

After this background work, batches 8 and 9 were produced on 24 November 1964. The roll temperatures were held as low as possible and the amount of fines recirculated as rework was limited to 750 pounds per 2000 pounds of raw mix. At the conclusion of the run, the preform delay test was run and, as expected, the delay times for the new batches were considerably improved over that of batch 7. The customer ran a sample of one of these new batches and confirmed its improved molding latitude.

Although the new batch of BMMA-5715 ran well on Cutler's standard impact jobs, there was one additional requirement to be met. Several months before the customer had purchased a 150 ton Stokes Injectoset press on which they planned to run additional impact jobs. They said that before the BMMA-5715 would be approved, it would have to run successfully on both the Injectoset and standard presses. An initial evaluation of batch 8 on the Injectoset proved to be unsuccessful, because the molded parts shrank too much upon discharge from the mold. Stokes personnel were called in to check out the press, and by making a slight modification to the heating system, batch 8 was found to run with no difficulty. After this evaluation, Cutler placed an order for 20,000 pounds of this material, still in the special grade 16.

On 9 February 1965, batches 11 and 12 were produced. This run was followed by two 40,000 pound runs; one on 17 July 1965 and another on 31 August 1965. No particular processing problems were encountered during these runs and none are foreseen for the future, provided that the attached manufacturing instructions are followed exactly. It is therefore recommended that BMMA-5715, grade 15 and softer, be transferred to final manufacturing status.

Because there has been no demand for grades 9 and 12 of the BMMA-5715, no production quantities have yet been made, and consequently, manufacture of these stiffer plasticities, if required, will be supervised by development personnel. It has been found that plasticity control of pilot plant batches of these stiffer materials can be eased considerably by using BRN-5351 resin modified with 0.5% lime. When it becomes necessary to produce a larger quantity of BMMA-5715 in grade 9 or 12, it will be made with resin so modified.

Cutler Hammer requires that all materials used on impact jobs be qualified under the standard military specifications, and thus work is in progress toward obtaining military qualification for the BMMA-5715. The material will be tested under MIL-M-14F specifications, type CFG (cellulose filled general purpose material). Laboratory tests have shown that the product should meet all requirements and work is presently in progress to arrange for the molding of samples and their subsequent testing under official auspices.