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REV..	DESCRIPTION	DATA	PROJ.	EXEC.	CONT.	APROV.



TRANSPORTADORA DE GAS DEL PERU
CAMISEA NATURAL GAS AND NGL TRANSPORTATION SYSTEM



TECHINT COMPAÑÍA TÉCNICA INTERNACIONAL

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RADIOGRAPHIC IDENTIFICATION

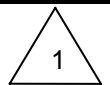
CONSTRUCTION SPECIFICATION

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2794-L-ME-00004

ESC. S/E

JOB: E100-50113



REVISION

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1.- PURPOSE

The purpose of this construction specification is to establish the guidelines to identify and mark the welded joints for the radiographic identification.

2.- SCOPE

This procedure shall be jointly applied to Production, Radiographic Examination and Inspection.

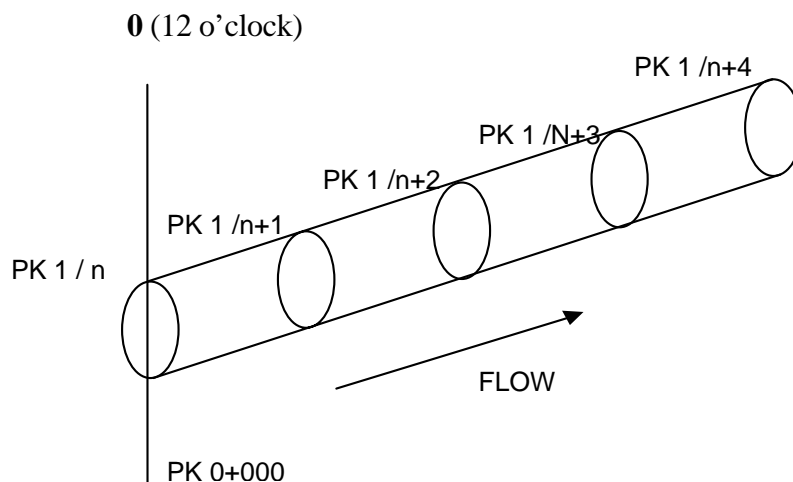
3.- REFERENCES

- API 1104/99 19th Ed. Par. 11.1.8
- 2794-L-SP-00037 Radiographic Examination
- 2794-L-ME-00012 Welding Joint Identification
- ASME Sec. V

4.- PROCEDURE


4.1 Placement

Positioning of tapes (with hoop distance marks every to 10 cm), will be done starting from the 12 o'clock position (zero point). Marking shall increase clockwise.



4.2 Repairs

The radiograph of a repair shall include the weld number followed by R. and welder repair ID.

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4.3 Numbers

Numbers corresponding to welded joints shall **always** increase in the flow direction.

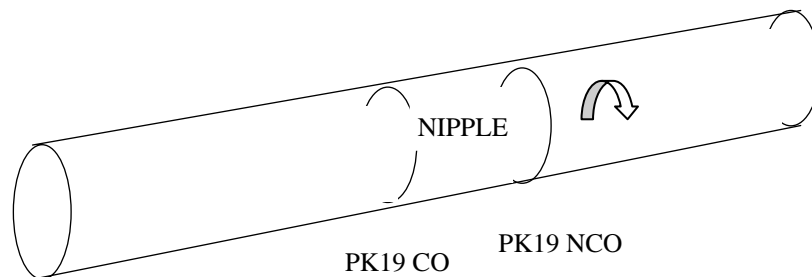
Production shall be in charge of recording the welded joint number on the pipe, according to the following guidelines:

4.3.a) Cut replaced with a single weld: The original number is replaced with the same number followed by “CO”.

Example: PK19 cutting ----- PK19 CO new welding

4.3.b) Cut replaced by a Nipple Piece: The first weld performed in the flow direction is replaced with the same number followed by “CO”, the second cut is replaced with the same number followed by “NCO”.

E.g.: PK19: cutting shall be replaced as follows:



4.3.c) Cut replaced by a Nipple (Pup) with unequal wall thickness: The identification for wall thickness changes larger than 1.6mm of the piping nominal wall thickness will be as follows:


Example : PK 19 NT PK 19 NTI

4.3.d) Insertion of welding between predetermined numbers: Letters shall be added subsequently.

Example: PK19 - PK19A - PK19B - PK19C - PK20

Insertion

4.3.e) Elimination of welds between prefixed numbers: The numbers of the welds nonexistent or eliminated will be indicated in order to allow the traceability.

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Example: PK19-PK20 - PK21 - PK22 - PK23

Elimination

Notice that joints 20 21 and 22 do not exist

4.3.f) Tie-ins: Tie-ins shall be:

- a) All the joints between sections and equipment or facilities of valves or scraper traps.
- b) Every line section joint.
- c) All the joints between sections and special crossings.

A “T” shall be written before the corresponding welding joint.

Example.: PKT21 for the pipe tie-in following weld number 20 and preceding welder number 22.

4.3.g) Final tie-ins: Final tie-ins between hydraulic test sections shall be numbered consecutively with prefix “FT”.

4.3.h) Valve station welds: They shall include prefix “BV” followed by the station number and the welded joint number.

Example: BV13/21

4.3.i) Scraper trap welds: They shall include prefix “TS” followed by the scraper trap and the welded joint number.

Example: PKTS 2/12

4.3.j) Special crossings: They shall include suffix “CR” and shall be numbered subsequently in the crossing.

Example: PK 6/8 CR

They include river, channel, stream, road, railway and highway crossings

Previous guidelines can be applied jointly



CONSTRUCTION SPECIFICATION
RADIOGRAPHIC IDENTIFICATION

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REV. 1

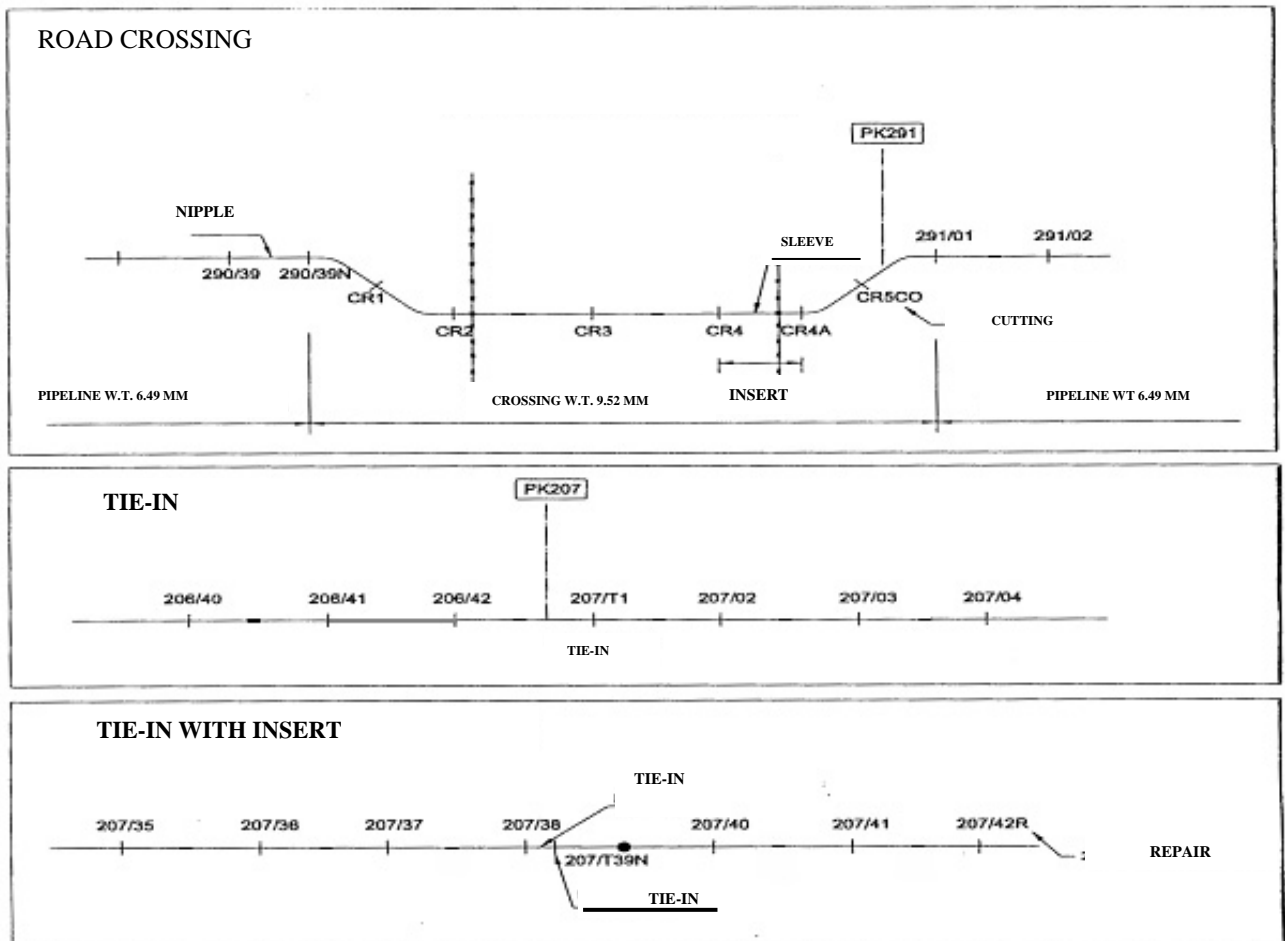
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5.- SCHEMES

Typical examples :





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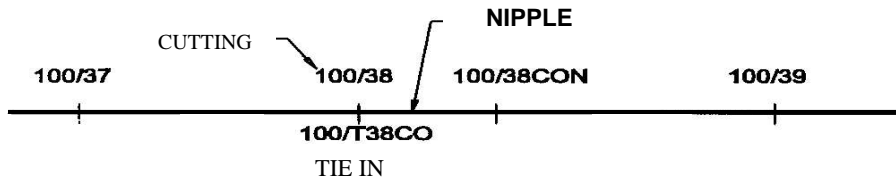
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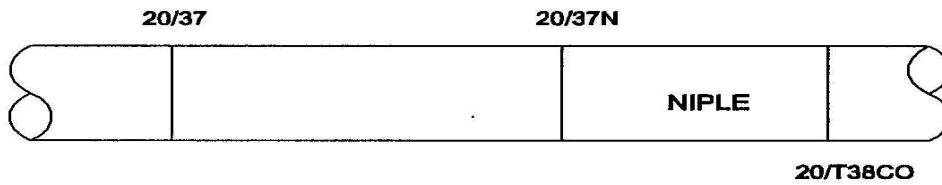
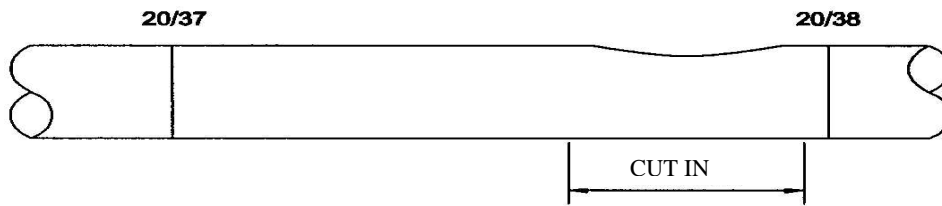
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CUTTING WITH INSERT



DENT REPAIRING

A.- CUTTING WITH INSERT



B.- INSERT WITHOUT WELDING CUT

