

Refer to: HSA-10/SS-17C

Mr. Michael S. Stenko
President, Transpo Industries, Inc.
20 Jones Street
New Rochelle, New York 10801-6098

Dear Mr. Stenko:

Thank you for your letter of July 10, 2003, requesting Federal Highway Administration (FHWA) acceptance of an additional signpost to be used with your company's Type A Break Safe System as a breakaway sign support system for use on the National Highway System (NHS). Accompanying your letter were copies of previous correspondence regarding the Type A system. You requested that we find Type A Break Safe couplers with steel pipe posts acceptable for use on the NHS under the provisions of National Cooperative Highway Research Program (NCHRP) Report 350 "Recommended Procedures for the Safety Performance Evaluation of Highway Features."

Introduction

Testing of Type A Break Safe couplings on structural steel supports was conducted in compliance with the guidelines contained in the NCHRP Report 350, Recommended Procedures for the Safety Performance Evaluation of Highway Features. Requirements for breakaway supports are those in the American Association of State Highway and Transportation Officials' Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals.

Type A Break Safe couplings were the subject of our Acceptance Letters SS-17, SS17-A, and SS-17B, dated January 8, 1990, March 7, 1995, and April 25, 1995 respectively.

Findings

Your request was for the use of Schedule 40 steel pipe sign posts supported on the Type A Break Safe coupling. The diameter of the post will be a minimum of 3 inches. Modifications to your Type A coupling to accommodate a round pipe include an adaptor as shown in the enclosed drawing for reference.

Your analysis comparing the crash-tested 4 pound-per-foot u-channel sign support to the 3 inch schedule 40 pipe via plastic design method shows that the 3 inch diameter steel pipe is strong enough to transfer the force of the impact directly to the couplings without deforming. Therefore, the Type A Break Safe Couplings for 3 inch and larger OD pipes described above and shown in the enclosed drawings for reference are acceptable for use as Test Level 3 devices on the NHS under the range of conditions tested, when proposed by a State.

Please note the following standard provisions that apply to FHWA letters of acceptance:

- ! Our acceptance is limited to the crashworthiness characteristics of the devices and does not cover their structural features, nor conformity with the Manual on Uniform Traffic Control Devices.
- ! Any changes that may adversely influence the crashworthiness of the device will require a new acceptance letter.
- ! Should the FHWA discover that the qualification testing was flawed, that in-service performance reveals unacceptable safety problems, or that the device being marketed is significantly different from the version that was crash tested, it reserves the right to modify or revoke its acceptance.
- ! You will be expected to supply potential users with sufficient information on design and installation requirements to ensure proper performance.
- ! You will be expected to certify to potential users that the hardware furnished has essentially the same chemistry, mechanical properties, and geometry as that submitted for acceptance, and that they will meet the crashworthiness requirements of FHWA and NCHRP Report 350.
- ! To prevent misunderstanding by others, this letter of acceptance, designated as number SS-17C shall not be reproduced except in full. As this letter and the supporting documentation which support it become public information, it will be available for inspection at our office by interested parties.
- ! The Transpo Industries breakaway couplings are patented products and is considered "proprietary." The use of proprietary devices specified on Federal-aid projects, except exempt, non-NHS projects: (a) must be supplied through competitive bidding with equally suitable unpatented items; (b) the highway agency must certify that they are essential for synchronization with existing highway facilities or that no equally suitable alternative exists or; (c) they must be used for research or for a distinctive type of construction on relatively short sections of road for experimental purposes. Our regulations concerning proprietary products are contained in Title 23, Code of Federal Regulations, Section 635.411, a copy of which is enclosed.

! This acceptance letter shall not be construed as authorization or consent by the FHWA to use, manufacture, or sell any patented device. Patent issues are to be resolved by the applicant and the patent owner.

Sincerely yours,

Michael S. Griffith
Acting Director, Office of Safety Design
Office of Safety

Enclosure

FHWA:HSA-10:NArtimovich:tb:x61331:8/4/03
File: h://directory folder/nartimovich/SS17C-TranspoFIN
cc: HSA-10 (Reader, HSA-1; Chron File, HSA-10;
N. Artimovich, HSA-10)