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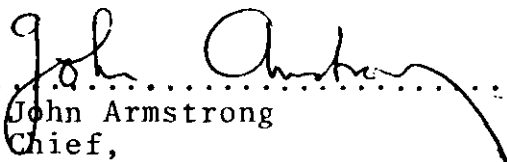
This Approval Supercedes
S.WA-T105

**NOTICE OF APPROVAL
AVIS D'APPROBATION**

S.WA-1141

Ottawa, June 13, 1979

- Company Requesting Approval - Criterion Engineering Limited
4651 Vanguard Road,
Richmond, B.C.
- Manufactured By - Criterion Engineering Limited
4651 Vanguard Road,
Richmond, B.C.
- Type of Scale - Hydraulic scissor lift platform incorporating
a full load cell system mounted integrally to
the platform.
- Use of Scale - Static weighing of containers, pallets and
general cargo; the scissors lift is used for
ease in loading trucks, aircraft etc of
different heights.
- Capacity And Readout Increments - Various capacities ranging from 1000 lbs
(500 kg) to 50 000 lbs (25 000 kg). Readout
increments are dependent on the capacity and
instrument used.
- Model Numbers - T1-5/5 HPS, T1-5/7 HPS, T1-5/10 HPS, T1-5/15
HPS, T1-5/15 HPS, T1-5/20 HPS, T1-5/25 HPS,
T1-5/30 HPS, T1-5/40 HPS, T1-5/50 HPS.
- Device Description - This device is a full load cell scissor
lift platform with a vertical travel of
1 - 20 ft. which can be fitted with 4, 6
or 8 load cells depending on capacity.
- Special Conditions - When weighing, the platform is to be in the
fully lowered position.

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 John Armstrong
 Chief,
 Weights and Measures Division
 Legal Metrology Branch

A. DEVICE DESCRIPTION

This device is a full load cell hydraulic scissor lift platform with built in weigh scale (HPD; hydraulic platform scale), which can be of a standard size and capacity or can be of "custom" design to suit a particular installation.

The load cells connected through a junction box with adjustable potentiometers can be used with any approved, compatible digital indicator.

The load cells are mounted on the top frame of the scissor lift platform. The load receiving element consists of a top conveyor deck figures 1 and 2, which is constructed of steel girders (1) fig. 2 and cross beams, (2) fig. 2. The top conveyor deck can consist of omni directional or bi-directional rollers (1&2) fig. 1 to transfer the containers; pallet stops and side fences are used to contain the loads on the conveyor deck (7) fig. 2.

The load receiving top deck, which rests on the load cells (6) fig. 2, is restrained to the hydraulic lift platform by means of two longitudinal check rods, (3) fig. 2, and two transverse check rods, (4) fig. 2. The check rods restrain the top deck by means of angle brackets welded to the top deck frame and the top frame of the lift platform.

As an alternative to the check rod system, when the top conveyor deck is subjected to forces in any direction, that is against either end or side in any elevated position of the lift, the restraining arrangement must be more positive and effective. In such a case the restraining arrangement consists of having on each corner, a double acting hydraulic cylinder which has the rod end engage or disengage into a pipe receptacle as shown in (5) fig. 2. (See detail of Hydraulic Stabilizer fig. 2).

When the rod end is engaged into the pipe receptacle, the top deck is firmly and positively restrained in order to withstand material handling forces in any direction. When the rod end is disengaged from the pipe receptacle, the top conveyor deck floats freely on the load cells.

In order not to weigh inaccurately when rod end is engaged in pipe receptacle, the double acting hydraulic cylinders are wired into an electrical circuit which blanks out the indication on the digital readout. A constant pressure push button must be pressed continuously in order to obtain a weight reading, which will occur only when the rod end is free of the pipe receptacle.

The load cells are mounted on the top frame of the scissor lift platform (6) fig 2.

The device is fitted with pallet stops and side fences which are an intergral part of the load receiving element (7) fig 2.

B. Installation Requirements:

- (i) The hydraulic lift platform with weigh scale must be mounted level and well secured to its foundation. The base frame at rolling end must be well shimmed with steel inserts and grouted to the extent of the rolling bearing horizontal travel.
- (ii) The load cell and power cables must be run in separate conduit.

Model Number Coding

Example - Model T1-5/10 HPS

T1 Stands for torklift of one set of arms in vertical plane.
-5 Stands for vertical travel of lift, in feet
/10 Stands for Capacity of lift in kips
HPS Stands for Hydraulic platform with scale

The torklift can be fitted with one or more sets of arms and will be identified as follows:

T1 - one set of arms
T2 - two sets of arms
T3 - Three sets of arms etc.

CONDITIONS OF APPROVAL: Approval is granted under the Weights and Measures Act, S.C. 1970-71-72, Chapter 36, and the Weights and Measures Regulations P.C. 1974-1461 of June 27, 1974 for use in Canada under the general conditions of the said Regulations and under any special conditions listed above.

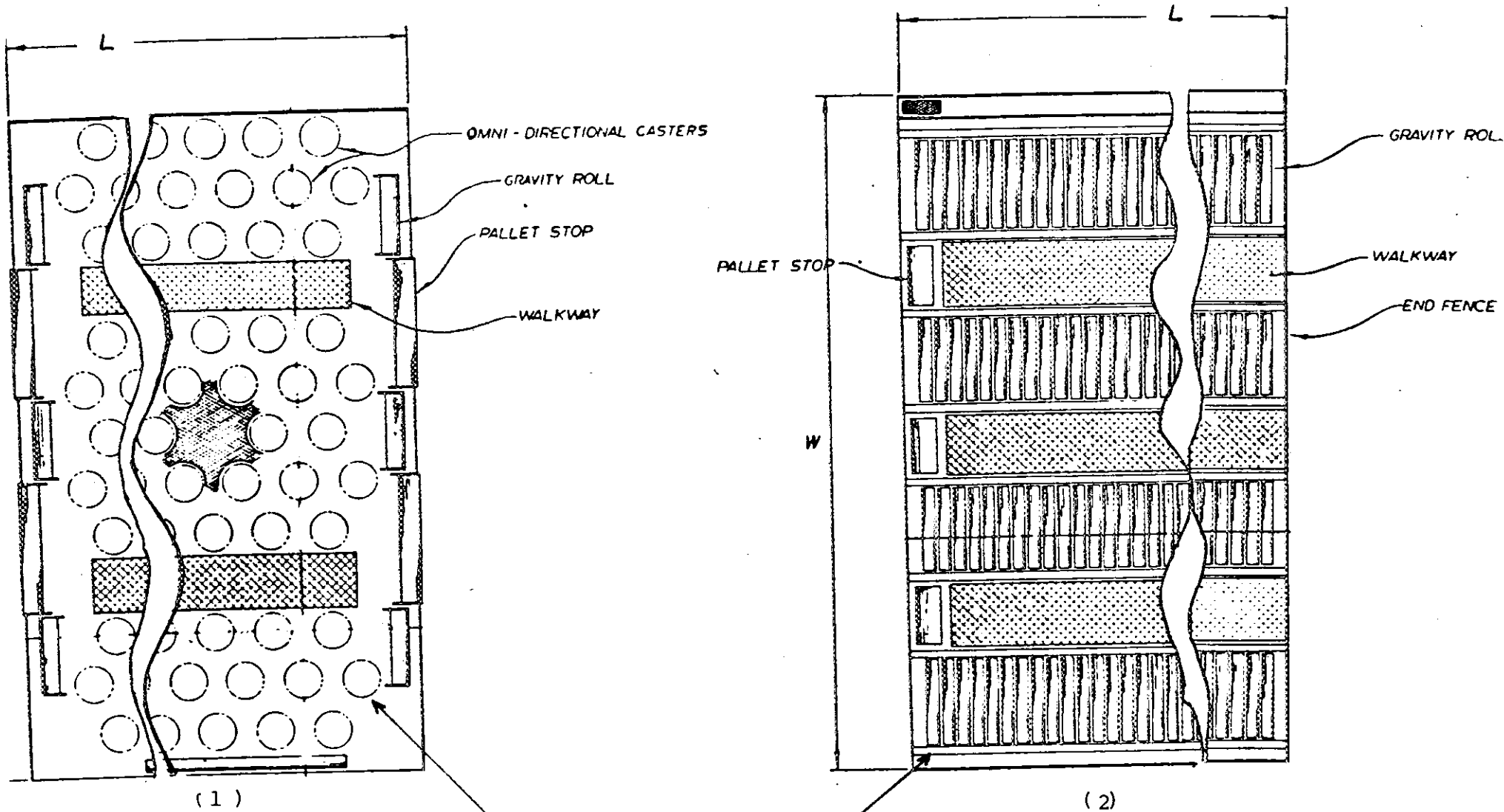


Figure 1

Omni and Bi-directional rollers

DETAIL OF HYDRAULIC STABILIZER

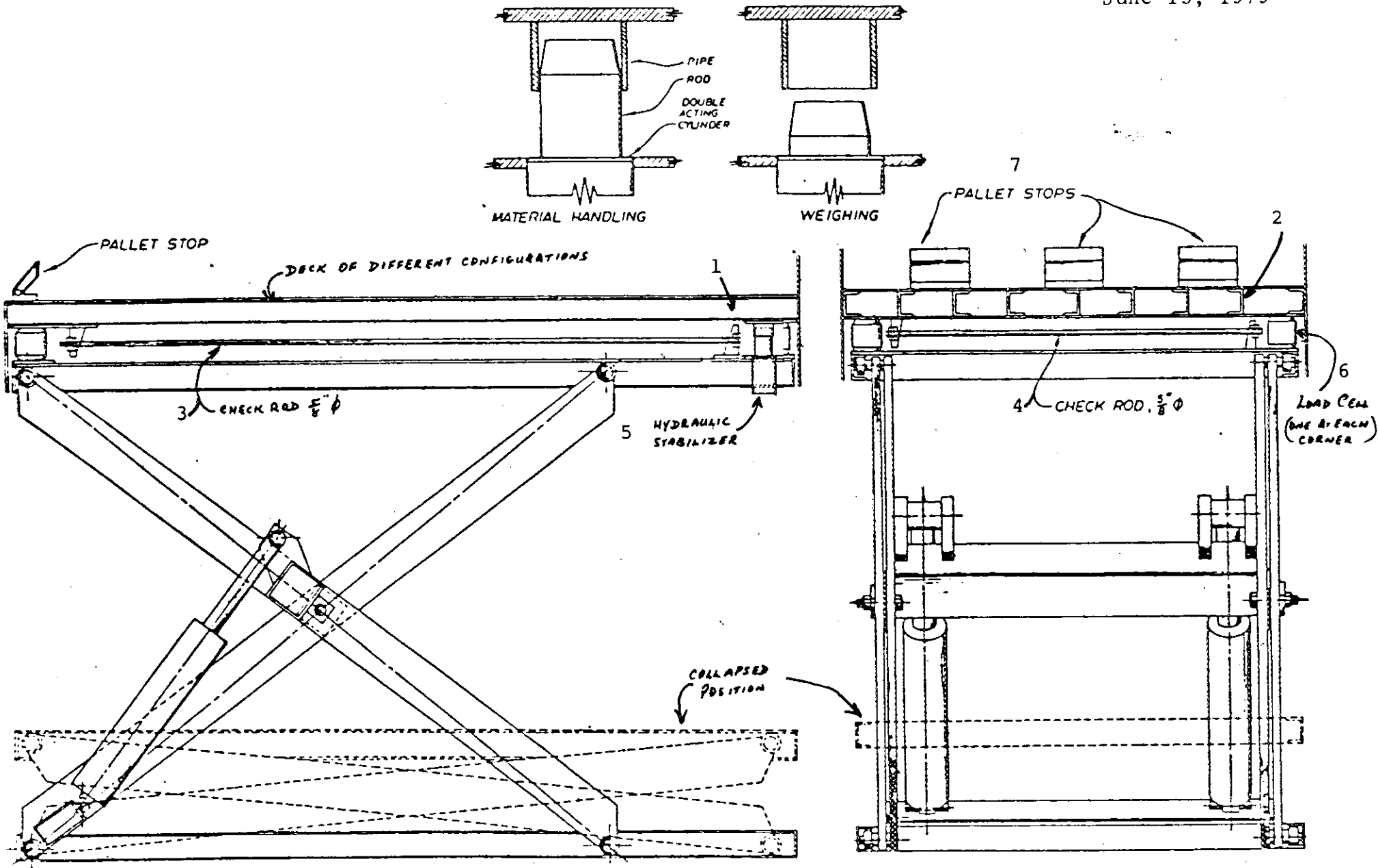


Figure 2
Side and End Sectional View