

Reasons for being cheap (part 2)

In this second of a short but fascinating series of blogs, conveyor belt specialist Bob Nelson explains how some unscrupulous conveyor belt manufacturers that use unsafe, unregulated chemicals in rubber production to achieve a price advantage are causing unnecessary risk to humans, wildlife and the environment.

As I explained in my previous blog, there are literally dozens of different components that are used to create the many different 'specific task' rubber compounds used to make conveyor belts. Unfortunately, it is an inescapable fact that it is necessary to use some chemicals that are extremely harmful if not used in a tightly controlled and responsible way.

For human safety and environmental protection reasons, these chemical components and additives are strictly regulated in Europe in the form of REACH (Registration, Evaluation and Authorisation of Chemical substances) regulation EC 1907/2006. These place strict limits on the amounts and types of chemicals that can be



used in a finished product, encourages safer substitutions and, in some cases, bans certain chemicals altogether. Reassuringly, there are also EU regulations concerning Persistent Organic Pollutants (POPs).

The reason why such regulation is necessary is twofold. Firstly, there are the already proven harmful effects that 'substances of very high concern' (SVHC's) can have on humans and the environment including, of course, wildlife. This includes categories 1 and 2A carcinogenic classifications*. Secondly, and equally importantly, there is an ever-growing list of substances still under research that are suspected by scientists to have potential harmful effects. Sadly, history is littered with examples of substances (asbestos for example) that were thought to be harmless at the time but ultimately proved to have seriously damaging long-term effects. However, such regulations do not apply to

Regulations to protect humans, wildlife and the environment do not apply outside of Europe.

CONVEYING ADVICE

belts made outside of Europe**. This includes Southeast Asia of course, which is the biggest source of cut-price, unregulated belting. Good quality, safety

* Definition: Group 1: "Carcinogenic to humans". There is enough evidence to conclude that it can cause cancer in humans. Group 2A: "Probably carcinogenic to humans". There is strong evidence that it can cause cancer in humans, but at present it is not conclusive.

** IMPORTERS BEWARE!

Although it is still legally permissible to import belts that contain materials that are forbidden to be used in Europe, European-based companies who import belts from outside of Europe are responsible for REACH regulation compliance. This means that manufacturers outside of the EU and UK are free of responsibility and the possible consequences but importers of their products, almost certainly unknowingly, are subject to them.



regulated raw materials cost significantly more than low-grade, unregulated raw materials. With rubber making up some 50% of the cost of making a conveyor belt, it is easy to understand why the use of unregulated components to make the rubber make such a huge contribution towards the manufacturer's cost-cutting objectives.

In an effort to maximize their price competitiveness, many conveyor belt manufacturers, including some based in Europe, outsource the mixing of their rubber compounds to specialist bulk suppliers. Notable exceptions to this rule are premium brand manufacturers such as Fenner Dunlop Conveyor Belting in The Netherlands and Contitech in Germany. Dunlop insists on making its own compounds using its own facilities, which although costing more, gives it genuine control over the quality and regulatory compliance of the rubber.

The advantages that rubber compound suppliers have is not simply related to the savings created by the mass manufacturing processes. They also have ultimate control of the raw

A notable exception – Fenner Dunlop insists on making its own rubber.



materials that they use while the manufacturer using their services has effectively lost that control. The quality of the rubber suffers as a consequence while compliance with human and environmental safety regulations such as REACH and persistent organic pollutants are unlikely to even be on their agenda. Rubber is the same as most things in manufacturing — you

only get out what you put in.

Bob Nelson

(NEXT TIME: In the final blog in this short series, Bob Nelson shines the spotlight on the inner carcass of rubber conveyor belts and reveals how many conveyor belt users are using belts that are not the specification that they are claimed to be.)