

Examples of Further Noise Reduction Improvements Identified for a Corrugator and Associated Equipment

No	Noise Assessment recommendation	Cost
1	Noise labels to be placed on all new enclosure doors	£5.00
2	Noise labels to be placed on wall by baler house entry.	£5.00
3	Top line 90°-chain section air dump valve to be fitted with a silencer.	£30.00
4	Bottom line 90°-chain section air dump valve to be fitted with a silencer.	£30.00
5	Pallet pusher no 2 on return to home position from under the pallet hopper makes a squealing noise, to be repaired.	£00.00
6	Decal change / order change warning alarms noise recorded at Operators control station, we may be able to change these to flashing beacons.	£50.00
7	Out-feed of knife area noise level recorded 86 dB on Stacker operator's side steps, investigate if there can be anything done to reduce noise further in this area.	?
8	Shear when chopping out noise level of 88 dB, investigate if there can be anything done to reduce noise further in this area.	?
9	Liner and fluting Splicers when firing record high levels of noise 96 – 97 dB quick air dump valves to be fitted with silencers. <i>See Note Below</i>	£150.00
10	Bridge walkway, bridge brakes slipping / squealing, remove web guide and wrap paper over brake roller for better contact.	£00.00
11	B flute Brake unit on No7, reel stand operator's side squealing when running producing excessive noise, engineers to repair.	£500.00
12	Engineers to replace mixing tank alarm 120 dB with a quieter unit.	£50.00
13	Shredder waste piping bends by Despatch office area to be fitted with pipe lagging.	Quote to be obtained? £650.00
14	Trim waste piping bends by fire alarm panel area to be fitted with pipe lagging.	Quote to be obtained? £650.00
15	Remove temporary clamp truck as soon as possible, noise measured inside cab in the reel stores, corrugator not running, with full throttle 90dB.	£00.00
		£2130.00

At the point of splicing in the Splicers recorded noise levels of 98dB for a period of two seconds (LIKE A GUN SHOT). Two out of six Splicers were fitted with air dump silencers, as a trial and the recorded noise levels were reduced to 87 & 88 dB a reduction of 10 dB. The cost of these silencers per Splicer was £30.00. The silencers do not affect the Splicer's reliability see noise assessments below

Activity / Process assessed		
B' Flute No 7-8 Splicer, Splicing in web. Splice speed set at 130m/m. noise levels taken at operators control panel.		
Area	Peak noise level dB(A) Leq	Duration of exposure
Splicing in web from 8 – 7	98	2 seconds
Splicing in web from 7 – 8	98	2 seconds
Background noise level Corrugator running	87	8 hours
Quick air dump silencers fitted to all Splicer air valves 05.01.		
Splicing in web from 8 – 7	89	2 seconds
Splicing in web from 7 – 8	88	2 seconds
Background noise level Corrugator running	87	8 hours

Activity / Process assessed:

C' Flute No 1-2 Splicer, Splicing in liner. Splice speed set at 165m/m. noise levels taken at operators control panel.

Area	Peak noise level dB(A) Leq	Duration of exposure
Splicing in web from 2 - 1	97	2 seconds
Splicing in web from 1 - 2	97	2 seconds
Background noise level Corrugator running	86	8 hours
Quick air dump silencers fitted to all Splicer air valves		
Splicing in web from 2 - 1	87	2 seconds
Splicing in web from 1 - 2	87	2 seconds
Background noise level Corrugator running	86	8 hours