

**Feedstock – Rubber**

The acceptable materials detailed below are typical sources of rubber feedstocks. If the proposed feedstock is likely to contain any other materials these can be discussed on a case by case basis to assess suitability with TDR staff.

		Target Parameters	Tolerances
<b>Acceptable Feedstocks</b>	Natural rubber Synthetic rubber Tyre Crumb Tyre Chips (including inherent textiles and plastics) Scraps from rubber processing Industry Rubber Conveyor Belts (including inherent textiles as appropriate) Rubber seals, washers and gaskets Rubber protective clothing (Gloves, Scrap Wellingtons)	The feedstock may contain any of these materials in any percentage order. The materials should be clean and as free of other foreign matter as possible within the limits set out below in the ‘undesirable’ section.	Minimum of 98% of material (by dry matter) must be hydrocarbon based
		The material should be shredded to the following target parameters: 0 to 10mm – 10% <25mm - 100%	25mm maximum shred size 3cm <sup>3</sup> maximum cube size
		The material should be as dry as possible, target moisture level 0%	Maximum 2% moisture. The cracker will cope with greater moisture % but performance will be greatly reduced
		Sulphur Content (from Vulcanisation) should ideally be less than 1%	Maximum 2%, higher levels of sulphur may need desulphurisation plant as a part of the project
<b>Undesirable Feedstocks</b>	P.V.C. and other chlorine containing plastics	Ideally all chlorinated plastics should be excluded i.e. Target = 0 %.	1% inclusion limit should be acceptable up to a maximum of 7kg per hour total of all chlorinated plastics  Excess chlorinated plastic inclusion will cause generation of chlorine which reduces the life of the plant and leads to increased maintenance.
	Non Hydrocarbon Materials with an MoH > 4 (i.e. <b>hard materials</b> ) – such as stones, glass, metals, ceramics, grit	100% of these materials should be removed , as they will damage the cracking machine leading to reduction in machine performance and an increase in maintenance costs	1% material allowed within the following parameters :  < 1mm – 100%
	Non Hydrocarbon Materials with an MoH < 4 (i.e. <b>soft materials</b> ) - such as talcum	100% of these materials should be removed , as they will eventually damage the cracking machine	2% material allowed within the following parameters :  < 1mm – 50%

## TDR Feedstock Specification

	powder, aluminium foil etc..	leading to reduction in machine performance and an increase in maintenance costs	1 – 2m – 50% >2mm – 0%  Please note that this tolerance is not in addition to the % allowable hard materials. Therefore if you have 1% hard material only 1% soft material is allowed. The maximum non-hydrocarbon content is 2%
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