in batches Check tracking mechanism or replace belt Reduce infeed speed and depth of cut. Increase or adjust extraction system



EKAMANT SOUTH AFRICA

TROUBLE SHOOTING GUIDE FOR WIDE BELT MACHINES

PROBLEM	POSSIBLE CAUSE	SUGGESTED SOLUTION
Belts creasing or folding	<p>Excessive belt flex</p> <p>Tapered contact roller</p> <p>Worn idler - center piece smaller diameter than ends</p> <p>Belt tension too low</p> <p>Accumulation of swarf or dirt on contact roller or idler</p> <p>Uneven tracking</p> <p>Worn bearings on contact roller or idler</p> <p>Uneven belt stretch</p> <p>Incorrect abrasive specification</p> <p>Moisture imbalance across the belt</p>	<p>Order correct specification</p> <p>Redress or remove taper</p> <p>Regrind or replace idler</p> <p>Increase tension</p> <p>Clean roller or idler and remove source of accumulation</p> <p>Readjust tracking controls</p> <p>Replace bearings</p> <p>Feed work uniformly across belt surface</p> <p>Order correct specification</p> <p>Replace belt and check storing conditions</p>
Belts slipping	<p>Belt tension too low</p> <p>Contact roller worn</p> <p>Workpiece thickness variation</p>	<p>Increase tension</p> <p>Dress contact roller to establish flat lands</p> <p>Run similar thickness workpieces in batches</p>
Belts Splitting	<p>Incorrect abrasive specification</p> <p>Product flex too severe</p> <p>Worn contact wheel or roll</p> <p>Burr on contact wheel</p> <p>Excessive grinding or infeed speed</p> <p>Excessively heavy cut</p> <p>Grinding on one area of belt only</p> <p>Workpiece thickness variation</p> <p>Contact roller and idler not parallel</p>	<p>Order correct specification</p> <p>Correct flex</p> <p>Dress or replace contact roll or wheel</p> <p>Dress or replace contact roller</p> <p>Reduce pressure</p> <p>Adjust cutting depth</p> <p>Use entire surface of belt</p> <p>Run similar thickness workpieces in batches</p> <p>Align idler, contact roller and other machine parts</p>
Belts not tracking properly	<p>Insufficient belt tension</p> <p>Excessive or insufficient grinding pressure</p> <p>Incorrect abrasive specification</p> <p>Uneven grinding pressure</p> <p>Idler pulley face worn</p> <p>Swarf buildup on idler or back of belt</p> <p>Contact wheel face worn</p> <p>Idler pulley defecting due to construction or wear</p>	<p>Increase belt tension</p> <p>Adjust pressure</p> <p>Order correct specification</p> <p>Use full width of belt</p> <p>Recover or change idler</p> <p>Increase extraction</p> <p>Redress or change contact wheel</p> <p>Replace idler pulley. Reduce belt tension</p>



EKAMANT SOUTH AFRICA

TROUBLE SHOOTING GUIDE FOR WIDE BELT MACHINES

PROBLEM	POSSIBLE CAUSE	SUGGESTED SOLUTION
	Misalignment between contact wheel and idler	Realign parts
	Workpiece thickness variation	Run similar thickness workpieces in batches
	Damaged edge of belt causing tracking malfunction	Change belt
	Belt stretched on one edge	Change belt
	Belt tension overriding tracking cylinder	Reduce belt tension
	Tracking mechanism not adjusted properly (belt moves slowly in one direction and fast in the opposite direction)	Adjust and/or repair tracking mechanism
	Contact wheel tapered	Redress to remove taper or replace contact wheel
	Microswitch failure	Be sure switches are clean
	Inoperative photo cell	Clean or replace photo cell

WORK PIECE DEFICIENCIES:

Chatter	Excessive work speed	Reduce infeed speed
	Loose or improperly lubricated spindle bearing or idler pulley	Lubricate, tighten or replace bearings or pulleys
	Excessive grinding pressure	Reduce pressure
	Contact wheel out of round or out of balance	Dress or replace contact wheel
	Contact wheel too aggressive or too hard	Replace with less aggressive softer wheel
	Vibration in machine	Check for vibration and correct
	insufficient belt tension	Increase tension
	Abrasive grit too fine	Order coarser grit
	Incorrect product or join specification	Order correct specification for application
	Hesitation in feed or drive mechanism	Service drive mechanism
	Contact wheel or roll improperly dressed	Dress or replace contact wheel or roll
Poor surface finish - Barberpole - Feed lines - Marks or scratches - Streaks	Previous grit grinding lines not removed	Change abrasive grit sequence
	Belt worn beyond useful life	Replace abrasive belt
	Abrasive belt oscillation	Check idler and belt tension
	Excessive grinding pressure	Reduce pressure
	Contact wheel improperly dressed	Dress or replace contact wheel
	Ragged belt edges	Replace belt
	Insufficient belt tension	Increase belt tension
	Contact wheel too aggressive	Use less aggressive contact wheel
	Loading or dulling of belt	Refer loading section under Inadequate Belt Life



EKAMANT SOUTH AFRICA

TROUBLE SHOOTING GUIDE FOR WIDE BELT MACHINES

PROBLEM	POSSIBLE CAUSE	SUGGESTED SOLUTION
	Contamination of contact roller or platen surface	Clean roller or platen and correct cause of contamination
Poor work piece tolerance - Tapered work piece - Out of specification dimensions	Abrasive grit too fine Insufficient or excessive abrasive belt tension Incorrect abrasive or join specification Work piece fixturing not rigid enough Play or looseness in feed table / conveyer Belt surface speed too fast for type of material being ground	Use coarser grit Adjust tension Order correct specification Improve work piece fixturing Correct condition Reduce speed