

Nugget Profiler Sample Evaluation

<Outline of equipment

Comparative inspection device for spot welding (not a measuring device)

Equipment to discriminate between mass-produced products and products with reduced welding conditions (Parameters are registered for mass-produced products).

Magnetic information of welding area and surrounding area is converted into numerical values.

<Please prepare the following items

Test samples: 5 pieces each of OK and NG products (min. 3 pieces) *Products or test pieces are acceptable.

Tensile strength of samples

Fracture diameter of OK product (target diameter)

<Outline of evaluation


(1) Create parameters with OK products (Preparation for evaluation)

(2) Inspect multiple OK products and check for variation (evaluate stability of OK products)

(3) Inspect NG products and confirm that there is a difference from OK products (evaluation of discrimination between OK and NG products)

OK, mass production conditions

① Parameter Creation



NG, lower welding conditions



current value : 90%

current value : 80%

② Confirmation of variation within OK products

③ Comparative inspection with OK product, and confirmed that there is a difference.