

A PICTORIAL REVIEW OF CONTAINER FLEETS OF THE WORLD:

K-LINE

by *DAVID G. CASDORPH*

Introduction

Kawasaki Kisen Kaisha, Ltd or more popularly known as "K-Line" began container service with a route between Japan and California in 1968. Based in Japan, it has grown since that time to become one of the World's largest marine common carrier container fleets.

Today, in 1993, K-Line's container fleet boasts some 80,000 units ranging from 20-foot dry vans to 45-foot high cubes. In addition, various types of special design containers balance the services available.

Container Types

Like their highway and rail counterparts, container operators offer standard types of transport equipment. The most common being the several sizes of box or dry van containers. Most of the containers placed in service during the first dozen years were made of aluminum. This type of construction offers lesser tare weight, greater strength, and longer service life. Unfortunately, aluminum costs more and thus a trend developed in the late Seventies to acquire lesser expensive steel containers.

The smallest common container type operated by K-Line is the 20-foot box. Most are 8'6" high and not vented. Most of the aluminum versions in service are older "smoothside" containers. A small number of aluminum "ribside" containers were more recently acquired. Steel corrugateds have made up the bulk of K-Line's recently acquired 20-foot container fleet. There are also a small number of 8' high containers left in service, but these are rare.

Certainly the most common type seen in America is the 40-foot box. K-Line has very few (to the point of being rare) vented 40-foot box containers; most being non-vented. This is in contrast to most other container operators. Again, like their smaller 20-foot counterparts, there are aluminum and steel versions. However, unlike their respective 20-footers, there are a greater number of the "ribside" containers. K-Line also operates a large fleet of high cube 40-foot boxes; most are steel corrugated. There are a small number of aluminum 40-foot high cubes in both "smoothside" and "ribside" versions.

An interesting, but not unique part of K-Line's fleet are the 45-foot high cube boxes. Most of these are destined for service in the USA (since most countries have limited clearance for this size on their highways). There are three versions of this type; an aluminum "smoothside," an aluminum "ribside," and the new steel corrugated containers.

K-Line's open-top (analogous to a gondola car on the railroads) fleet offers both 20- and 40-foot 8'6" high containers. These are used where large loads require weather protection and an excess height that cannot fit into a standard closed box size or where the commodity requires overhead loading.

Bulk containers (analogous to a covered hopper), usually 20-footers, have hatches on top for loading and outlets usually at the rear doors for unloading. This type of container is used for loose dry products such as grain, plastic pellets, fertilizer etc. K-Line operates less than 2000 of these.

K-Line's fleet of flat containers is small but interesting. The most common are the bulkhead flats in both 20- and 40-foot sizes. Some of these have rigid bulkheads, while others have folding ends. Flat containers are used for those commodities that are excess in size and do not require weather protection. An example of this is the huge construction vehicle tires that often are transported from Japan to the USA.

Refrigerated containers make up another sizable portion of the fleet. K-Line offers both 20- and 40-foot sizes (including 40-foot high cubes). Most, if not all, of the reefers are made of aluminum to maximize load and service life.

Other types of containers operated by K-Line include ventilator, tank, and insulated. These types are not very numerous and rarely seen in the USA.

Container Paint Schemes

Despite the relative short time that K-Line has been in the interchange container business there have been quite a few paint schemes. I've assigned each of the five major groups a type code noted by a Roman numeral. Please remember this is the author's classification system and not K-Line's.

Type I. The longest lived scheme. Its time span ranges from the early years to the present. The basic key identifier if this scheme is the natural metal (usually aluminum) container with the "billboard" style white K-Line on a red rectangle. Here are some of the variations:

- a). With white flag on red square.
- b). Without flag.
- c). Black reporting marks and numbers on two lines with the reporting mark centered over number (there is also split and not split sub variation of this).
- d). Black reporting marks and numbers on two lines - both lines flush left (or close to it).
- e). Black reporting mark and numbers on one line.

f). Black reporting mark, numbers and ISO type code on three lines - staggered right (the most current on this type).

g). White TIR on blue square.

h). With capacities data on sides (early to middle time period). Two sub variants, one with black data on white rectangle; the other black data with no white background square.

i). Without capacities data on sides (most recent).

j). Black, "Express Service Between Far East and United States" slogan on lower sides.

k). Red "-Hi-cube-" and red upper side rails denoting high cube boxes (older variant).

l). Vertical mirrored "warning 13'6" high" and/or "high-cube 13'6" markings on front. This is an interesting one because the *container* is giving the height of the container *and* chassis.

m). Yellow and black 9-1/2' warning rectangle with yellow and black diagonal stripes under top rail centered on sides (newer high cube scheme)

n). 45-foot scheme with white '45' on red extension panels plus high cube markings of variant "m" above.

o). Open top containers. Either gray tarp or red tarp.

p). Refrigerator scheme with red "IN HATCH STOWAGE AVAILABLE" on white rectangle located lower on side.

Type II. This is a fairly uncommon scheme similar to the above but with no large "billboard" style K-Line on the sides. A small white K-Line on red rectangle appears in the upper left corner on the sides.

Type III. This type is for steel containers that entered service in the late Seventies. The primary identifier of this type is the gray container. For boxes (including open-tops) it also has a white K-Line turned sideways 90° on red logo panel. Data is black. A few versions of this:

- a). The high cube version with the standard

ISO yellow and black 9-1/2' warning on sides, ends etc and the upper rail is painted red.

b). Bulkhead versions have the white K-Line on red rectangle logo horizontally on side sill. Capacities, in black, are also on the side sill.

Type IV. The latest standard K-Line type for steel containers. Appeared in mid Eighties. Primary identifier is the red container. Boxes have a large white "billboard" style K-Line on sides with a solid white (not outline) flag to the left. The data is white. Some of the variations include:

a). High cube. Standard ISO yellow and black 9-1/2' warning and K-Line's black and yellow diagonal warning stripes on upper side rail.

b). Bulkhead version with no flag.

c). Open top version with blue tarp.

d). 45-foot version with standard high cube markings (see "a" above) and red 45 on white vertical extension corrugated panels.

Type V. The owner-lessor type. This has various lessor liveries including DSL, Genstar, Interpool, Itel, Transamerica, XTRA, etc.

TABLE 1: COMMON DESIGNS FOR K-LINE BOX CONTAINERS

<i>OL</i>	<i>OH</i>	<i>ISO</i>		<i>Sides</i>	<i>Notes</i>
20'	8'	2000	Alum	5 panels.	9 double rows of rivets.
20'	8'6"	2200	Alum	5 panels.	9 double rows of rivets.
20'	8'6"	2200	Alum	9 posts or ribs.	
20'	8'6"	2200	Steel	21 square corrugations.	2-17-2 pattern. 8 square front corrugations. Flat door.
20'	8'6"	2200	Steel	17 beveled corrugations.	2-13-2 pattern. 10 square front corrugations. Flat door.
20'	8'6"	2200	Steel	17 beveled corrugations.	1-15-1 pattern.
40'	8'6"	4300	Alum	10 panels.	19 double rows of rivets.
40'	8'6"	4300	Alum	10 panels.	22 double rows of rivets.
40'	8'6"	4300	Alum	19 posts or ribs.	
40'	8'6"	4300	Steel	48 square corrugations.	2-44-2 pattern. 8 square front corrugations. Flat doors.
40'	8'6"	4310	Steel	48 square corrugations.	3-42-3 pattern. Rare!
40'	8'6"	4300	Steel	39 beveled corrugations.	2-35-2 pattern. 10 square front corrugations. Flat doors.
40'	9'6"	4500	Alum	11 panels.	21 double rows of rivets.
40'	9'6"	4500	Steel	48 square corrugations.	2-44-2 pattern. 8 square front corrugations.
40'	9'6"	4500	Steel	39 beveled corrugations.	2-35-2 pattern. 10 square front corrugations.
45'	9'6"	9500	Alum	19-posts or ribs.	Flat panels on extensions.
45'	9'6"	9500	Alum	10 panels.	Flat panels on extensions.
45'	9'6"	9500	Steel	42 beveled.	3 additional corrugations on extensions (2 on left side, 1 on right side).

TABLE 2: K-LINE REPORTING MARKS 1968-1993

<i>Marks</i>	<i>Year</i>	<i>Type</i>	<i>Notes</i>
AKLU	1983	K-Line	Containers in K-Line livery and various lessor liveries.
EKLU	1980	K-Line	
ESSU	Early	K-Line	Marks derived from Eastern Searoad Service, an early joint venture.
GSTU	1990	Lessor	Genstar Container Corporation.
HGSU	1988	Lessor	
INBU	1986	Lessor	Interpool.
ITLU	1988	Lessor	Itel Containers International Corp.
ITSU	Early	Lessor	International Transportation Service Inc. Essentially a K-Line exclusive.
KKIC	1990	Lessor	Transamerica ICS
KKLU	Early	K-Line	
KKTR	1990		
KLFU	1988	K-Line	
KLTU	1988	K-Line	
KMEU	Early	K-Line	
KNCU	1990		
KPLU	1981	K-Line	
KWCU	1990		
KWSU	1990		"K Kinkai" logos on containers.
KXTU	1988	Lessor	XTRA, Inc.
NYLU	1986	Lessor	New York Liner Administration Co Ltd.
PXCU	1981	Lessor	Phoenix Container Liners Ltd. Later became a full K-Line reporting mark.
UFCU	1990	Lessor	Itel Containers International Corp (originally a Uni-Flex mark).

TABLE 3: SPOTTERS GUIDE SUMMARY OF K-LINE PAINT SCHEMES

Type Identification Features

- I** Natural metal container.
"Billboard" white K-Line on red rectangle.
No flag or with white flag on red square.
Early variants have capacities data on sides. Recent variants do not have capacities data on sides.
Black reporting marks (several arrangement variants)
- II** Natural metal container.
Very small white K-Line on red rectangle in upper left corner on sides.
Black reporting marks
Capacities data on sides.
- III** *Gray container.*
Sideways white K-Line on red logo panel on box containers
White reporting marks, container numbers and ISO type code on three lines.
White TIR on blue square.
- IV** *Red Container.*
White "billboard" K-Line across side.
Solid white flag - always to the left of the large K-Line.
White TIR on blue square
White reporting marks, container numbers, and ISO type code on three lines.
- V** Various owner-lessor paints schemes