

## Health and Safety

## How noisy is a splicer?

A splicer uses compressed air, which for a brief period - about 1 to 2 seconds - is vented to atmosphere while the splice is being made. Air at perhaps 7 bar pressure escapes through a small blast hole, creating intense turbulence in a small volume. Noise is inevitable.

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| Hz | 63 | 125 | 250 | 500 | 1000 | 2000 | 4000 | 8000 | 16000 |
|----|----|-----|-----|-----|------|------|------|------|-------|
| dB | 47 | 52  | 57  | 63  | 74   | 89   | 92   | 93   | 95    |

In practice, splicers are barely noticeable in a textile mill. This is because the other mill machinery tends to be very noisy, and the sound of the splicer is lost in the general noise. Also, the blast only lasts for about one second. Nevertheless, in compliance with UK health and safety regulations, we recommend that ear defenders (to local standards equivalent to British Standard 6344 Part 1) be worn.

## What are the safety issues associated with splicers using compressed air?

All our splicers have been designed with safety in mind. The few moving parts have been enclosed or shielded to reduce the possibility of injury to the operator.

However, the splicers do use compressed air, and compressed air has the potential to cause injury:

- Compressed air is dangerous: avoid any bodily contact with it.
- Always follow the safety precautions recommended by the compressor manufacturer.
- Always ensure that unions and connectors are fully tightened and sealed, and that there are no leaks.
- Check the conditions of air supply lines on a regular basis. Always ensure that any flexible hoses are unblemished; if there are any cuts or abrasions to the outer surface of the hose, stop using the splicer and have the hose replaced by qualified personnel.
- Do not look into the working parts of the splicer when it is being operated.
- If a splicer malfunctions, do not use it until it has been repaired by qualified personnel.

For maintenance staff, additional advice is necessary. When cleaning or servicing is being carried out, access to the internal mechanism of the splicer is essential. Under these circumstances, maintenance engineers will be at greater risk than ordinary users. The engineer should adhere strictly to the following guidelines:

- Before undertaking any service work, disconnect the splicer from the air supply.
- During service work, exercise care while handling knives and springs.
- Under normal circumstances, always refit safety covers before reconnecting the splicer to the air supply.
- Under exceptional circumstances, it may be necessary for test purposes to reconnect the splicer to the air supply without its safety covers. While the splicer is being tested, wear protective gear and exercise due caution.