

Technical Literature G-14

## AURUM<sup>®</sup> Press Molding Method (Example)

### 1. Recommended Equipment to Be Used

- |     |                  |                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-----|------------------|----------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) | Press spec.:     | Heating platen size:<br>Max. mold clamping pressure:<br>Temperature:                   | 250 x 250 mm or larger<br>10 tons<br>Capable of molding at 400°C (max. 450°C)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| (2) | Dryer spec.:     | Temperature control range:                                                             | From normal temperature to 300°C                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| (3) | Press jig spec.: | Sample frame:<br><br>Press plate:<br><br>Mold releasing film:<br><br>Drying container: | The outside dimensions shall be approx. 60% of the heating platen dimensions. (Ex. 150 mm).<br>The inside dimensions shall be approx. 70% of the outside dimensions. (Ex. 110 mm).<br>A recommendable construction material is stainless steel SUS304.<br>The dimensions shall be 1.3 times the outside dimensions of the sample frame (Ex. 200 mm).<br>The film shall be cut to a size about 1.2 times as large as the outside dimensions of the press plate.<br>UPILEX film (Ex. Grade 50S/508 mm wide, 100 m long)<br>A preferable drying container is a stainless steel container with a lid. |

### 2. Molding Procedures

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|-----|------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (1) | Preparations     | The resin shall be dried at 200°C for 3 hrs or longer. (If drying is insufficient, voids will be formed in the molded articles.)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| (2) | Pressing method: | Press samples shall be prepared in the following order:<br>Top side: Press plate/mold release film/resin/sample frame/press plate (bottom side)<br>Refer to the attachment.<br>Heating platen temp.: Ex. Natural 400°C<br>Preheating shall be carried out with the heating platen brought close to such location that pressure will not be applied.<br>Promptly after completion of preheating, pressure shall be applied.<br>Air shall be vented as required.<br>Promptly after completion of press molding, the sample shall be removed from the heating platen and cooled. (If necessary, the sample shall be cooled by use of a cooling press.) |

The information contained herein is based on the information and data available at this moment, but none of the data or evaluation results contained herein provide any warranty whatsoever.

3. Other Precautions

- (1) Pressing    The heating temperature, preheating time, pressurization force, pressurization time and cooling time vary with the shape of the sample, etc.  
Condi         and cooling time vary with the shape of the sample, etc.  
tions:         Air venting shall be carried out by repeating pressurization and pressure release several times.

**Heating platen top side**

**Press plate**

**UPILEX film**

**AURUM**

**Sample frame**

**UPILEX film**

**Press plate**

**Heating platen bottom side**

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