Cell assemblies for reproducible multi-anvil experiments (the COMPRES assemblies)

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Table 6a. Drop-in parts list, 8/3 assembly

<table>
<thead>
<tr>
<th>Part</th>
<th>OD (mm)</th>
<th>ID (mm)</th>
<th>L (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LaCrO sleeve</td>
<td>3.60</td>
<td>1.85</td>
<td>6.33</td>
</tr>
<tr>
<td>Rhenium heater</td>
<td>8.00</td>
<td>5.44</td>
<td>0.6635</td>
</tr>
<tr>
<td>Alumina plug</td>
<td>1.55</td>
<td>-</td>
<td>2.1</td>
</tr>
<tr>
<td>Graphite/BNF/MgO cup</td>
<td>1.57</td>
<td>0.84</td>
<td>1.14</td>
</tr>
<tr>
<td>Graphite/BNF/MgO cap</td>
<td>1.57</td>
<td>0.38</td>
<td></td>
</tr>
<tr>
<td>Alumina thermocouple cover</td>
<td>1.57</td>
<td>0.22</td>
<td></td>
</tr>
<tr>
<td>Alumina thermocouple insulator</td>
<td>1.55</td>
<td>0.41 (4 holes)</td>
<td></td>
</tr>
<tr>
<td>Mullite thermocouple sleeves of</td>
<td>0.8</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>ZrO2-based cement</td>
<td>Cotronics 940 with activator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6b. Drop-in parts list, 10/5 assembly

<table>
<thead>
<tr>
<th>Part</th>
<th>OD (mm)</th>
<th>ID (mm)</th>
<th>L (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LaCrO sleeve</td>
<td>4.32</td>
<td>2.07</td>
<td>8.18</td>
</tr>
<tr>
<td>LaCrO base plug</td>
<td>2.56</td>
<td>-</td>
<td>0.99</td>
</tr>
<tr>
<td>MgO plug</td>
<td>2.54</td>
<td>-</td>
<td>2.21</td>
</tr>
<tr>
<td>MgO sample sleeve</td>
<td>2.54</td>
<td>1.85</td>
<td>1.78</td>
</tr>
<tr>
<td>Alumina thermocouple cover</td>
<td>1.57</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Alumina thermocouple insulator</td>
<td>1.55</td>
<td>0.41 (4 holes)</td>
<td></td>
</tr>
<tr>
<td>Mullite thermocouple sleeve</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZrO2-based cement</td>
<td>Cotronics 940 with activator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6c. Drop-in parts list, 14/8 step heater assembly (BGI style)

<table>
<thead>
<tr>
<th>Part</th>
<th>OD (mm)</th>
<th>ID (mm)</th>
<th>L (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>MgO end sleeve (bottom)</td>
<td>5.6</td>
<td>3.8</td>
<td>2.0</td>
</tr>
<tr>
<td>ZrO2 insulating sleeve (middle)</td>
<td>5.6</td>
<td>3.8</td>
<td>7.6</td>
</tr>
<tr>
<td>MgO end sleeve (top)</td>
<td>5.6</td>
<td>3.8</td>
<td>2.0</td>
</tr>
<tr>
<td>Mo plate (bottom)</td>
<td>3.8</td>
<td>1.0</td>
<td></td>
</tr>
<tr>
<td>LaCrO furnace sleeve (thin, bottom)</td>
<td>3.8</td>
<td>2.9</td>
<td>3.1</td>
</tr>
<tr>
<td>LaCrO furnace sleeve (thick, middle)</td>
<td>3.8</td>
<td>2.6</td>
<td>2.7</td>
</tr>
<tr>
<td>MgO spacer</td>
<td>1.6</td>
<td>0.35</td>
<td></td>
</tr>
<tr>
<td>Sample + capsule</td>
<td>1.6</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>Alumina thermocouple cover</td>
<td>1.57</td>
<td>0.36</td>
<td></td>
</tr>
<tr>
<td>LaCrO furnace sleeve (thin, top)</td>
<td>3.8</td>
<td>2.9</td>
<td>3.1</td>
</tr>
<tr>
<td>MgO thermocouple sleeve</td>
<td>2.9</td>
<td>1.8</td>
<td>3.1</td>
</tr>
<tr>
<td>Mo ring</td>
<td>3.8</td>
<td>1.8</td>
<td></td>
</tr>
<tr>
<td>Alumina thermocouple insulator</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mullite thermocouple sleeves</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZrO2-based cement</td>
<td>Cotronics 940 with activator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 6d. Drop-in parts list, 14/8 "G2" box heater assembly

<table>
<thead>
<tr>
<th>Part</th>
<th>OD (mm)</th>
<th>ID (mm)</th>
<th>L (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>ZrO2 End sleeve</td>
<td>6.32</td>
<td>2.44</td>
<td>2.56</td>
</tr>
<tr>
<td>Molybdenum ring</td>
<td>2.40</td>
<td>1.70</td>
<td>3.40</td>
</tr>
<tr>
<td>Stuffing ring</td>
<td>1.68</td>
<td>3.40</td>
<td></td>
</tr>
<tr>
<td>ZrO2 Middle sleeve</td>
<td>6.32</td>
<td>5.18</td>
<td>6.35</td>
</tr>
<tr>
<td>Graphite furnace sleeve</td>
<td>5.16</td>
<td>4.62</td>
<td>6.35</td>
</tr>
<tr>
<td>Graphite furnace end sleeve</td>
<td>4.60</td>
<td>2.38</td>
<td>0.76</td>
</tr>
<tr>
<td>MgO cap</td>
<td>4.60</td>
<td>0.85</td>
<td></td>
</tr>
<tr>
<td>MgO sleeve</td>
<td>4.60</td>
<td>3.57</td>
<td>3.2</td>
</tr>
<tr>
<td>Capsule + sample</td>
<td>3.5</td>
<td>3.2</td>
<td></td>
</tr>
<tr>
<td>MgO end-sleeve</td>
<td>4.60</td>
<td>1.59</td>
<td>0.85</td>
</tr>
<tr>
<td>Alumina thermocouple cover</td>
<td>1.57</td>
<td>0.36</td>
<td></td>
</tr>
<tr>
<td>Grooved ZrO2 end-sleeve</td>
<td>6.32</td>
<td>2.44</td>
<td>2.67</td>
</tr>
<tr>
<td>Grooved moly ring</td>
<td>2.40</td>
<td>1.70</td>
<td>3.40</td>
</tr>
<tr>
<td>Alumina thermocouple insulator</td>
<td>1.6</td>
<td>0.41</td>
<td></td>
</tr>
<tr>
<td>Mullite thermocouple sleeves</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ZrO2-based cement</td>
<td>Cotronics 940 with activator</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: The parts are listed in order of assembly. The superscript letters refer to the materials listed in Table 1.