



Original Innovative
Pharmaceutical Technology

SAWAI HARMOTECH[®]

Striving for a world in which "Good medicine tastes 'better' to the mouth!"

Making generics easier to take, easier to handle, and more accessible.

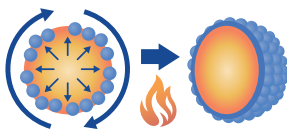
Sawai Pharmaceutical aims for a future in which "Good medicine tastes better to the mouth"
becomes a matter of course through its innovative pharmaceutical technology.

SAWAI HARMOTECH® offers six different technologies to enhance drugs.

Technology that makes it easier to swallow medicine and makes medicine more portable, easier to handle, and easier to store...

SAWAI HARMOTECH® is a term for Sawai Pharmaceutical's original innovative pharmaceutical technology that adds value to generic drugs and harmonizes pharmaceutical formulations.

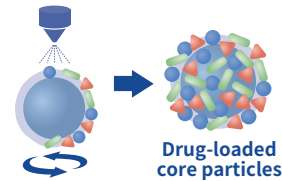
MALCORE®



“Dry-coating” technology for the manufacture of drug-loaded core particles

Drug-loaded core particles can be prepared by heating without any solvents!

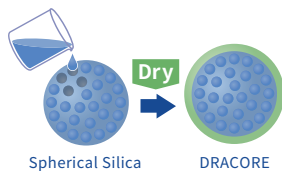
QALCORE®



“Wet-coating” technology for the manufacture of drug-loaded core particles

Drug-loaded core particles can be prepared by using a gelatin-like core with a small amount of water!

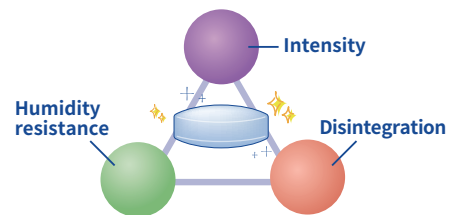
DRACORE®



“Adsorption” technology for the manufacture of drug-loaded core particles

Drug-loaded core particles can be prepared by adsorption of the drug solution into porous carriers!

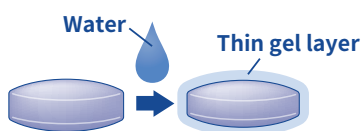
SARAMEL®



“Rapidly dissolving” premix excipients

SARAMEL®, Sawai's original mixture of four excipients provides tablets with “strength,” “moisture-resistance” and “immediate disintegration”!

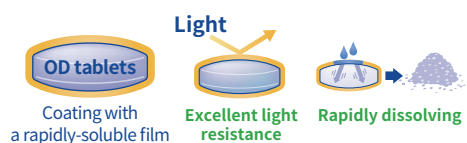
THRUCOAT®



Film-coating technology for “smoothly swallowable” dosage form

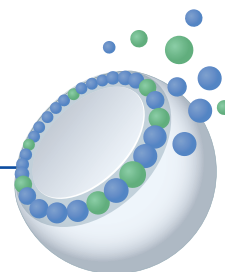
The coated film on surface of tablet will become gelatinous by contact with water allowing for smooth swallowing with less force.

SARACOAT®



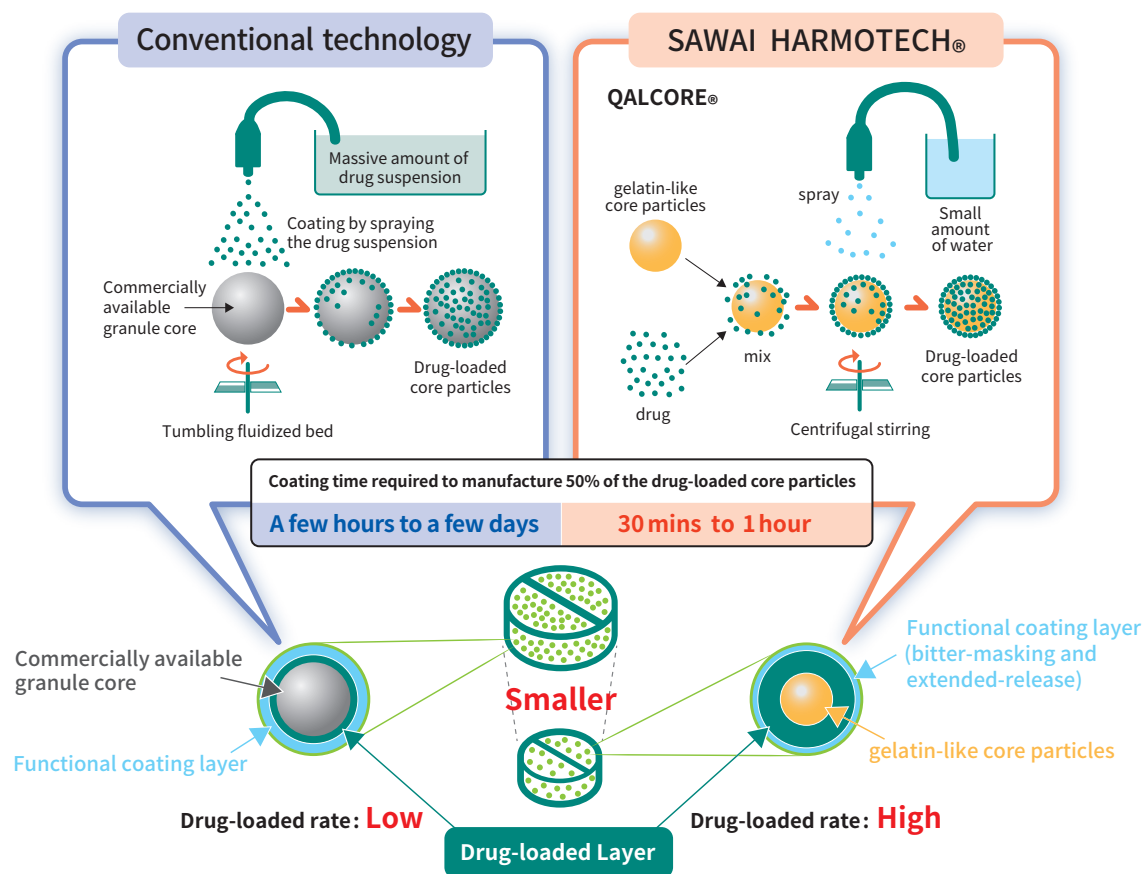
Film-coating technology for orally disintegrating (OD) tablets

The technology not only makes tablets photo-resistant, but also rapidly dissolvable! Film-coating technology is now applicable to OD tablets!



Pursuit of reduction of oral tablet and more stable supply.

As a conventional drug-layering technology, commercially available granule cores are coated with a drug suspension to manufacture drug-loaded particles. Due to the limited size of the commercially available particle cores, smaller granule cores cannot be manufactured with conventional technology making the coated granule cores larger in size. In addition, a substantial amount of time is required for the uniform coating of drug particles, resulting in poor production efficiency. Sawai has established an agitating granulation technology in which the mixture of drug and sticky “gelatin-like core particles (partly pregelatinized starch),” which are smaller in diameter than the general granule cores, are sprayed with water. The surface of the resulting drug-loaded cores can be coated by a functional ingredient such as a pH-dependent or pH-independent polymer in order to mask any undesirable taste including bitterness.



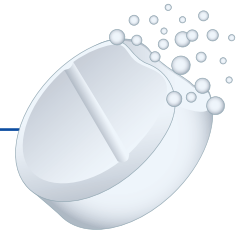
Because this technology enables the manufacture of highly drug-loaded particles, the number of particles required per tablet is reduced, leading to a reduction of the tablet size. Additionally, the drug products containing highly drug-loaded particles are smaller in diameter and feel smoother in the mouth, resulting in improved mouthfeel. Furthermore, the reduced coating time improves production efficiency, resulting in a contribution to a stable supply.

※ Patent : Jpn. Unexamined Patent Publication 2021-130618 (foreign application or registration submitted)

Featured Technology

SARAMEL®

"Rapidly dissolving" premix excipients



Pursuit of development of high quality drug products.

Tablets, especially orally disintegrating (OD) tablets, are required to (1) be strong enough to withstand handling during the distribution process, (2) disintegrate with a small amount of water when orally taken and (3) be moisture resistant (preventing tablet damage due to deterioration of tablet hardness and tablet swelling from moisture). A drug product is therefore expected to possess these contradictory properties in a well-balanced manner. Although the development of the OD tablet requires meeting this expectation, it can be difficult to achieve. Sawai has addressed these specific challenges and developed an original premix formulation of excipients (SARAMEL®) with the properties required for OD tablets. SARAMEL®, comprised of commonly used excipients, can be used in various formulations, facilitating efficient development and high-quality drug products.

Easy to handle!

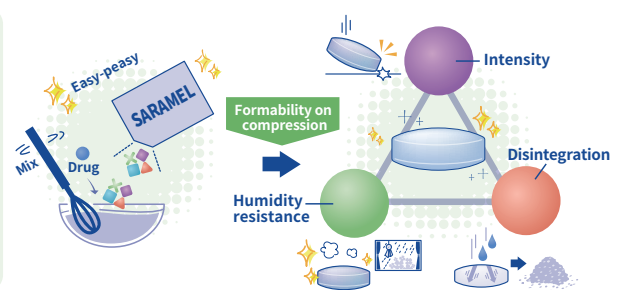
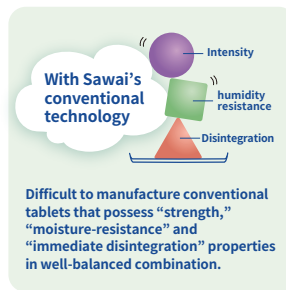
SARAMEL® will be given to tablets highly strength and moisture-resistant property and thus improves the handling ability of the tablets.

High manufacturing efficiency

SARAMEL® improves the tablet manufacturing efficiency and thus contributes to a stable supply.

Applicable to various drugs!

SARAMEL®, comprised of common excipients, can be applied to various drugs and is being extensively used in many products.



※Patent : Pat. No. 6606287 (foreign application or registration submitted) and Pat. No. 6651638 (foreign application or registration submitted)

Featured Technology

THRUCOAT®

"Film-coating" technology



Pursuit of improved ease of oral intake.

As insoluble or poorly absorbable drugs have been increasingly developed in recent years, many newly developed products are comprised of a large amount of drug substance. Consequently, the tablets developed are large in size. Additionally, if the drug substance load is reduced to make a miniaturized tablet and improve the ease of oral intake, more tablets have to be taken orally per dose, potentially leading to poor patient adherence. To achieve easy swallowing of a large tablet or multiple tablets, Sawai has developed a new tablet-coating technology by using a particular polymer and gelatinizing agent. Regarding the film-coating technology (THRUCOAT®), a gelatinous layer will be formed on the surface when the coating comes in contact with the water used for oral intake, reducing the resistance when passing through the throat. The tablets coated with a mixture of a particular polymer and gelatinizing agent in a specific ratio are designed to release the drug after swallowing.

Easy to swallow a large tablet!

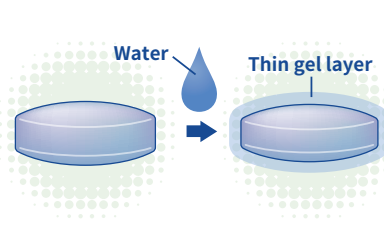
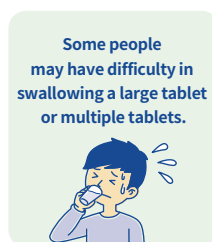
The gelatinous coating film helps patients swallow a large tablet.

Easy to swallow multiple tablets!

Sawai's invention also helps patients swallow multiple tablets.

Applicable to various drugs!

Highly versatile formulation that will be applied to various drugs.



※Patent : World Patent Publication WO2020/179736 (foreign application or registration submitted)