

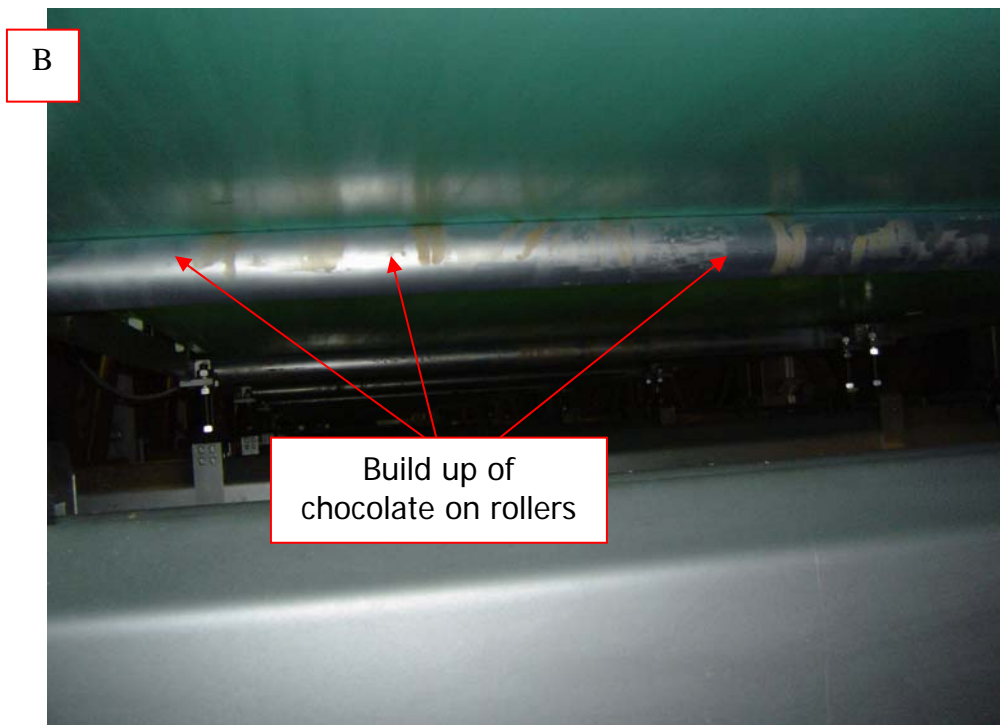
Burtons Foods Case Study 3 Pages	Benefits of Teflon* Sleeving for Rollers on Robotic System	Issued by: Gordon McKay Date:23/11/04
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HOLSCOT TEFLON* SLEEVES DRAMATICALLY IMPROVE PRODUCTIVITY AND REDUCE DOWNTIME

Background:- the Robotic system at Burton's processing plant at Sight Hill, Edinburgh (see picture A) is an 18 robot array which picks and places biscuits from the Product Infeed belt onto skillets which travel in the opposite direction on 2 tray belts. All in all there are over 60 rollers in the whole robotic system.



Problem:- Chocolate, toffee and coconut was transferring from the product onto the product belt and tray belt, this in turn was transferring onto the rollers in particular the rollers at the underside of the belt system (see picture B). The Product belt (green belt in picture) gets washed daily and during the washing the debris from the rollers would transfer back onto the product belt making washing the belt a never ending task. The rollers would get cleaned as part of the weekly cleaning schedule and this would take 2 people approximately 120 minutes to clean all rollers. To remove the build up of chocolate, toffee and coconut it required using a soaked Scotchbrite pad and a lot of "elbow grease".



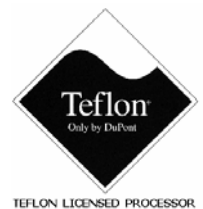
In addition to this problem the end rollers were also getting a build up of biscuit deposits on them which was resulting in the web tracking to drift. In the case of the tray belts this phenomenon badly effected the placing of the biscuits into the trays by the robots.

Solution:- All rollers on the Robotic system were fitted with Teflon* sleeves 0.5 mm thick supplied and fitted on site by engineers from Holscot Northern Division based in Leven, Fife. After running the system for several weeks after the rollers were coated it was obvious there was a dramatic improvement. The build up of biscuit debris on the rollers was reduced, but the biggest effect was the time it took to clean the rollers. All the rollers could now be cleaned using a damp cloth as opposed to Scotchbrite and any build up of material simply brushed off with ease! The overall time was reduced from taking 2 people 2 hours down to taking 2 people 15mins. An improvement can also be seen on the end rollers, (see picture C) no longer do they get a large build up of biscuit debris which causes the tray belt tracking to drift, therefore there are less issues with poor robot placement of biscuits caused by poorly tracked belts!



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* Teflon is the registered Trade Name of Du Pont de Nemours