

**Fig.8-1** The intent to release models of U.S. and European prototypes in 1/160 scale was published in the advertisement page of “Tetsudou Mokei Shumi” (TMS, Hobby of Model Railroading published in Japan), No.199, Jan., 1965 around one year before the release of the first Japanese prototype model at the end of 1965. (Cooperated by Kigei Publishing)

**Fig.8-2** In the first catalog of 1967, cf. P172-173, there was statement that Kato had decided to start designing N-Gauge models and the small investment to it would enrich modeler’s every day hobby life. This was a message of intent by Yuji Kato to popularize N-gauge railroading, referred to as 9mm gauge at that time in Japan.

**Fig.8-3** The first high-performance drive unit, newly developed for the original production ALCO PA-1, had a solid diecast frame to which all drive parts were tightly affixed. Two diecast plates were attached under the bottom of the main diecast frame with an insulating sheet (Not shown) inserted between them to separate the polarity for power supply. In later productions, the drive unit was modified to use a small FM-5 motor, cf. Fig.6-67, using the same mechanism structure. The structure of this drive unit was devised by Miyoko Kato, the wife of Yuji Kato and the managing director of Sekisui Kinzoku. One of the policies by Sekisui Kinzoku that continues to this day is to repeatedly improve and modify designs in order to maintain the best possible quality. Many copies of the PA-1 in various paint schemes were delivered in the US and in Japan along with smooth side passenger cars in four different body styles.

**Fig.8-4** The Con-Cor catalog in 1967/1968 was printed in blue and pink colors before its development into a luxurious color catalog. Already the J3a is listed as the "4-6-4 Hudson" steam locomotive alongside the PA-1.

**Fig.8-5** This picture shows a manual of N-scale model railroading published by Con-Cor. It conveys the dealer's enthusiasm to spread N-gauge in the U.S. using products by Sekisui Kinzoku.

**Fig.8-6** The J3a was the first large steam locomotive developed by Sekisui Kinzoku in 1969. There were various paint schemes for the locomotive as well as the smooth side passenger cars released at almost the same time. The picture shows a model from the original production for New York Central, where a hook type coupler is attached on the front of the locomotive. After some modifications later in its production, the surface of the drive wheels was changed from a machined zinc alloy to a plated one in order to improve electrical pickup, in addition to painting the trucks in a matte black, and adding grooves to the eccentric rods.

**Fig.8-7** The Con-Cor catalog in 1987 celebrating its 25th anniversary included many products by Sekisui Kinzoku such as various steam locomotives, passenger cars and freight cars of different road names in addition to the PA-1, PB-1, and DL109. Diesel locomotives with undecorated shells were also delivered in Japan. (Cooperated by James Conway, Con-Cor)

**Fig.8-8** The front view of the hall for the Toy Fair (Spielwarenmesse) in Nürnberg, Feb., 1983.

**Fig.8-9** From left to right, Dr. Moser of Hobbytrain, Yuji Kato, Mr. Pfusterschmid, and Mr. Conway of Con-Cor in Nürnberg, Feb., 1983.

**Fig.8-10** Staff from Transmondia, the famous model shop dedicated to N-gauge in Paris, in the Hobbytrain booth. Kato produced the TGV as a new item which went on to be the starting point of Kato’s continued production of European models to this day.

**Fig.8-11** The Hobbytrain booth where KATO demonstrated their original items. Both the names of Hobbytrain and KATO can be seen at the top of the booth front. Nürnberg, Feb., 1983.

**Fig.8-12** The TGV Sud-Est, the first European prototype model, was released in 1983. The model was composed of a basic and an add-on set of six and four cars, respectively. The original products were packed in paper boxes, while the now-common book cases were used with later productions.

**Fig.8-13** The first OEM (Original Equipment Manufacturing) model for the European market was the Swiss Federal Railways Re6/6, with two color variations of dark green and orange red released by Hobbytrain. The symbols of states were printed on stickers and were user applied, while they were directly printed on the body when the original products were first released.

**Fig.8-14** In 1986, OEM models of the Re4/4 I were released by Hobbytrain. The Re4/4 I has many variations in both of shape and color. There were two variations used in the most popular TEE (Trans Europe Express) model. One model had an emblem of a crosshair on the front, which was prepared for the European market. Recently, some of these models have been produced again and released under the KATO brand.

**Fig.8-15** The BR57 in KPEV (Königlich Preußische Eisenbahn Verwaltung) colors, released by Hobbytrain, is the probably the most beautiful European steam locomotive produced by KATO. Despite the fact that all ten wheels have flanges, the locomotive can pass along sharp curves thanks to the second to fourth drive wheels moving independently in the transverse direction.

**Fig.8-16** This picture shows the original release RAeII for the TEE "Gottardo" and "Cisalpin" delivered by Hobbytrain in 1989. The RAeII prototype was very popular worldwide and became a representative OEM model for

Hobbytrain manufactured by KATO. The model had unique features such as vertically separated bodies for the reproduction of sharp color boundaries and of electrically connected couplers for the stable power pickup. Recently, an improved model was released under the KATO brand, where, for example, the fitting of windows parts to the bodies were improved. In addition to the TEE colors, Euro City versions in gray two-tone colors were also released in both productions.

**Fig.8-17** The first model of German high-speed railcars, "VT Köln", comprised of three cars was released by Hobbytrain in 1988. Five different models of DRG/SVT137, DR/SVT137 and DB/VT06 in four paint schemes were prepared. The picture shows the model of the international express train "Vindobona" in DR (Deutsche Reichsbahn). In 1992, the model of the "Fliegender Hamburger" composed of two cars was released by KATO. Four different models of DRG/SVT877, DB/VT04 and SWDE/VT04 in three paint schemes were produced. Furthermore, in 2004-2006, the model of "Bauart Hamburg" composed of two cars were released by KATO, where eight different models of DRG/SVT137, /SVT183, DR/VT137 and DB/VT04 in six paint schemes became available.

**Fig.8-18** The models of BLS Ae8/8 and Ae4/4 (not shown) in Switzerland were produced as OEM models for Hobbytrain, which have small front decks and emblems of the state on the body.

**Fig.8-19** The KATO booth at Nürnberg Toy Fair in February, 2016. KATO had been exhibiting in its own booths at this show for 30 years.

**Fig.8-20** The DR/VT18.16 in DDR (Deutsche Demokratische Republik) was the first model produced in collaboration with NOCH in Germany. Models in four different paint schemes in a similar color were released.

**Fig.8-21** Mr. James Conway, the president of Con-Cor and Mrs. Patricia Conway in the garden of their house. May, 1986.

**Fig.8-22** The building where KATO USA Inc. was located at the time of its establishment in 1986, still exists in Arlington Heights, Illinois. May, 2016.

**Fig.8-23** When KATO USA was established in 1986, Hiroshi Kato and Yuji Kato, the chairperson emeritus of Sekisui Kinzoku, visited the house of Mr. Keith Edward and Mrs. Coral Edward in Medford, Oregon. Thereafter, Mr. Keith Edward became independent of Kadee and founded Micro-Trains.

**Fig.8-24** Hiroshi Kato visited the office of Model railroader and explained KATO Digital System using HO-gauge UNITRACK in front of Mr. Russ Larson, the editor-in-chief at that time.

**Fig.8-25** The GP38-2 was released as a new item for the U.S. market when KATO USA Inc. was established. It was an ambitious model, with a flywheel based drive unit used for the first time prior to the EF81.

**Fig.8-26** Models of the EMD F3, a popular diesel locomotive from the past, were released in 1989, followed by models of the EMD F7.

**Fig.8-27** In 1995, KATO USA Inc. had a new building constructed in Schaumburg, Illinois.

**Fig.8-28** The first Sekisui Kinzoku showroom was located along Meiji street in Takatanobaba, Shinjyuku in Tokyo. The objectives of the showroom were the improvement of after-sale service and the popularization of N-gauge rather than the sale of products there.

**Fig.8-29** In early days of the showroom in Takatanobaba, cards describing the name of merchandise were inserted into a ticket holder, similar to those used in a train station, and were used to check on daily sales tallies.

**Fig.8-30** When the number of produced items was still fairly small, a maintenance manual with an exploded view of the individual model and the list of component parts was prepared and distributed to retail shops along with a box of parts needed for maintenance.

**Fig.8-31** The showroom was moved to the second and the third floors of the company head office in Nishiochiai and was rebranded under the name "Hobby Center KATO" in order to offer a wide range of services to users.

**Fig.8-32** An Osaka showroom was established neighboring Nankai Electric Railway's Nanba station located in the southern part of downtown Osaka. The showroom later changed its name to "Hobby Center Osaka". In those days, there was also a service center in Hakata, Fukuoka in Kyushu.

**Fig.8-33** Hobby Center Osaka, having done business for many years since it had moved to Esaka, shifted to "KATO Model Trains Kyoto Station" as a service base to users in March, 2016.

**Fig.8-34** Hobby Center KATO has produced original models since it first opened. The first item was the testing car KUMOYA in a few different colors, which was produced via a simple change of color from the goods electric car JNR KUMONI 143 in the original two-tone colors of orange and green. The second model was the JNR EF58 4 classic electric locomotive. The prototype had a special color experimentally prepared for the limited-express train "Tsubame (swallow)" (not shown). In these models, the boundaries of different colors were accomplished by using

separately mounted paint masks.

**Fig.8-35** In the 1990s, original train sets were released by Hobby Center KATO. This picture shows a JR Series 205 electric commuter train in Saikyo line color, where only the color of stripes was changed from light green to green based on the existed model of Yamanote line, keeping the smaller door windows unchanged. There was a basic set of six cars and an add-on set of four cars. In 1994, KATO released the same train as a standard item, this time precisely reproducing the larger door windows.

**Fig.8-36** A trial attempt to produce number plates for a JNR EF57 electric locomotive by etching a metal plate. The number plate was not released officially and it was replaced by one made of plastic.

**Fig.8-37** KATO Model Trains Kyoto Station was opened on the ninth floor of the station building in 2016, moved from the Hobby Center Osaka. The items, surrounded by the Japanese interior designed along the tradition of Kyoto, fascinate all visitors.

**Fig.8-38** The model of the KURO 280-9 of JR West limited-express electric train Series 281 "Haruka" for access to the Kansai Airport from Kyoto was released celebrating the opening of the new KATO shop in Kyoto. With a special glossy paint representing the fresh appearance of the prototype, only a head car was selected for production from the existing train set of six cars.

**Fig.8-39** Special "Train sets in chipboard-boxes" were specially prepared in celebration of store's opening. Users could select a favorite model combined with a standard power pack and an oval of track. These sets were available only in the KATO Model Trains Kyoto Station store as limited items.

**Fig.8-40** This picture shows a local train crossing the Landwasser viaduct which is a highlight of the Rhätische Bahn (RhB) in Switzerland. The famous "Glacier Express" operates between Zermatt and St. Moritz using also the track of Matterhorn-Gotthard Bahn (MGB). There, passengers can experience travel where the rails traverse steep hills with the help of racks and overlapping loop lines all while enjoying beautiful landscapes from the windows. Along the Bernina line stretching southward from St. Moritz, the train runs around a glacial lake and descends the mountain in a short distance following a zigzagging path. The train passes along a loop line and tracks which are compatible with roads, before finally arriving at Tirano, the terminal in Italy.

**Fig.8-41** At Disentis/ Mustér in Switzerland, traditional music is played via the horn for the enjoyment of passengers in the train of regular service. Many trains from St. Moritz are composed of twelve coaches. However, this train is divided into two trains of six coaches from here to Zermatt because of the use of rack rail sections to cross the steep mountain slopes. The operating velocity of the Glacier Express train is reduced to the minimum along the line from St. Moritz to Zermatt, which proves to be an advantage rather than a disadvantage for passengers as they are able to enjoy the landscape. The train is proud to be regarded as the slowest limited-express in the world.

**Fig.8-42** The purpose for riding the Glacier Express is to enjoy the scenery from the windows. The train is composed of panorama cars which provide excellent views of the mountain landscapes to the passengers through large windows that wrap around to the roof. The trip by train is very comfortable thanks to the clean interior, fresh colors, and the customer service facilities installed in the train. It takes eight hours for the trip from St. Moritz to Zermatt. However, on board the train the trip feels much shorter, because passengers can enjoy their meals and relax in the seats of the panorama car facing the beautiful landscapes of the Swiss Alps.

**Fig.8-43** The head office of the Rhätische Bahn (RhB) is located in Chur, Switzerland. Behind a large garden, a historic building made of stone can be found. A large quantity of wood was used for the inside walls of the building constructed along a traditional European style of architecture. In the head office of the RhB, the contract for the approval to produce and sell the models of Glacier Express was exchanged.

**Fig.8-44** For years, electric cars in addition to electric locomotives pull passenger cars in Bernina line. The "Allegra" is one of the latest electric cars for operating the "Berliner Express". The Allegra consists of three cars, where eight axles of the total twelve are driven. The power of 2600kW needed for the steep line is comparable to locomotives in Japan, and an operational velocity of 100km/h along the flat sections of the line is possible.

**Fig.8-45** The front of the picture shows models of the panorama cars for the Bernina Express. The train departing from St. Moritz goes up and down along zigzag lines, thus the length of the panorama cars is shorter than the panorama cars on the Glacier Express. The panorama cars for the Berliner Express have red bodies and silver roofs which are the standard colors for passenger cars on the RhB. The Bernina line has a sequence of steep slopes and steep curves, and we often feel the illusion as if we were travelling in the world of an N-gauge layout.

**Fig.8-46** A model of a "Swiss Train Station" is included in the series of "Glacier Express in the Alps". The prototype is the building of Filisur, the station nearest to the famous Landwasser viaduct. The local atmosphere can be reproduced well by a series of models including structures as well as the trains. Users may expand their view of the world through the models of the Glacier Express.

**Fig.8-47** The Bernina Express from St. Moritz to Tirano stops for a long time at Alp Grüm. There passengers exit

the train to enjoy the fresh air and the atmosphere before the magnificent sight created by the 2000m+ mountains. For these passengers, the time spent with the train becomes the fascination of the Bernina Express. The Bernina express is also composed of panorama cars shorter than those for Glacier Express. Meals are not provided on the train because of the shorter operation time.

**Fig.8-48** From Filisur on the Albula line, the line for Davos, a famous place for the international conference of the finance ministries, branches off. The station building has a typical style and the atmosphere of a local station in Switzerland, and its model was released under the name "Swiss Train Station". The station is located in the middle of a mountain slope and is higher than the nearby village. The station is near to the Landwasser viaduct, the symbol of the line which was designated a UNESCO World Cultural Heritage site. Because of the wide field of vision from the station, one can observe the trains going up and down the zigzag line of the slope. Filisur station provides a good location to take pictures of many trains including both the local and freight services operated between the Glacier and Bernina Expresses.

**Fig.8-49** The Glacier Express is pulled by the Ge4/4, the latest inverter controlled electric locomotive developed based on the SBB Re460. Among locomotives painted in the standard red color, one locomotive, No.650, has an illustration of the Landwasser viaduct on the side of the body painted in light blue. This was done as part of a campaign celebrating the Albula and Bernina lines being designated UNESCO World Cultural Heritage sites along with their landscapes in 2008. The special color is still maintained today showing a good contrast with the panorama cars. The picture shows the Glacier Express for Zermatt departed from St. Moritz just arriving at Chur. The model of this beautiful locomotive was produced only once and released as a train set with panorama cars.

**Fig.8-50** It is well known that the ABe8/12, named the "Allegra", pulls the Bernina Express thanks to power comparable to locomotives. The electric train operates also in other lines. The picture shows a snapshot of the train on the Arosa line waiting for departure at Chur. The Arosa line between Chur and Arosa is located in the mountain range and the ABe8/12 also pulls passenger cars. In Chur, the platform for the Arosa line is located outside of the station building and the train goes up along road-embedded tracks, a rare in Japan today in addition to the operation of an electric train being used to pull passenger cars.

**Fig.8-51** Mr. Jim FitzGerald and his wife in JAM2000. He is a founder of NTRAK in the U.S.

**Fig.8-52** The members of the railway club at Meiji Gakuin junior high school and Meiji Gakuin Higashimurayama high school. Their layout module "1-35-5 Yoyogi, Shibuya-ku, Tokyo" received the Prize of the Minister of Education, Culture, Sports, Science and Technology at the Model Rail Contest (MoRaCo) in 2014. The layout, as the fourth work in a series of Chuo line presented every year, reproduced the elevated curved line and the surrounding buildings near Yoyogi station. The tower building located in the center has a height of 1800mm at a scale of 1/150. (Photo by Neko Publishing)

**Fig.8-53** The layout module "Satoyama" (village in the vicinity of mountain), produced by the geography and history club at Kyoritsu girls senior high school, received the Prize of the Minister of Education, Culture, Sports, Science and Technology at the Model Rail Contest in 2015. The layout tried to reduce the landscape around Nagatoro station of the Seibu railway and reproduced the torrent and the terraced paddy field as the landscape of the heart in Japan. (Photo by Neko Publishing)

**Fig.8-54** The Model Rail Contest also includes a category of layout modules built by university students. There are many cases in which the students who had graduated from senior high schools continued their attendance. The module "360 degree perspective of Mount Fuji" was made based off of the famous ukiyoe "Thirty-six Views of Mount Fuji" by Hokusai Katsushika. In 2015, the authors who had graduated from Shiraume Gakuen Seishu high school and had previously collaborated together in their railway design club received the first prize in the university student category. The concept of making a three-dimensional model from a two-dimensional picture and their expert technique in reproducing raging waves were highly evaluated.

**Fig.8-55** The inside of a large hall in Tokyo Big Sight used for Model Rail Contest 2015, full of young exhibitors and visitors of different ages. Additionally a wide range of events were performed on stage.

**Fig.8-56** The inside of the hall used for the 10th European N-scale Convention in 2015.

**Fig.8-57** The students at Kyoritsu girls senior high school, who won the Prize of the Minister of Education, Culture, Sports, Science and Technology at the 2015 Model Rail Contest, were invited to the 10th European N-scale Convention held in Stuttgart, Germany in November of 2015. The group was honored again with the first prize at the convention.

**Fig.8-58** "T-TRAK" is an international standard layout module, developed to allow collaboration of modelers in different countries. It has a length of 308mm, a depth of 355mm and the height of 100mm from the bottom to the surface of tracks. Because of the ease of building a module of such a small size, the T-TRAK has gained worldwide popularity.