Use of Grouting Compound Beneath Baseframes

The purpose of this technical bulletin is to provide guidance on foundation requirements for compressor package units.

Grouting between the concrete floor or plinth and the package unit offers an even support to the baseframe which reduces vibration. An epoxy resin grouting compound is recommended because of its resistance to creep and vibration and its dimensional stability.

Screw Compressors

Screw compressor package units when mounted on a concrete floor and with individual compressor motors greater than or equal to 200kW should have the baseframe grouted.

The package unit should be set and leveled using leveling screws* fitted to the longitudinal channel sections either side of the unit and a nominal 30mm gap beneath the channel achieved.

Shuttering timber (or metal sheet) coated with non-melt grease, to prevent the resin adhering to it, is then fixed to the concrete floor and positioned 50mm away from the edge either side of the unit. This is also fixed on the inside edge of each of the longitudinal members, 25mm inboard of the longitudinal member. The shuttering should be sized to allow the grout to go 10mm over the top of the lower flanges.

There is no need for holding down bolts as the grout is run over the lower flanges. The concrete should be prepared by scrabbling to allow the grout to bond to the concrete and ensure foundation security.

The recommended material is EIP 435 Chockfast Red SG.

*There will be 3 off M20 levelling screws per longitudinal section.
Reciprocating Compressors

All reciprocating compressor package units mounted on a concrete floor or plinth and not supported by AV mounts should be grouted. The method used should be as above however the package unit will require holding down bolts.

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<tr>
<td>11-10-25</td>
<td>B</td>
<td>Bulletin re-written.</td>
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<tr>
<td>12-06-07</td>
<td>C</td>
<td>Method 1 removed and method 2 modified to remove the requirement for holding down bolts.</td>
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<tr>
<td>31-10-12</td>
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<td>Additional grout on inboard of baseframe to eliminate trapped air added</td>
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