Application: Wood Sanding

Data

OEM: Timesavers (Model #:3300 Planner/Sander)
Environment: Indoor / abrasive, ambient temperature
Product on belt: Wood of varying sizes
and the characteristics

Process description:
The piece of wood to be sanded is placed
on a belt and inserted manually into the
machine. The belt holds the wood in
contact with the sanding heads, which are
rotating at high speed, and moves the wood
through the machine.

Belt requirement:
High coefficient of friction:
The belt must grip the wood firmly in order
to move it through the sanding process with
minimum slippage.

Endless:
All belts must be made endless. Laces or
mechanical fasteners would damage the
wood.

Current Belt Problem:

3-ply Natural Rubber Roughtop belt

There is not enough room to use a press to splice a belt on the machine, so replacing a
belt requires dismantling the equipment to install a belt that has already been made
endless. This process requires 8 hours of downtime, resulting in a loss of productivity
and extra labor charges for the end user. In normal use, the belts require changing
about every three months.

Solution:

Chemprene ZipLink Natural Rubber Roughtop belt*

With ZipLink, a complete belt change can be made in less than 30 minutes. Furthermore the life of the ZipLink Natural Rubber Roughtop is 5 months, 2 months longer than with the old belt.

Belt Replacement Cost Savings Analysis:

ZipLink Natural Rubber Roughtop		*3-ply Natural Rubber Roughtop*	
Lifetime	: 5 months	Lifetime	: 3 mnths
Down time (installation)	: 1 hour	Downtime (installation)	: 8 hours
Cost of 1 hour of downtime	: $250	Cost of 1 hour of downtime	: $250
Downtime cost	: $ 250	Downtime cost	: $2,000
Belt cost	: $2,200	Belt cost	: $1,400
Installation labor (in House)	: $ 0	Installation labor	: $ 700+
Total Cost (5 months)	: $2,450+	Total Cost (3 months)	: $4,100
Total Cost (12 months)	: $5,880 *minus*	Total Cost (12 months)	: $16,400

= Yearly Savings using ZipLink: **$ 10,520**

Details:

Minimum pulley diameter	: 3" (76.2mm)
Crown	: 1%
Center to center distance	: 153.3" (3894mm)
Belt width	: 50" (1270mm)
Speed	: Varies
Splice	: ZipLink
Support	: Slider bed

Remark:

In this application there are no special standards required for this belt. Furthermore, the belt will not incline nor decline, has no knife edge, no crowning, no reverse bend, no scrapers, and is not troughed.

*Note:

Depending on the application a customer may require a diamond top profile (with or without perforations), an oil resistant NBR roughtop or a smooth cover MOR belt (may require counter sunk perforations) all of which are currently available on the ZipLink fabric.