



Hair Straightener Plates Test

Objective

The test is to define the life of the ceramic coating on the hair straightener plates in:

1. Dry hair condition
2. Wet hair condition
3. Dry hair condition with heat protection spray

Apparatus

- Wig
- Hair straightener with ceramic coated plates
- Abrasion resistance tester

Procedure

1. Dry Hair Condition

- i. Prepare a wig with hair strands of 12 inches in length.
- ii. Energize the hair straightener to its maximum temperature setting.
- iii. Mount the hair straightener to the tester, and pull through the hair strands with rate of 15 strokes per minute.
- iv. Pull for 40,000 strokes, and inspect the coating surface for wear.
- v. Continue to pull after having achieved 40,000 strokes, until the coating starts peeling off.
- vi. Record the number of strokes when wear becomes visible.

2. Wet Hair Condition

- i. Prepare a wig with hair strands of 12 inches in length.
- ii. Energize the hair straightener to its maximum temperature setting.
- iii. Wash the wig with water, and gently wipe the hair with towel.
- iv. Mount the hair straightener to the tester, and pull through the hair strands with rate of 15 strokes per minute.
- v. Pull for 40,000 strokes, and inspect the coating surface for wear.
- vi. Continue to pull after having achieved 40,000 strokes, until the coating starts peeling off.
- vii. Record the number of strokes when wear becomes visible.

3. Dry Hair Condition with Heat Protection Spray

- i.** Prepare a wig with hair strands of 12 inches in length.
- ii.** Prepare “Vidal Sassoon” heat protection spray.
- iii.** Energize the hair straightener to its maximum temperature setting.
- iv.** Wash the wig with water, and wipe the hair with towel until it is entirely dry.
- v.** Spray the heat protection spray on the hair strands, both sides.
- vi.** Mount the hair straightener to the tester, and pull through the hair strands with rate of 15 strokes per minute.
- vii.** Pull for 40,000 strokes, and inspect the coating surface for wear.
- viii.** Continue to pull after having achieved 40,000 strokes, until the coating starts peeling off.
- ix.** Record the number of strokes when wear becomes visible.