

Lloyd's Register of Shipping

Aleksanterinkatu 48 A, SF-00100 Helsinki 10 Alexandersgatan 48 A, SF-00100 Helsingfors 10

1982-12-03-

Telephone 90-171/330

Telex 122173

Cables Lloydsreg, Helsinki

Our Ref

Please address further communications to The Surveyors, and quote

Oy Serlachius Ab

PL 20

66400 LAIHIA

SJT/biw

Your Ref

Jarmo Myllylä

Date

29.11.82

Your letter of 30.08.1982 T-DRILL METHOD

The Society has no objection to the use of the T-Drill Method of cold working for producing pipe T pieces.

The method can be accepted on piping systems for classed ships, and Industrial Services use in Class I, II and III piping system and LNG/LPG piping systems, provided the following be complied with:

- 1. The scantlings, compensation and material characteristics are to be in accordance with the relevant Rules, Gas Codes or Industrial codes for Standards, together with applicable testing requirements.
- 2. When necessary, such as in the use of some copper alloys, or in LNG/LPG-service, stress relieving heat treatment may require to be carried out. In this respect the following application heat treatment is to ge applied after the cold forming operation:
 - a. aluminium brass is to be stress relieved in the temperature range 350-400°C.
 - b. for liquefied gas service ferritic steels are to be normalised and stainless steels are to be solution treated.
- 3. The manufacturing process is to be acceptable to all parties responsible for the design operation of the pipework.
- 4. The manufacturing equipment is operated and maintained correctly, in accordance qith the T-Drill Instruction Manual.

The surveyors attending the works where the machinery is installed are to be satisfied with regard to the quality of the finished product, and compliance with Rules or Codes.

With kind regards

LLOYD'S REGISTER OF SHIPPING

(myn)

Helsinki