CLAIMS

1. High corrosion-resistant aluminum alloy bonding wire comprising:

high-purity aluminum having a purity of 99.99% by mass or more; and

rhodium (Rh) in an amount of 10 ppm by mass or more and less than 100 ppm by mass, wherein

the rhodium (Rh) forms a dispersion phase of an intermetallic compound with aluminum in an aluminum matrix.

2. High corrosion-resistant aluminum alloy bonding wire comprising:

high-purity aluminum having a purity of 99.99% by mass or more; and

rhodium (Rh) and palladium (Pd) in a total amount of 10 ppm by mass or more and less than 100 ppm by mass, wherein

the rhodium (Rh) and palladium (Pd) form a dispersion phase of intermetallic compounds with aluminum in an aluminum matrix.

3. The high corrosion-resistant aluminum alloy bonding wire according to Claim 1 or 2, wherein the high-purity aluminum has a purity of 99.998% by mass or more.

4. The high corrosion-resistant aluminum alloy bonding wire according to Claim 1 or 2, wherein the aluminum matrix has a grain size of 10 to 100 μm.

5. The high corrosion-resistant aluminum alloy bonding wire according to Claim 1 or 2, wherein the dispersion phase is formed by heat treatment at 200 to 300°C after continuous wire drawing.

6. The high corrosion-resistant aluminum alloy bonding wire according to Claim 1 or 2, wherein the bonding wire is ultrasonically bonded.

7. The high corrosion-resistant aluminum alloy bonding wire according to Claim 1 or 2, wherein the bonding wire has a wire diameter of 50 to 500 μm.

8. The high corrosion-resistant aluminum alloy bonding wire according to Claim 1 or 2, wherein the bonding wire is used at 80 to 300°C or at 150 to 250°C.

CLAIMS

[Claim 1]

High corrosion-resistant aluminum alloy bonding wire comprising:

high-purity aluminum (Al) and rhodium (Rh), where the high-purity aluminum (Al) has a purity of 99.99% by mass or more, and the rhodium (Rh) is contained in an amount of 10 to 100 ppm by mass (excluding 100 ppm by mass), wherein

the rhodium (Rh) forms a dispersion phase of an intermetallic compound with aluminum in an aluminum matrix.

[Claim 2]

High corrosion-resistant aluminum alloy bonding wire comprising:

high-purity aluminum (Al), rhodium (Rh), and palladium (Pd), where the high-purity aluminum (Al) has a purity of 99.99% by mass or more, and the rhodium (Rh) and the palladium (Pd) are contained in a total amount of 10 to 100 ppm by mass (excluding 100 ppm by mass), wherein

the rhodium (Rh) and the palladium (Pd) form a dispersion phase of an intermetallic compound with aluminum in an aluminum matrix.

[Claim 3]

The high corrosion-resistant aluminum alloy bonding wire according to Claim 1 or 2, wherein the high-purity aluminum has a purity of 99.998% by mass or more.

[Claim 4]

The high corrosion-resistant aluminum alloy bonding wire according to Claim 1 or 2, wherein the aluminum matrix has a grain size of 10 to 100 μm.

[Claim 5]

The high corrosion-resistant aluminum alloy bonding wire according to Claim 1 or 2, wherein the dispersion phase is formed by heat treatment at 200 to 300°C after continuous wire drawing.

[Claim 6]

The high corrosion-resistant aluminum alloy bonding wire according to Claim 1 or 2, wherein the bonding wire is ultrasonically bonded.

[Claim 7]

The high corrosion-resistant aluminum alloy bonding wire according to Claim 1 or 2, wherein the bonding wire has a wire diameter of 50 to 500 μm.

[Claim 8]

The high corrosion-resistant aluminum alloy bonding wire according to Claim 1 or 2, wherein the bonding wire is used at 80 to 300°C or at 150 to 250°C.