

Application of Innovative Manufacturing Technologies

Shionogi strives to improve its manufacturing technologies through research in the manufacture and formulation of medicine as well as its quality evaluation. From the standpoint of emphasizing “Customer Focus”, “Trust”, and “On-Site Orientation,” which are elements of Shionogi’s Action Norm (“The Value”), the Company has undertaken extensive projects to develop and improve formulations, aiming to provide medicines that are easier for patients to take and for medical professionals to prescribe.

“Easy to take” Granules for Children

Parents often come across difficulty in making their children take a medicine owing to its unpleasant taste or smell, and even if the children swallow the medicine, they may spew it out together with what they ate just before swallowing the medicine. Medicines are often dispersed in water or fruit juice when



The diameter of Shionogi’s fine granules has been reduced.



After the improvement measures, large granules have been eliminated and the average diameter of granules has been reduced. This reduces the rough feeling of the granules and increases the ease of administering the granules.

prescribed to infants. This treatment is sometimes troublesome, so Shionogi has developed Flomox Fine Granules for children which quickly disperse in solution by slight stirring. For children who want to take the granules without solution, Shionogi applied its taste-masking technologies to the granules and enhanced sweetness by modifying the formulation process.

A New Protective Bottle Filler for Tablets

A molded plastic bottle filler or polyethylene (PE) film filler is usually inserted into the top of the bottle to prevent tablets from such damage as breakage, cracking, or defacement during transportation. However, the plastic bottle filler is not easily removed, and the tablets are sometimes entangled with the PE film filler. To solve these problems, Shionogi has developed a new protective bottle filler for tablets. The new bottle filler, made of polyethylene, is prepared by rolling a cylindrical net into a several-layer ball having a stem on the top. It has superior shock-absorbing ability thanks to its high level of elasticity, and can easily be removed from the bottle by pulling out the stem. Moreover, the filler has some other outstanding characteristics; the size of the filler is easily adjusted so that it can be applied to different sizes of containers. We have filed patents on this filler and registered its trademark, “TabGuard”, and applied this to bottled medicines, such as Irberan®, Pirespa®, and Crestor®.



Prevention of Medication Errors (To Ensure Right Medication)

In Irbetan® and Pirespa®, the product name and dosage are displayed on each pocket of the press-through packages (PTPs*) of the medicines. Therefore, even if a PTP sheet is divided into pieces, patients can find the name and dosage in each piece, which prevents the patients from misuse. Furthermore, in Irbetan®, the dosage, Shionogi’s logo, and recognition code are alternately printed on both obverse and reverse sides as well as on either side of the score line of the tablet, so that the name and dosage of the medicine can be recognized even when divided in half.

*PTPs: Press-through packages (PTPs) hold drug tablets in individual pockets that can be pressed with a finger to push the tablet through the backing.

