

KES

Observation Standard of Eddy in Steel Pipe

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1. Scope of application

This standard shall specify the examination method for observing eddy which use the piercing coil of the seamless steel pipe, outside diameter 10 ~ 180mm, thickness 1 ~ 20mm and the welded steel pipe. The general particulars except this standard shall follow KS D 0232 (Testing method to observe eddy of steel).

2. Device

This device is composed of a moving device of pipe, an automatic alarming device or a recoding device besides an observation device.

(1) Observation device

An observation device is composed of the electric device that manages an oscillator, coil and electric signal, and the device that display the fault signal. And this device should have the proper performance for observing.

(2) Moving device, automatic saturation device and recoding device

(3) When these devices are used, the proper performance should be in the observing work and judging work of result.

3. Compared specimen

3.1 Material

The quality, dimension and surface condition of the material of a compared specimen should be equal to those of the examined material.

3.2 Species, shape and dimension of the artificial scratch

3.2.1 Species of the artificial scratch

The artificial scratches are composed of square scratch, file scratch and drilling hole and are classified as to its name, depth and diameter of hole like table 1 ~ 3.

Table 1 Species of square scratch

Name	Depth of scratch
ES – 15	15% of its thickness
ES – 20	20% of its thickness
ES – 25	25% of its thickness
ES – 30	30% of its thickness
ES – 40	40% of its thickness
ES – 50	50% of its thickness

Table 2 Species of file scratch

Name	Depth of scratch
ES – 10	10% of its thickness
ES – 12	12.5% of its thickness
ES – 15	15% of its thickness
ES – 20	20% of its thickness
ES – 25	25% of its thickness
ES – 30	30% of its thickness

Table 3 Species of drilling hole

Name	Depth of scratch
ES – 10	1.0 mm
ES – 12	1.2 mm
ES – 16	1.6 mm
ES – 20	2.0 mm
ES – 25	2.5 mm
ES – 32	3.2 mm