

Toyota Kohki Co., Ltd., Tokio, 183-0035 Japan

# Mold for integral drainage

Because of diversified products designs, various purposes, design complexity, and high-standard quality control, wet-cast concrete products have been more widely used than dry-cast concrete products throughout Japan. Along with the intense product design development and the product quality control, productivity and quality of molds have naturally been developed and cultivated over the years. Toyota Kohki Co., Ltd. seeks to develop its quality and technologies to respond these high standard demands. In their over 45 years long experiences, what they have been researching is how they can provide workers/operators the Toyota's molds that are easy and safe to operate, long-life to use, and easy to de-molding, setting, and cleaning.



Fig. 1: All the inner cores are able to be collapsible in one-touch by hand

In this issue, the mold for integral drainage (lid-integral type drainage) which largely constructed in Japan is introduced. As shown in the figure 1, various types of integral drainages have been designed and manufactured throughout Japan. Recently water-permeable roads are popularly con-

structed. A new designed drainage has the ability that allows the permeated water from the road to be flowed into the drainage through its side holes. To manufacture this type of the integral drainages, the easy operation of the inner core plays such an important role in the whole productivity. All



Fig. 2: Mold with roll-back type inner core



Fig. 3: The inner core is hung from one side with sliding rail

the inner cores shown in figure 1 are able to be collapsible in one-touch by hand. This enables to separate the inner core from the

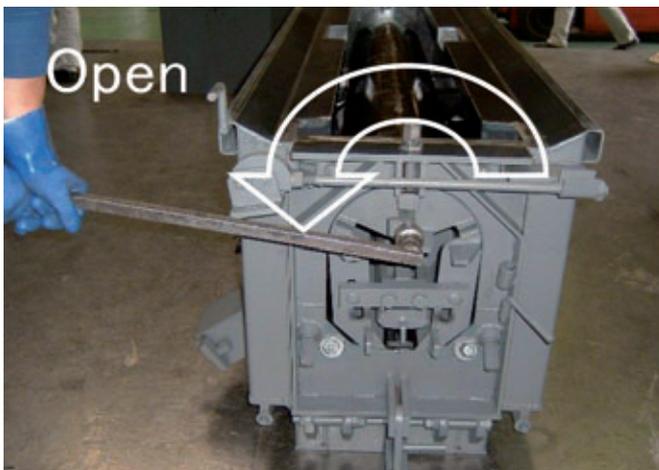


Fig. 4: the inner can be closed....

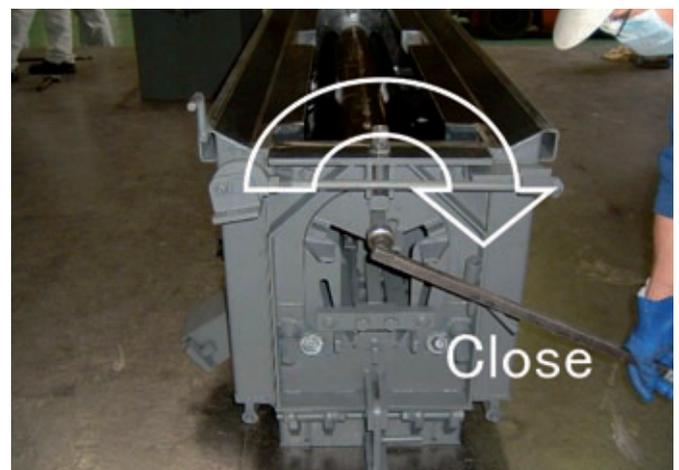


Fig. 5:...and open in one-touch by hand

concrete, and make it easy to demold. There are many ways to move the inner core away from the concrete product, such as roll-back type (by human hand), automatic type (by a special machining), or gooseneck type (by a crane depending on the individual customers' requests. The molds shown in figure 2 and 3 are with the roll-back type inner core. The inner core is hung from one side with sliding rail. This makes easy and safe to demold and clean.

As shown figure 4 and 5, the inner can be opened / closed in one-touch by hand and hydraulic device is not needed at all. Since the operation has been done by human hand, it can be easily realized if any inappropriate situation occurs such as a case that clogs are left due to the poor cleaning.

The molds are all with gasket rubber to prevent the concrete from leaking. Replacing the gasket material is only the necessary maintenance for this type of mold. This is why Toyotaforms can be used for many years as long as the molds are well-cleaned. Moreover, many artifices and innovations can be found throughout the

Toyotaforms such as demolding of the side hole-formers for gathering the permeated water from the road and slit-part on the base pallet of the mold, or any for better precast concrete products.

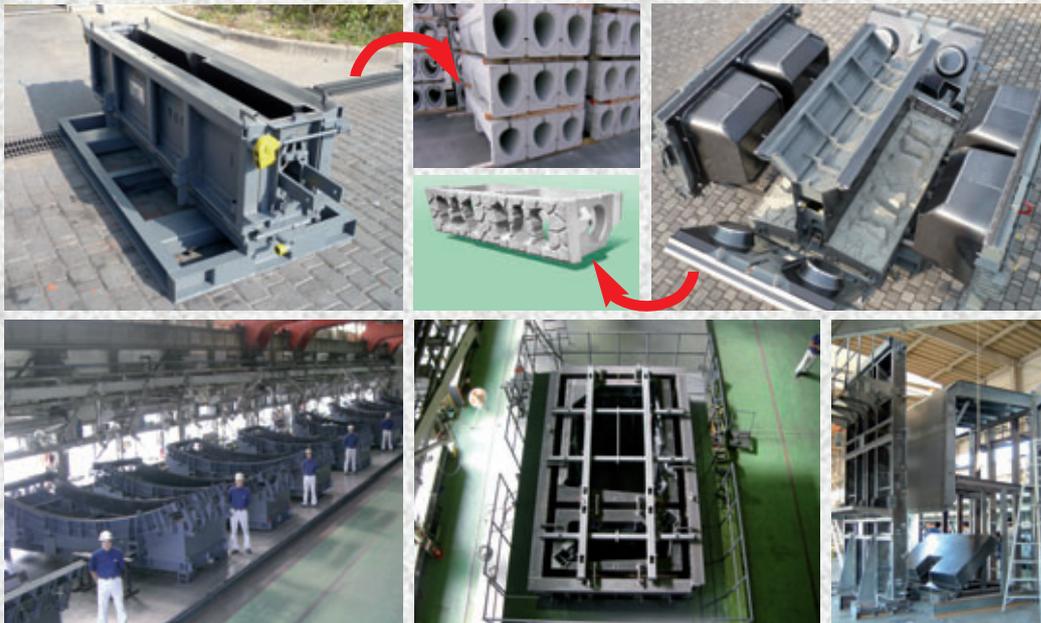
Since its foundation of 1966, Toyota Kohki has been developed its technologies and contributed to the concrete industry as a leading mold manufacture company in Japan. Toyotaforms that is water-tight, high durability, high productivity, and ease of use, now have widely been used more and more countries.

FURTHER INFORMATION



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