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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 39165-2020

**Test method of peel and chisel for resistance spot and
projection welds**

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Foreword

This standard was drafted in accordance with the rules given in GB/T 1.1-2009.

This standard uses the redrafting method to modify and adopts ISO 10447.2015 "Testing of resistance welding welds. Resistance spot welding and projection welding joints.

Peeling and chipping test."

Compared with ISO 10447.2015, this standard has many structural adjustments. Appendix A lists this standard and ISO 10447.2015.

A list of changes in the chapter number

Compared with ISO 10447.2015, there are technical differences between this standard, and the clauses involved in these differences have been passed on the outer margins.

The set vertical single line (|) is marked, and a list of the corresponding technical differences and their reasons is given in Appendix B.

This standard has made the following editorial changes.

---Modified the standard name;

---References are deleted.

This standard was proposed and managed by the National Welding Standardization Technical Committee (SAC/TC55).

Drafting organizations of this standard. CRRC Changchun Railway Vehicle Co., Ltd., Harbin Welding Research Institute Co., Ltd., Chuzhou Hongda Mould

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(Ningbo) Co., Ltd., Beijing Aerospace Fresh Air Machinery Equipment Co., Ltd.

1 Scope

This standard specifies the equipment and tools, samples, test procedures, and test data for resistance spot welding and projection welding joint peeling and chipping tests

Management and test report.

This standard applies to resistance spot welding and projection welding of two or more metal plates with a thickness of 0.5mm~5.0mm.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated references, the latest version (including all amendments) applies to this document.

GB/T 3375 welding terminology

GB/T 39166 Resistance spot welding, projection welding and seam welding joint mechanical peel test method (GB/T 39166-2020, ISO 14270.2016,

MOD)

3 Terms and definitions

The following terms and definitions defined in GB/T 3375 apply to this document.

3.1

Gouge test

Use a chisel to go between the plates of adjacent solder joints until fracture occurs or the base material near the solder joint yields or bends.

see picture 1.

a) Type 1 (embedded chiseling) b) Type 2 (single-sided chiseling) c) Type 3 (bilateral chiseling)

Figure 1 Chisel-off test of resistance spot welding and projection welding joint

3.2

Peel test

Destructive test of resistance welding lap joints by applying peeling force in the thickness direction of the solder joints.

See Figure 2.

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