

CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2024
 DateRun: 04/03/2024
 Experimenters: Amelia Wagner
 ClientType: Manufacturing
 ProjectNumber: Project #1
 Substrates: Laminate
 PartType: Coupon
 Contaminants: Adhesive
 Cleaning Methods: Manual Wipe
 Analytical Methods: Gravimetric, Timing

Purpose: To evaluate the ease of removal of adhesive using a variety of scrubbing tools

Experimental Procedure: Five scrubbing tools were tested. A total of fifteen laminate coupons were used, three per tool. The initial weights of the coupons were recorded. The coupons were then soiled with Roberts Vinyl Composition Floor Adhesive by heating the adhesive with a heat gun for 5 seconds, and then scraping the melted adhesive onto the center of the coupons. The dirty weights of the coupons were then recorded. Each coupon was cleaned with the correct scrubbing tool with Krud Kutter until all of the adhesive was removed. Each coupon received 2 sprays of the Krud Kutter and each tool received 2 sprays of the Krud Kutter, meaning that for each coupon about 3 ml of the cleaning agent was used. The time it took for all of the adhesive to be removed was recorded.

Results:

| Tool | Wt of cont. | Time cleaned (secs) | Time required per gram of cont. | AVG Time (secs) |
|-------------------------------|-------------|---------------------|---------------------------------|-----------------|
| Handle Brush | 0.9612 | 25 | 25 | 38 |
| | 0.7585 | 37 | 49 | |
| | 0.3553 | 14 | 39 | |
| White Flat Drill Attachment | 0.9759 | 9 | 9 | 35 |
| | 0.4984 | 24 | 48 | |
| | 0.5414 | 26 | 47 | |
| White Round Drill Attachment | 1.2993 | 23 | 28 | 31 |
| | 1.2145 | 9 | 7 | |
| | 0.3397 | 20 | 58 | |
| Yellow Flat Drill Attachment | 0.8326 | 8 | 9 | 20 |
| | 0.8052 | 24 | 30 | |
| | 1.1488 | 24 | 21 | |
| Yellow Round Drill Attachment | 1.3179 | 13 | 10 | 23 |
| | 0.4255 | 15 | 34 | |
| | 0.5496 | 13 | 24 | |

Summary:

Conclusion: They Yellow Drill Attachments worked the quickest, between 20 and 23 seconds per gram of soil.