CLAIMS:

1. A wire rope analyzing apparatus to which are applied the output signal from a magnetization detector and the image data from an imaging device, wherein the output signal and the image data are recorded by a rope tester for inspecting a wire rope traveling at a predetermined speed, the rope tester comprising:

the magnetization detector including a magnetizer for generating a magnetic force, and a detector for detecting a change in magnetism produced in the wire rope magnetized by the magnetic force generated by the magnetizer;

the imaging device, which is provided a predetermined distance away from said magnetization detector along the traveling direction of the wire rope, for imaging the wire rope;

a controller, which is connected to said magnetization detector and to said imaging device, for detecting a defect location on the wire rope based on a change in magnetism detected by said magnetization detector, and outputting a drive signal that actuates said imaging device at a timing at which the defect location arrives at the location of installation of said imaging device;

first recording means for recording, in storage

means at predetermined time intervals in a time series, the output signal produced by said magnetization detector; and

second recording means for recording image data, which is output from said imaging device, in storage means, inclusive of order of image data capture;

wherein the wire rope analyzing apparatus comprises:

graph display means for displaying a graph in which the horizontal axis is a plot of wire rope position and the vertical axis is a plot of the output signal produced by said magnetization detector; and

wire rope image display means for displaying a wire rope thumbnail image, which is represented by the image data, in association with a graph value representing the defect location in the graph representing the output signal produced by the magnetization detector and displayed by said graph display means, the wire rope thumbnail image displayed by said wire rope image display means and the graph displayed by said graph display means being displayed together in a display field.

2. The wire rope analyzing apparatus according to claim 1,

wherein the wire rope thumbnail image that corresponds to a respective spike in the graph representing an output value that exceed a threshold

value is displayed.

3. The wire rope analyzing apparatus according to claim 1,

wherein the controller detects the defect location on the wire rope when the output value outputted from the magnetization detector exceeds a first threshold value.

4. The wire rope analyzing apparatus according to claim 3, further comprising:

threshold value display means adapted to display a second threshold value equal to or higher than the first threshold value in the graph, and a threshold value input means adapted to input the second threshold value,

wherein the wire rope image display means displays the wire rope thumbnail image represented by image data taken when the output signal outputted from the magnetization detector exceeds the second threshold value, in association with the output value representing the output signal that exceeds the second threshold value.

5. The wire rope analyzing apparatus according to

claim 1, wherein said controller includes:

an input unit for accepting an input of a predetermined traveling speed of the wire rope and an input of distance representing a predetermined spacing between said magnetization detector and said imaging device; and

delay time calculating means for calculating a delay time, which specifies a timing at which the drive signal is to be output, using the traveling speed and the distance representing the predetermined spacing that are accepted from said input unit.

6. A program for controlling the wire rope analyzing apparatus according to claim 1, said program controlling said wire rope analyzing apparatus so as to:

display, on a display device, a graph in which the horizontal axis is a plot of wire rope position and the vertical axis is a plot of the output signal produced by the magnetization detector; and

display, on the display device, a wire rope thumbnail image, which is represented by the image data, in association with a graph value representing the defect location in the graph representing the output signal produced and displayed, the wire rope

thumbnail image displayed and the graph displayed being displayed together in a display field.