

1 CLAIMS (AMENDED)

- 2 1. Method for collection and storage of information representing wall thickness
3 of tubular goods, comprising:
- 4 a. positioning an ultrasonic detection means which is capable of
5 measuring the thickness of a discrete section of the wall of a tubular
6 good at a first position along the wall of a tubular good;
 - 7 b. at said first position, determining the longitudinal position of said
8 ultrasonic detection means along the axis of said tubular good;
 - 9 c. at said first position, determining the circumferential position of said
10 ultrasonic detection means about the circumference of said tubular
11 good;
 - 12 d. at said first position, causing said ultrasonic detection means to
13 determine the thickness of a first discrete section of the wall of said
14 tubular good;
 - 15 e. recording the thickness of said first discrete section of said wall,
16 longitudinal position and circumferential position of the tubular good
17 at said first position in an associated relationship;
 - 18 f. positioning said ultrasonic detection means in at least a second
19 position along the wall of said tubular good, wherein at said second
20 position said ultrasonic detection means can be caused to determine
21 the thickness of a discrete section of the wall of said tubular good
22 which is adjacent to but partially overlaps the discrete section of the
23 wall of said tubular good determined and recorded at said first
24 position;
 - 25 g. recording the thickness of said second discrete section of said wall,
26 longitudinal position and circumferential position of the tubular good
27 at said second position in an associated relationship; and,
 - 28 h. associating the recording at said first position and the recording at said
29 second position in an associated relationship.

- 1 2. The method of Claim 1 wherein said recordings are made in digital format
2 which is readable by computer means.
- 3 3. The method of Claim 2 further comprising the step of using a computer
4 means to display the wall of said tubular good in virtual three-dimensional
5 form.
- 6 4. The method of Claim 2 further comprising the step of using a computer
7 means to compute the effect of stresses on the wall of said tubular good.
- 8 5. The method of Claim 1 further comprising the step of synchronizing each
9 circumferential reference to a pre-selected longitude of the wall of the
10 tubular good.
- 11 6. Method for collection and storage of information representing wall thickness
12 of tubular goods, comprising:
- 13 a. positioning an ultrasonic detection means which is capable of
14 measuring the thickness of a discrete section of the wall of a tubular
15 good at a first position along the wall of a tubular good;
- 16 b. at said first position, determining the longitudinal position of said
17 ultrasonic detection means along the axis of said tubular good;
- 18 c. at said first position, determining the circumferential position of said
19 ultrasonic detection means about the circumference of said tubular
20 good;
- 21 d. at said first position, causing said ultrasonic detection means to
22 determine the thickness of a first discrete section of the wall of said
23 tubular good;
- 24 e. recording the thickness of said first discrete section of said wall,
25 longitudinal position and circumferential position of the tubular good
26 at said first position in an associated relationship;
- 27 f. repeating each of the above steps at a plurality of other positions along
28 the wall of the tubular good which has not been previously determined
29 and recorded, until the entire wall of the tubular good has been

1 determined and recorded and is represented by a plurality of
2 recordings, each of which represents wall thickness, longitudinal
3 position and circumferential position of a discrete section of the wall
4 of the tubular in an associated relationship; and,
5 g. associating each of said recordings in an associated relationship.
6 7. The method of Claim 6 wherein each of said plurality of other positions
7 partially overlaps each adjacent positions.