



For Immediate Release  
General Distribution

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### **Sumitomo's New HP+ Delivers Super-Fast Filling and Braking**

(Booth #6550, NPE 2000, Chicago, IL)... Sumitomo Plastics-Machinery has expanded its advanced processing capabilities with the introduction of the HP+ Option for injection molding applications requiring high injection pressures with super-fast filling and braking.

Equipped with the new HP+ Option, Sumitomo's SGM ultra-high speed toggle clamp machines reach a maximum injection velocity of **78.7 in/sec (2000 mm/sec)** with 8.0 msec response from 10 to 90%, and a braking response time of 5 msec.. Equally important, HP+ machines are also able to deliver maximum injection pressures up to **47,210 psi (3320 kg/cm<sup>2</sup>)** at these speeds.

Platen rigidity for machines with the HP+ Option has been increased to 2 times the standard SGM platen rigidity. The exceptionally fast response in these machines is achieved with a new, high-capacity, digitally controlled servo valve. The combined capabilities allow high-precision, super-fast filling (approximately 6 times faster than a standard machine), increased flow length and uniform pressure, but no overfilling or flash due to the extremely fast braking.

Sumitomo is demonstrating the HP+ on an SG100M (110 US tons) running a 2-cavity, thin-wall battery pack case mold on a 16.8-second cycle. The part weight for the polycarbonate cases is 0.08 oz (2.16 g).

Applications for the HP+ option include: parts requiring increased resin flow rate, thinner walls or mixed thick/thin walls, reduced part weight and cooling time, elimination of weld lines and improved skin layer formation.

The HP+ Option is offered for 110 & 198 US ton models with C170, C220, C450 and C570 plasticizing units, for shot sizes ranging from 1.9 to 6.0 ounces (PS).

**(MORE)**

**[Sumitomo's New HP+ Delivers Super-Fast Filling and Braking...continued]**

Other advanced processing capabilities available from Sumitomo include:

- Press  $\alpha$ —Compression/oscillating system, available from both the fixed and moving platens, that actuates compression pins in the mold during the hold stage.
- ULTRA—Injection compression system that for stable, precision clamp positioning and multi-stage control during injection, and fast-response, complete mold closing during fill or hold stage.
- HP Option—Allows SGM Series machines to reach an injection velocity of 800 mm/sec in .01 seconds and brake from 800 mm/sec to 0 in .005 seconds.

Sumitomo Plastics-Machinery provides a complete line of injection molding machines, from 20 to 716 US tons, including general purpose, all-electric, hydraulic, ultra high-speed toggles and disc molding systems.

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