Claims

1. A device for end side welding of plastic profiles, each profile having an end, an outer side adjacent the end and an inner side adjacent the end, the device comprising:

tensioning devices for retaining ends of two profiles in a coaxial position relative to one another;

a disc-shaped heating plate for generating heat rays, the heating plate having a central axis;

a reflection outer ring surrounding the heating plate;

a reflection inner ring arranged on the heating plate about the central axis; and

the tensioning devices being configured to retain ends of the profiles so that the inner ring is located inside of the inner sides of the profiles and the outer ring is located about the outer sides of the profiles, with the inner ring being configured to reflect heat rays from the heating plate onto inner sides of the profiles and the outer ring is configured to reflect heating rays from the heating plate onto outer sides of the profiles.

2. The device according to claim **1**, wherein the heating plate has a through-hole in the center along the central axis, and wherein the heating plate has a round outer contour.

3. The device according to claim **2**, wherein the reflection inner ring is arranged concentrically in the through-hole of the heating plate.

4. The device according to claim **1**, wherein the reflection inner ring is capable of conducting heat.

5. The device according to claim **4**, wherein the reflection inner ring comprises two bushings that are connected to one another with a changeable length by means of bolts and tensioning elements.

6. The device according to claim **1**, wherein the reflection inner ring is configured have a changeable length.

7. The device according to claim **1**, wherein the reflection inner ring has a maximum roughness Ra 1.2 μm.

8. The device according to claim **1**, wherein the reflection inner ring has two bushings.

9. The device according to claim **1**, wherein the reflection inner ring has tensioning elements.

10. A device comprising a heating plate for generating heat rays for contact-free heating of plastic profiles for end-side welding, each profile having an end, an outer side adjacent the end and an inner side adjacent the end, a reflection inner ring having an outer reflective surface with a diameter less than an inner diameter of the inner side of the profile, the reflection inner ring being arranged on the heating plate, and wherein the outer reflective surface of the reflection inner ring reflects the heat rays of the heating plate onto the plastic profile inner side.

11. The device according to claim **10**, wherein the heating plate has a through-hole in the center.

12. The device according to claim **11**, wherein the reflection inner ring is arranged concentrically in the through-hole of the heating plate.

13. The device according to claim **10**, wherein the reflection inner ring has a maximum roughness Ra 1.2 μm.

14. The device according to claim **10**, wherein the reflection inner ring has two bushings.

15. The device according to claim **10**, wherein the reflection inner ring has tensioning elements.

16. The device according to claim **10**, wherein the reflection inner ring is capable of conducting heat.

17. The device according to claim **16**, wherein the reflection inner ring comprises two bushings that are connected to one another with a changeable length by means of bolts and tensioning elements.