Automatic crack and structure test of ***spindles*** *with the* ***2-channel eddydector®*** *and the* ***eddyliner®P 4***

hardness
hardening depth at 4 position
tempering of basic material
correct alloying
surface cracks

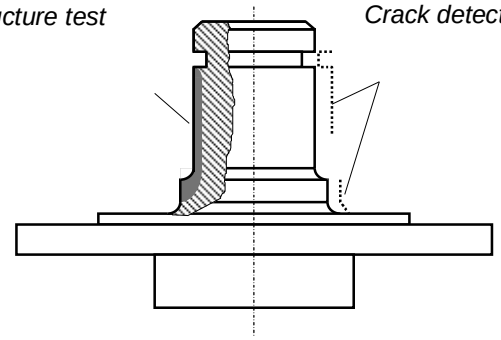
cycle time : ≤25sec.

crack specification

depth : 0.050mm
width : 0.075mm
length : 3.75mm

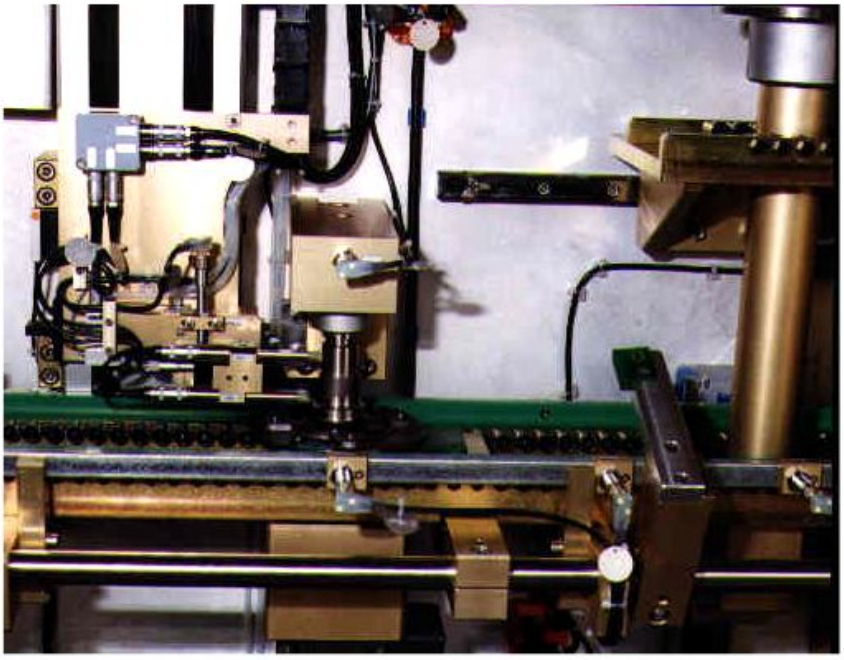
orientation longitudinal and circumpherential

Structure test *Crack detection*



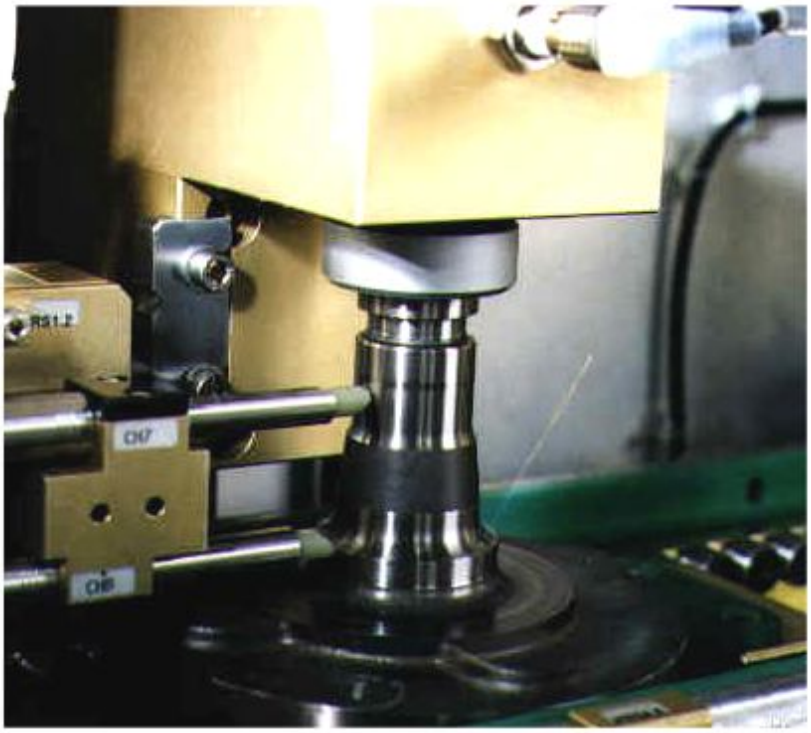
After hardening and grinding, the parts enter the test system from the left on a roller conveyor.

ibg NDT Systems Corporation
20793 Farmington Road,
Farmington Hills, MI 48336
Phone: 248.478.9490, Fax: 248.478.9491
http://www.ibgndt.com

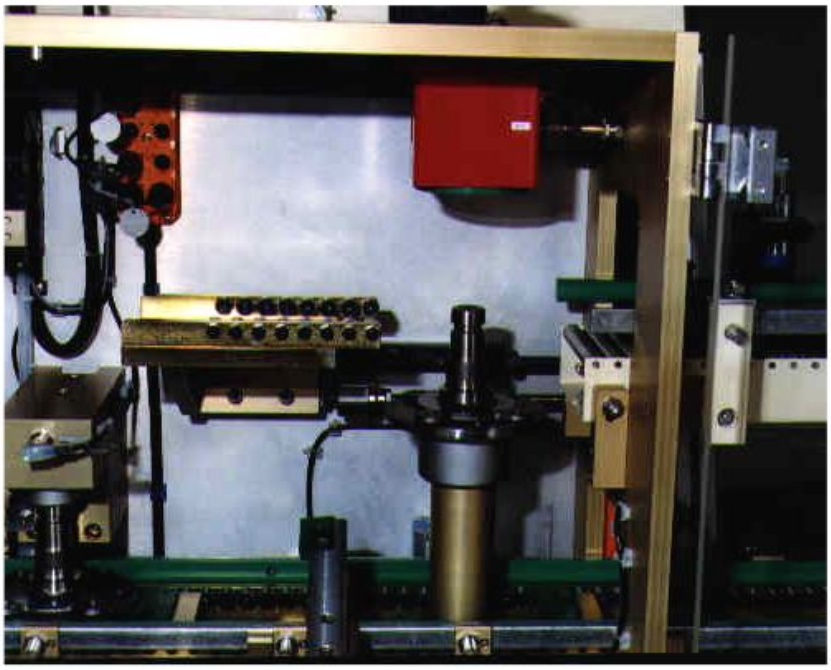


In the crack detection station, the test part is lifted up and put into rotation (approx. 600rpm).

The two crack detection probes scan the ground area of the spindle for very small cracks.



ibg NDT Systems Corporation
20793 Farmington Road,
Farmington Hills, MI 48336
Phone: 248.478.9490, Fax: 248.478.9491
http://www.ibgndt.com



For structure test, the part is lifted up into the red coil head and is tested for correct heat treatment at 4 positions. OK parts exit the system via the top right roller conveyor, NOK parts exit the test system via the bottom right roller conveyor.

Test electronics consist of an

eddyliner®P4 *for structure test and a 2-channel* ***eddydector®*** *for crack detection.*

ibg NDT Systems Corporation
20793 Farmington Road,
Farmington Hills, MI 48336
Phone: 248.478.9490, Fax: 248.478.9491
http://www.ibgndt.com