
Supplemental Technical Specification for

Rideability for Asphalt Mixtures

SCDOT Designation: SC-M-403 (4/16)

1. SCOPE

- 1.1. The Resident Construction Engineer (**RCE**) will evaluate asphalt surfaces for a satisfactory ride. If conditions permit and unless otherwise specified in the special provisions, the Materials and Research Engineer will test the asphalt surface in accordance with **SC-T-125** when requested by the **RCE**. General guidelines for the application of this specification are shown in Figure 1.

2. REFERENCED DOCUMENTS

- 2.1. **SC-T-125**, *Measurement of Pavement Rideability using the Dynatest 5051 Mark III Road Surface Profiler with LMI 3D Gocator series wheel path lasers.*
- 2.2. **SC-M-502**

3. REQUIREMENTS FOR TESTING

- 3.1. For **SC-T-125** to be used, the following conditions must be met:
 - A constant speed of at least 35 miles per hour is maintainable throughout each section that measurements are made.
 - The sections to be tested have a final posted speed limit of at least 45 mph.
 - The project has at least 0.5 miles of pavement that may be tested without interruptions or exclusions (such as, but not limited to, bridges, stop signs, railroad crossings, speed limit below 45 mph, signalized intersections, or sharp curves posted for less than 35 mph.)

4. REQUIREMENTS FOR NEW CONSTRUCTION

- 4.1. On newly constructed roadway projects that include two or more uniform lifts of asphalt, the maximum acceptable IRI for full pay for each nominal 0.1-mile segment of vehicle lane, when tested in accordance with **SC-T-125**, is 65 inches per mile, with the following exceptions. If the new construction is directly tied to existing pavement for widening and the existing pavement is being overlaid with two or more lifts of asphalt, then Subsection 5.3 (Table 3.) applies to all adjacent new wheelpaths in a segment and direction unless the route is defined as limited access in Table 2. If the new construction is directly tied to existing pavement for widening and the existing pavement is being overlaid with a single lift of asphalt, then the requirements of Sections 6 or 7, as applicable, for a given segment and direction applies to all adjacent new wheelpaths unless the route is defined as limited access in Table 2. Pay adjustments apply only to the course of asphalt that will constitute the final riding surface.
- 4.2. When the IRI value exceeds 65 (or 90 if Table 3. applies) inches per mile but does not exceed 80 (or 111 if Table 3. applies), then a price reduction will be made in accordance with Table 1 or Table 3 as applicable. Alternatively, the Contractor may elect to correct

such deficient sections without additional compensation. Follow the requirements for repair in Subsection 10. If corrections are not made, then the price adjustment is based on the original contract unit price per ton of the asphalt modified according to Table 1 or Table 3, as applicable. Deduct as a lump sum the total amount of any reduction in payment from monies due.

- 4.3. Sections of roadway for which the IRI value is 81 (or 112 if Table 3. applies) inches per mile or above, as applicable, will be reviewed by the **RCE** on an individual basis. If the **RCE** determines that the section is unacceptable, remove the material and replace or overlay it subject to the approval of the **RCE**. Follow the requirements for repair in Subsection 9. Should the **DCE** determine that the material may remain in place and does not require an overlay or other corrective action, then a price adjustment will be assessed based on the applicable Schedule for Adjusted Payment. If corrections are not made, then the price adjustment is based on the original contract unit price per ton of the asphalt modified according to Table 1 or Table 3, as applicable. Deduct as a lump sum the total amount of any reduction in payment from monies due.

Segment IRI (inches/mile)	Price Adjustment – Asphalt Final Riding Course
Less than 39	107%
39 – 43	105%
44 – 65	100%
66 – 70	95%
71 – 75	90%
76 – 80	80%
Greater than 80	For each additional increment of 5 inches per mile of roughness above 80 inches per mile, reduce payment by an additional 10% from 80% if the DCE determines the material may remain in place.

5. REQUIREMENTS FOR MULTIPLE LIFT RESURFACING PROJECTS

- 5.1. The requirements of this section apply to overlays of existing pavement with two or more asphalt lifts. A lift is defined as any asphalt mix applied at a specified contract application rate across the road segment.
- 5.2. Limited access segments that receive 2 lifts or more of asphalt will be tested in accordance with Subsection 4 with incentives and pay reductions assessed according to Table 1 regardless of the lift thicknesses. Limited access routes are defined as those listed in Table 2, Limited Access Routes.

Route	Location	Comments
All routes designated as an interstate.	Statewide	
US 123	Pickens County	MP 3.1 to 17.6 only
SC 277	Richland County	Zoned 55 mph or greater
SC 22	Horry County	
SC 31	Horry County	

- 5.3. For resurfacing projects entailing 2 or more lifts of asphalt on routes not given in Table 2, the requirement for new construction, as given in Subsection 4, apply with the schedule for adjusted payment shown in Table 3 in lieu of Table 1.

Table 3. Schedule For Adjusted Payment – Multiple Lift Overlay on Non-Limited Access Segments and Reclamation	
Segment IRI (inches/mile)	Price Adjustment – Asphalt Final Riding Course
Less than 46	107%
46 – 54	105%
55 – 90	100%
91 – 95	95%
96 – 101	90%
102 – 106	85%
107 – 111	80%
Greater than 111	For each additional increment of 5 inches per mile of roughness above 111 inches per mile, reduce payment by an additional 10% from 80% if the DCE determines the material may remain in place.

6. REQUIREMENTS FOR RESURFACING PROJECTS OVER 150 PSY

- 6.1. The requirements of this section apply to overlays of existing pavement with a contract application rate of greater than 150 psy. When a resurfacing project involves two or more uniform asphalt lifts, the requirements for new pavement, as given in Subsection 4, apply. However, the rideability requirements as shown in Table 3 apply in lieu of Table 1, except for segments that are on interstate and limited access routes for which Table 1 applies. For single lift overlays, except OGFC, of existing pavement with a contract application rate of greater than 150 psy, all incentives and pay reductions will otherwise be assessed according to this Subsection. If the overlay is OGFC, then the requirements of Table 4 apply without regard to number and thickness of lifts.

Table 4. Schedule For Adjusted Payment – OGFC Overlay	
Segment IRI (inches/mile)	Price Adjustment – Asphalt Final Riding Course
Less than 31	107%
31 – 36	105%
37 – 57	100%
58 – 63	95%
64 – 68	90%
69 – 73	80%
Greater than 73	For each additional increment of 5 inches per mile of roughness above 73 inches per mile, reduce payment by an additional 10% from 80% if the DCE determines the material may remain in place.

- 6.2. Where applicable, the existing pavement will be tested by the Department in accordance with SC-T-125 or other method specified in the special provisions before any work is performed and then again on the finished surface. Payment for the final asphalt riding surface course will be made based on the improvement over the initial rideability for each 0.1 mile segment as shown in Table 6, Rideability Requirements for Resurfacing.

- 6.3. All pay adjustments apply only to the course of asphalt that will constitute the final riding surface. The asphalt mix tonnage subject to adjustment is based on the original plan quantity for the asphalt as shown on the typical section. The total amount of any reduction in payment is deducted as a lump sum from monies due. Where measurements on the finished surface exceeds the repair threshold limit for the corresponding initial roughness as given in the column titled "Repair" in Table 6, the Department, at the discretion of the **DCE**, may require corrective action or elect to apply a pay reduction to the asphalt final riding surface course in lieu of correction.
- 6.4. If the Department elects to require correction, correct such sections without additional compensation such that the finished surface has an acceptable rideability. Follow the requirements for repair in Subsection 10. Final rideability is considered acceptable when the repaired segment has a rideability value less than or equal to that shown in the "Repair" column. Segments requiring repair prior to acceptance are not eligible for payment in excess of 100%, however a 5% pay reduction will be applied if the post-repair rideability is in the range shown as "95%" in Table 6.
- 6.5. If the Department elects to apply a pay reduction as provided in Subsection 6.3, then the payment for asphalt tonnage for that segment will be made at 95% of the bid unit price minus an additional 2% for each inch per mile of roughness up to 20 inches per mile above the rideability value given in the "Repair" column of Table 6. For each additional inch of roughness per mile greater than the "Repair" value plus 20 inches per mile, an additional reduction of 4% per inch will apply. If the final rideability is 34 inches per mile or more above the repair threshold, the section would be accepted without pay for the material subject to reduction.

Example 1: A segment has an initial ride of 255 inches per mile. After overlay, the ride is 139 inches per mile, which is 1 inch per mile above the repair threshold. Payment for the section would be $(95\% - (2\% \times 1 \text{ inch})) = 93\%$ of the bid unit price for the surface lift.

Example 2: A segment has an initial ride of 255 inches per mile. After overlay, the ride is 158 inches per mile, which is 20 inches per mile above the repair threshold. Payment for the section would be $(95\% - (2\% \times 20 \text{ inches})) = 55\%$ of the bid unit price for the surface lift.

Example 3: A segment has an initial ride of 255 inches per mile. After overlay, the ride is 159 inches per mile, which is 21 inches per mile above the repair threshold. Payment for the section would be $(95\% - (2\% \times 20 \text{ inches}) - (4\% \times 1 \text{ inch})) = 51\%$ of the bid unit price for the surface lift.

Example 4: A segment has an initial ride of 255 inches per mile. After overlay, the ride is 172 inches per mile, which is 34 inches per mile above the repair threshold. The ASPHALT final riding course for the segment would be accepted without pay.

7. REQUIREMENTS FOR SINGLE LIFT OVERLAYS LESS THAN OR EQUAL TO 150 PSY

- 7.1. The requirements for this section apply to overlays with a contract application rate less than or equal to 150 psy, except for OGFC. If the overlay is OGFC, then the requirements of Table 4 apply.
- 7.2. Where applicable, the existing pavement will be tested by the Department in accordance with SC-T-125 or other method specified in the special provisions before any work is performed and then again on the finished surface. Payment for the final asphalt riding surface course will be made based on the change in final rideability over the initial rideability for each 0.1 mile segment.
- 7.3. For overlays where this subsection applies and the initial ride is 142 inches per mile or less, full payment is made if the final rideability is less than or equal to the initial rideability.
- 7.4. For overlays where this subsection applies and the initial ride is greater than 142 inches per mile and less than or equal to 157 inches per mile, full payment is made if the final rideability is less than or equal to 142 inches per mile.
- 7.5. For overlays where this subsection applies and the initial ride is greater than 158 inches per mile, full payment is made if the final rideability is less than or equal to the initial rideability times 0.9, rounded up to the nearest whole number.
- 7.6. The repair threshold for a segment is 1.1 times the full payment rideability value rounded up to the nearest whole number.
- 7.7. If the final ride for a segment is greater than the full-payment rideability, but less than or equal to the repair threshold, payment on the asphalt final riding surface for that segment is made at 95% of the unit bid price.
- 7.8. If the final ride for a segment is greater than the repair threshold, the Department, at the discretion of the **DCE**, may elect to require repairs to correct the rideability or apply a pay reduction.
- 7.9. If the Department elects to require correction, correct such sections without additional compensation such that the finished surface has an acceptable rideability. Follow the requirements for repair in Subsection 10. Final rideability is considered acceptable when the repaired segment has a rideability value less than or equal to the repair threshold. A 5% pay reduction will be applied if the post-repair rideability is in the range given in Subsection 7.7.
- 7.10. If the Department elects to apply a pay reduction, then payment for asphalt mixture quantity for that segment will be made as given in Section 6.5, except that the repair threshold is determined as given in Section 7.6.

8. REQUIREMENTS FOR RECLAMATION PROJECTS

- 8.1. The requirements for this section apply to segments where the existing pavement has been reclaimed in accordance with Section 306 of the Standard Specifications, including any applicable Special Provisions, Supplemental Specifications, or other addenda, prior to overlay with asphalt or bituminous surfacing.
- 8.2. If the reclamation is being overlaid with a single lift of asphalt surface, ensure that the final rideability is 133 inches per mile or less. All incentive and pay reductions will follow Subsection 6 of this specification for a pre-overlay rideability of 286 inches per mile, regardless of asphalt thickness of the single lift.
- 8.3. If the reclamation is being overlaid with multiple uniform lifts of asphalt, then ensure that the rideability meets the requirements for new construction as given in Subsection 4 of this specification except that the rideability requirements are as shown Table 3, instead of Table 1. All incentives and pay reductions will otherwise be assessed according to Subsection 5.

9. REQUIREMENTS FOR SURFACE PLANING (MICRO-MILLING)

- 9.1. A 1156 foot test section will be constructed as per Section 4.1 of Special Provision titled Surface Planing of Asphalt Pavement. The test section will be tested by the Department for rideability following Subsection 9.4. The maximum acceptable rideability is 78 inches per mile for each 0.1 mile segment. The first and last 50 feet of the test section will not be included in the two 0.1 mile segments. **The RCE will provide the SCDOT Office of Materials and Research with at least three business days of notice prior to the need of rideability testing.**
- 9.2. If rideability is not met on this section, do no further work and provide a written plan of action to the RCE detailing what steps will be taken to improve operations. The RCE may require corrective action to the test section prior to acceptance or accept the test section as is. Once the plan has been approved by the RCE, construct a second test section at a different location from the first. If the second test section meets the requirements and is approved by the RCE, continuous milling may commence. If the second test section fails to meet the requirements, continue to construct test 1156 foot sections until satisfactory results are achieved.
- 9.3. The Department will test and accept the milled surface for rideability as given in Subsections 9.4 through 9.6. The Adjusted Schedule of Payment given in Table 5 below will apply to the contract unit price for the micro-milling as given in Subsection 6 of the Micro-Milling special provision.
- 9.4. *Testing*
 - 9.4.1. When existing Asphalt Pavement is milled as a means to improve the rideability and surface characteristics, the pavement is tested according to **SC-T-125**, however **SC-T-125** is modified such that the IRI measured for each wheelpath is averaged and the average value is reported for the section. The section will be tested with the profiler three times and the three IRI values are averaged to determine the overall IRI for the section. The testing will be performed by the Department's Pavement Evaluation Unit after all grinding

operations are complete if the pavement meets the requirements of Subsection 4.2. The International Roughness Index (IRI) is reported in inches per mile in 0.1-mile nominal lots.

9.5. *Rideability*

9.5.1. The pavement is considered acceptable if the IRI roughness is 87 inches per mile or less after grinding operations are complete unless otherwise specified in the Special Provisions. Based on the measured roughness, the contract unit price for Grinding and Texturing Existing Pavement is adjusted according to Table 5, shown below.

Table 5. Schedule For Adjusted Payment – Micro-Milling	
IRI Roughness (inches/mile)	Adjusted Unit Price
Less than or equal to 48	125%
49 - 62	110%
63 - 78	100%
79 - 87	90%
Greater than 87	Corrective Action Required

9.6. *Further Corrective Action*

9.6.1. In the event that the initial IRI of the ground surface is greater than 87 inches per mile, perform further work on the pavement such that the IRI is reduced to 87 inches per mile or less at no expense to the Department. Additional remedial work may also be optionally conducted at lower initial IRI roughness levels. Prior to any corrective action, submit a written remediation plan to the RCE for approval. Conduct no corrective work until the RCE has approved the written plan. If the initial IRI roughness is less than 79 inches per mile, the Department reserves the right to reject any additional corrective work if, in the Department’s opinion, additional work will be detrimental to the pavement or reduce the pavement thickness excessively. The final adjusted unit price for Grinding and Texturing Existing Pavement is determined based on Table 5 and the IRI measured after corrective action is applied.

10. REQUIREMENTS FOR REPAIR

10.1. This section covers the requirements for the repairs of surface deficiencies elected by either the Contractor or Department, as applicable.

10.2. Obtain written approval of the **RCE** for the method of correcting the surface deficiencies; however under no circumstances shall the pavement be subject to an artificial heat source over 175°F. If repairs consist of patching, then ensure that the patches are the full width of the lane. Also, when patches are less than 250 feet apart, combine the patches into one continuous patch, unless otherwise directed by the RCE.

10.3. The RCE may withhold payment for the asphalt (or portion thereof) until the deficiencies have been corrected, and the surface is re-tested and provides an acceptably smooth ride.

10.4. No more than 100% of the contract unit price will be paid for sections where corrective work has been made.

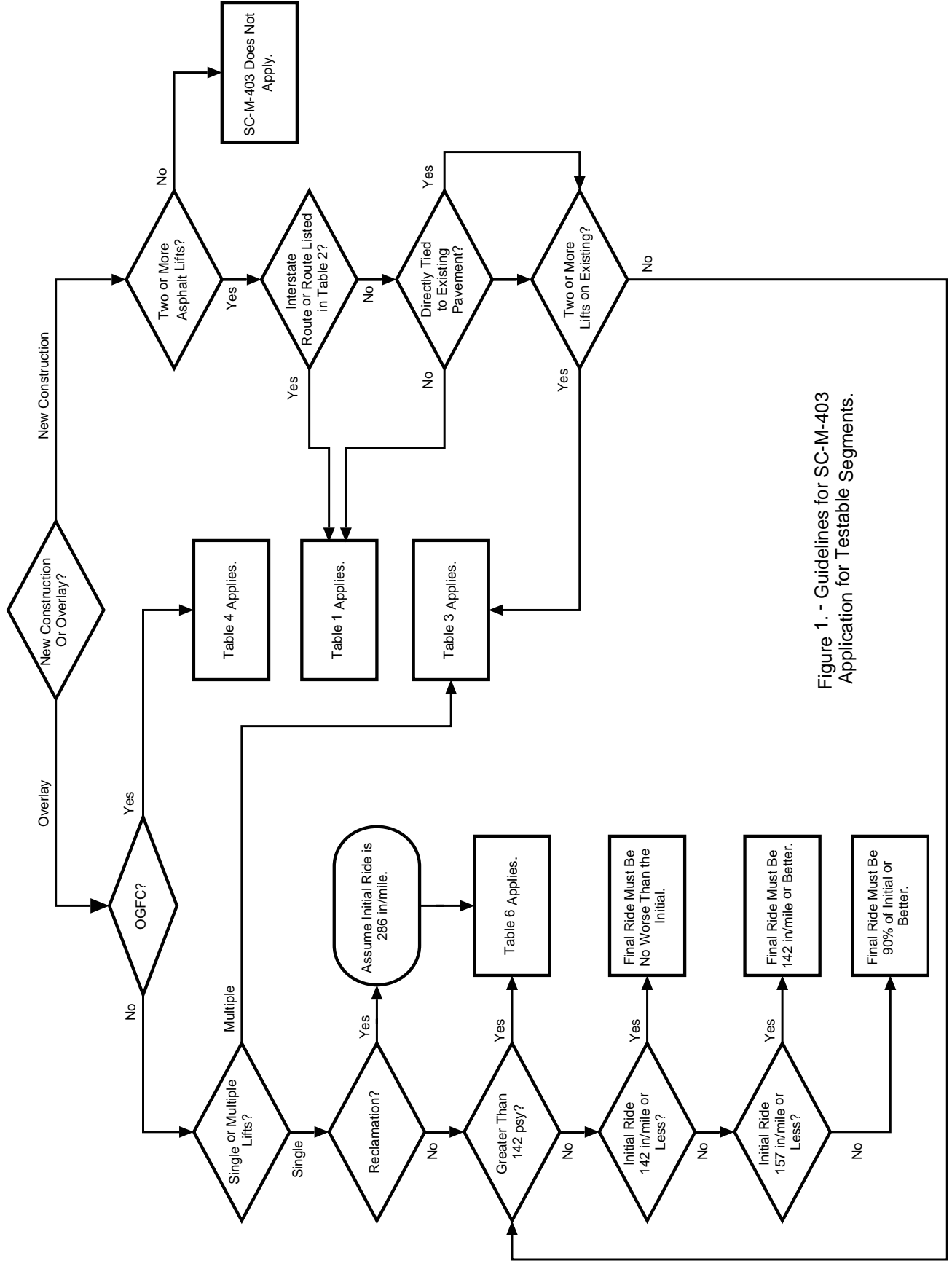


Figure 1. - Guidelines for SC-M-403 Application for Testable Segments.

Table 6 – Rideability Requirements for Resurfacing

Initial Ride	107%	105%	100%	95%	Repair
57	< 45	45 - 55	56 - 80	81 - 86	> 86
58	< 45	45 - 55	56 - 80	81 - 86	> 86
59	< 45	45 - 55	56 - 80	81 - 86	> 86
60	< 45	45 - 55	56 - 80	81 - 86	> 86
61	< 45	45 - 55	56 - 80	81 - 86	> 86
62	< 45	45 - 55	56 - 80	81 - 86	> 86
63	< 45	45 - 55	56 - 80	81 - 86	> 86
64	< 45	45 - 55	56 - 80	81 - 86	> 86
65	< 45	45 - 55	56 - 80	81 - 87	> 87
66	< 45	45 - 55	56 - 80	81 - 87	> 87
67	< 45	45 - 55	56 - 80	81 - 88	> 88
67	< 45	45 - 55	56 - 80	81 - 88	> 88
68	< 45	45 - 55	56 - 80	81 - 89	> 89
69	< 45	45 - 55	56 - 80	81 - 89	> 89
70	< 45	45 - 55	56 - 80	81 - 90	> 90
71	< 45	45 - 55	56 - 80	81 - 90	> 90
72	< 45	45 - 55	56 - 80	81 - 91	> 91
73	< 45	45 - 55	56 - 81	82 - 91	> 91
74	< 45	45 - 55	56 - 81	82 - 92	> 92
75	< 45	45 - 55	56 - 81	82 - 92	> 92
76	< 45	45 - 55	56 - 82	83 - 93	> 93
77	< 45	45 - 55	56 - 82	83 - 93	> 93
78	< 45	45 - 55	56 - 82	83 - 93	> 93
79	< 45	45 - 55	56 - 82	83 - 94	> 94
80	< 45	45 - 55	56 - 83	84 - 94	> 94
81	< 45	45 - 55	56 - 83	84 - 95	> 95
82	< 45	45 - 55	56 - 83	84 - 95	> 95
83	< 45	45 - 55	56 - 84	85 - 96	> 96
84	< 45	45 - 55	56 - 84	85 - 96	> 96
85	< 45	45 - 55	56 - 84	85 - 96	> 96
86	< 45	45 - 55	56 - 84	85 - 96	> 96
86	< 45	45 - 55	56 - 85	86 - 97	> 97
87	< 45	45 - 55	56 - 85	86 - 97	> 97
88	< 45	45 - 55	56 - 85	86 - 97	> 97
89	< 45	45 - 55	56 - 86	87 - 98	> 98
90	< 45	45 - 55	56 - 86	87 - 98	> 98
91	< 45	45 - 55	56 - 86	87 - 98	> 98
92	< 45	45 - 55	56 - 86	87 - 98	> 98
93	< 45	45 - 55	56 - 87	88 - 100	> 100
94	< 45	45 - 55	56 - 87	88 - 100	> 100

Table 6 – Rideability Requirements for Resurfacing

Initial Ride	107%	105%	100%	95%	Repair
95	< 45	45 - 55	56 - 87	88 - 100	> 100
96	< 45	45 - 55	56 - 87	88 - 100	> 100
97	< 45	45 - 55	56 - 88	89 - 101	> 101
98	< 45	45 - 55	56 - 88	89 - 101	> 101
99	< 45	45 - 55	56 - 88	89 - 101	> 101
100	< 45	45 - 55	56 - 88	89 - 101	> 101
101	< 45	45 - 55	56 - 89	90 - 102	> 102
102	< 45	45 - 55	56 - 89	90 - 102	> 102
103	< 45	45 - 55	56 - 89	90 - 102	> 102
104	< 45	45 - 55	56 - 90	91 - 103	> 103
104	< 45	45 - 55	56 - 90	91 - 103	> 103
105	< 45	45 - 55	56 - 90	91 - 103	> 103
106	< 45	45 - 55	56 - 90	91 - 103	> 103
107	< 45	45 - 55	56 - 91	92 - 104	> 104
108	< 45	45 - 55	56 - 91	92 - 104	> 104
109	< 45	45 - 55	56 - 91	92 - 104	> 104
110	< 45	45 - 55	56 - 91	92 - 104	> 104
111	< 45	45 - 55	56 - 92	93 - 105	> 105
112	< 45	45 - 55	56 - 92	93 - 105	> 105
113	< 45	45 - 55	56 - 92	93 - 105	> 105
114	< 45	45 - 55	56 - 92	93 - 105	> 105
115	< 45	45 - 55	56 - 93	94 - 106	> 106
116	< 45	45 - 55	56 - 93	94 - 106	> 106
117	< 45	45 - 55	56 - 93	94 - 106	> 106
118	< 45	45 - 55	56 - 93	94 - 106	> 106
119	< 45	45 - 55	56 - 94	95 - 107	> 107
120	< 45	45 - 55	56 - 94	95 - 107	> 107
121	< 45	45 - 55	56 - 94	95 - 107	> 107
122	< 45	45 - 55	56 - 94	95 - 107	> 107
122	< 45	45 - 55	56 - 95	96 - 108	> 108
123	< 45	45 - 55	56 - 95	96 - 108	> 108
124	< 45	45 - 55	56 - 95	96 - 108	> 108
125	< 45	45 - 55	56 - 95	96 - 108	> 108
126	< 45	45 - 55	56 - 96	97 - 109	> 109
127	< 45	45 - 55	56 - 96	97 - 109	> 109
128	< 45	45 - 55	56 - 96	97 - 109	> 109
129	< 45	45 - 55	56 - 96	97 - 109	> 109
130	< 45	45 - 55	56 - 96	97 - 109	> 109
131	< 45	45 - 55	56 - 97	98 - 110	> 110
132	< 45	45 - 55	56 - 97	98 - 110	> 110

Table 6 – Rideability Requirements for Resurfacing

Initial Ride	107%	105%	100%	95%	Repair
133	< 45	45 - 55	56 - 97	98 - 110	> 110
134	< 45	45 - 55	56 - 98	99 - 111	> 111
135	< 45	45 - 55	56 - 98	99 - 111	> 111
136	< 45	45 - 55	56 - 98	99 - 111	> 111
137	< 45	45 - 55	56 - 98	99 - 111	> 111
138	< 45	45 - 55	56 - 100	101 - 112	> 112
139	< 45	45 - 55	56 - 100	101 - 112	> 112
140	< 45	45 - 55	56 - 100	101 - 112	> 112
140	< 45	45 - 55	56 - 100	101 - 112	> 112
141	< 45	45 - 55	56 - 101	102 - 113	> 113
142	< 45	45 - 55	56 - 101	102 - 113	> 113
143	< 45	45 - 55	56 - 101	102 - 113	> 113
144	< 45	45 - 55	56 - 101	102 - 113	> 113
145	< 45	45 - 55	56 - 101	102 - 113	> 113
146	< 45	45 - 55	56 - 102	103 - 114	> 114
147	< 45	45 - 55	56 - 102	103 - 114	> 114
148	< 45	45 - 55	56 - 102	103 - 114	> 114
149	< 45	45 - 55	56 - 102	103 - 114	> 114
150	< 46	46 - 56	57 - 103	104 - 115	> 115
151	< 46	46 - 56	57 - 103	104 - 115	> 115
152	< 46	46 - 56	57 - 103	104 - 115	> 115
153	< 46	46 - 56	57 - 103	104 - 115	> 115
154	< 47	47 - 57	58 - 104	105 - 116	> 116
155	< 47	47 - 57	58 - 104	105 - 116	> 116
156	< 47	47 - 57	58 - 104	105 - 116	> 116
157	< 47	47 - 57	58 - 104	105 - 116	> 116
158	< 48	48 - 58	59 - 105	106 - 117	> 117
159	< 48	48 - 58	59 - 105	106 - 117	> 117
159	< 48	48 - 58	59 - 105	106 - 117	> 117
160	< 48	48 - 58	59 - 105	106 - 117	> 117
161	< 48	48 - 58	59 - 105	106 - 117	> 117
162	< 49	49 - 59	60 - 106	107 - 118	> 118
163	< 49	49 - 59	60 - 106	107 - 118	> 118
164	< 49	49 - 59	60 - 106	107 - 118	> 118
165	< 49	49 - 59	60 - 106	107 - 118	> 118
166	< 50	50 - 60	61 - 107	108 - 119	> 119
167	< 50	50 - 60	61 - 107	108 - 119	> 119
168	< 50	50 - 60	61 - 107	108 - 119	> 119
169	< 50	50 - 60	61 - 107	108 - 119	> 119
170	< 51	51 - 61	62 - 108	109 - 120	> 120

Table 6 – Rideability Requirements for Resurfacing

Initial Ride	107%	105%	100%	95%	Repair
171	< 51	51 - 61	62 - 108	109 - 120	> 120
172	< 51	51 - 61	62 - 108	109 - 120	> 120
173	< 51	51 - 61	62 - 108	109 - 120	> 120
174	< 51	51 - 61	62 - 108	109 - 120	> 120
175	< 52	52 - 62	63 - 109	110 - 121	> 121
176	< 52	52 - 62	63 - 109	110 - 121	> 121
177	< 52	52 - 62	63 - 109	110 - 121	> 121
177	< 52	52 - 62	63 - 109	110 - 121	> 121
178	< 53	53 - 63	64 - 110	111 - 122	> 122
179	< 53	53 - 63	64 - 110	111 - 122	> 122
180	< 53	53 - 63	64 - 110	111 - 122	> 122
181	< 53	53 - 63	64 - 110	111 - 122	> 122
182	< 53	53 - 63	64 - 110	111 - 122	> 122
183	< 55	55 - 64	65 - 111	112 - 123	> 123
184	< 55	55 - 64	65 - 111	112 - 123	> 123
185	< 55	55 - 64	65 - 111	112 - 123	> 123
186	< 55	55 - 64	65 - 111	112 - 123	> 123
187	< 56	56 - 65	66 - 112	113 - 124	> 124
188	< 56	56 - 65	66 - 112	113 - 124	> 124
189	< 56	56 - 65	66 - 112	113 - 124	> 124
190	< 56	56 - 65	66 - 112	113 - 124	> 124
191	< 56	56 - 65	66 - 112	113 - 124	> 124
192	< 57	57 - 66	67 - 113	114 - 125	> 125
193	< 57	57 - 66	67 - 113	114 - 125	> 125
194	< 57	57 - 66	67 - 113	114 - 125	> 125
195	< 57	57 - 66	67 - 113	114 - 125	> 125
195	< 57	57 - 66	67 - 113	114 - 125	> 125
196	< 58	58 - 67	68 - 114	115 - 126	> 126
197	< 58	58 - 67	68 - 114	115 - 126	> 126
198	< 58	58 - 67	68 - 114	115 - 126	> 126
199	< 58	58 - 67	68 - 114	115 - 126	> 126
200	< 59	59 - 68	69 - 115	116 - 127	> 127
201	< 59	59 - 68	69 - 115	116 - 127	> 127
202	< 59	59 - 68	69 - 115	116 - 127	> 127
203	< 59	59 - 68	69 - 115	116 - 127	> 127
204	< 59	59 - 68	69 - 115	116 - 127	> 127
205	< 60	60 - 69	70 - 116	117 - 128	> 128
206	< 60	60 - 69	70 - 116	117 - 128	> 128
207	< 60	60 - 69	70 - 116	117 - 128	> 128
208	< 60	60 - 69	70 - 116	117 - 128	> 128

Table 6 – Rideability Requirements for Resurfacing

Initial Ride	107%	105%	100%	95%	Repair
209	< 60	60 - 69	70 - 116	117 - 128	> 128
210	< 61	61 - 70	71 - 117	118 - 129	> 129
211	< 61	61 - 70	71 - 117	118 - 129	> 129
212	< 61	61 - 70	71 - 117	118 - 129	> 129
213	< 61	61 - 70	71 - 117	118 - 129	> 129
213	< 62	62 - 71	72 - 118	119 - 130	> 130
214	< 62	62 - 71	72 - 118	119 - 130	> 130
215	< 62	62 - 71	72 - 118	119 - 130	> 130
216	< 62	62 - 71	72 - 118	119 - 130	> 130
217	< 62	62 - 71	72 - 118	119 - 130	> 130
218	< 63	63 - 72	73 - 119	120 - 131	> 131
219	< 63	63 - 72	73 - 119	120 - 131	> 131
220	< 63	63 - 72	73 - 119	120 - 131	> 131
221	< 63	63 - 72	73 - 119	120 - 131	> 131
222	< 63	63 - 72	73 - 119	120 - 131	> 131
223	< 64	64 - 73	74 - 120	121 - 132	> 132
224	< 64	64 - 73	74 - 120	121 - 132	> 132
225	< 64	64 - 73	74 - 120	121 - 132	> 132
226	< 64	64 - 73	74 - 120	121 - 132	> 132
227	< 64	64 - 73	74 - 120	121 - 132	> 132
228	< 65	65 - 74	75 - 121	122 - 133	> 133
229	< 65	65 - 74	75 - 121	122 - 133	> 133
230	< 65	65 - 74	75 - 121	122 - 133	> 133
231	< 65	65 - 74	75 - 121	122 - 133	> 133
232	< 65	65 - 74	75 - 121	122 - 133	> 133
232	< 66	66 - 75	76 - 122	123 - 134	> 134
233	< 66	66 - 75	76 - 122	123 - 134	> 134
234	< 66	66 - 75	76 - 122	123 - 134	> 134
235	< 66	66 - 75	76 - 122	123 - 134	> 134
236	< 66	66 - 75	76 - 122	123 - 134	> 134
237	< 67	67 - 76	77 - 123	124 - 135	> 135
238	< 67	67 - 76	77 - 123	124 - 135	> 135
239	< 67	67 - 76	77 - 123	124 - 135	> 135
240	< 67	67 - 76	77 - 123	124 - 135	> 135
241	< 67	67 - 76	77 - 123	124 - 135	> 135
242	< 68	68 - 77	78 - 124	125 - 136	> 136
243	< 68	68 - 77	78 - 124	125 - 136	> 136
244	< 68	68 - 77	78 - 124	125 - 136	> 136
245	< 68	68 - 77	78 - 124	125 - 136	> 136
246	< 68	68 - 77	78 - 124	125 - 136	> 136

Table 6 – Rideability Requirements for Resurfacing

Initial Ride	107%	105%	100%	95%	Repair
247	< 69	69 - 78	79 - 125	126 - 137	> 137
248	< 69	69 - 78	79 - 125	126 - 137	> 137
249	< 69	69 - 78	79 - 125	126 - 137	> 137
250	< 69	69 - 78	79 - 125	126 - 137	> 137
250	< 69	69 - 78	79 - 125	126 - 137	> 137
251	< 70	70 - 79	80 - 126	127 - 138	> 138
252	< 70	70 - 79	80 - 126	127 - 138	> 138
253	< 70	70 - 79	80 - 126	127 - 138	> 138
254	< 70	70 - 79	80 - 126	127 - 138	> 138
255	< 70	70 - 79	80 - 126	127 - 138	> 138
256	< 71	71 - 80	81 - 127	128 - 139	> 139
257	< 71	71 - 80	81 - 127	128 - 139	> 139
258	< 71	71 - 80	81 - 127	128 - 139	> 139
259	< 71	71 - 80	81 - 127	128 - 139	> 139
260	< 71	71 - 80	81 - 127	128 - 139	> 139
261	< 72	72 - 81	82 - 128	129 - 140	> 140
262	< 72	72 - 81	82 - 128	129 - 140	> 140
263	< 72	72 - 81	82 - 128	129 - 140	> 140
264	< 72	72 - 81	82 - 128	129 - 140	> 140
265	< 72	72 - 81	82 - 128	129 - 140	> 140
266	< 73	73 - 82	83 - 129	130 - 141	> 141
267	< 73	73 - 82	83 - 129	130 - 141	> 141
268	< 73	73 - 82	83 - 129	130 - 141	> 141
268	< 73	73 - 82	83 - 129	130 - 141	> 141
269	< 73	73 - 82	83 - 129	130 - 141	> 141
270	< 74	74 - 83	84 - 130	131 - 142	> 142
271	< 74	74 - 83	84 - 130	131 - 142	> 142
272	< 74	74 - 83	84 - 130	131 - 142	> 142
273	< 74	74 - 83	84 - 130	131 - 142	> 142
274	< 74	74 - 83	84 - 130	131 - 142	> 142
275	< 74	74 - 83	84 - 130	131 - 142	> 142
276	< 75	75 - 84	85 - 131	132 - 144	> 144
277	< 75	75 - 84	85 - 131	132 - 144	> 144
278	< 75	75 - 84	85 - 131	132 - 144	> 144
279	< 75	75 - 84	85 - 131	132 - 144	> 144
280	< 75	75 - 84	85 - 131	132 - 144	> 144
281	< 76	76 - 85	86 - 132	133 - 145	> 145
282	< 76	76 - 85	86 - 132	133 - 145	> 145
283	< 76	76 - 85	86 - 132	133 - 145	> 145
284	< 76	76 - 85	86 - 132	133 - 145	> 145

Table 6 – Rideability Requirements for Resurfacing

Initial Ride	107%	105%	100%	95%	Repair
285	< 76	76 - 85	86 - 132	133 - 145	> 145
286	< 77	77 - 86	87 - 133	134 - 146	> 146
286	< 77	77 - 86	87 - 133	134 - 146	> 146
287	< 77	77 - 86	87 - 133	134 - 146	> 146
288	< 77	77 - 86	87 - 133	134 - 146	> 146
289	< 77	77 - 86	87 - 133	134 - 146	> 146
290	< 78	78 - 87	88 - 134	135 - 147	> 147
291	< 78	78 - 87	88 - 134	135 - 147	> 147
292	< 78	78 - 87	88 - 134	135 - 147	> 147
293	< 78	78 - 87	88 - 134	135 - 147	> 147
294	< 78	78 - 87	88 - 134	135 - 147	> 147
295	< 78	78 - 87	88 - 134	135 - 147	> 147
296	< 79	79 - 88	89 - 135	136 - 148	> 148
297	< 79	79 - 88	89 - 135	136 - 148	> 148
298	< 79	79 - 88	89 - 135	136 - 148	> 148
299	< 79	79 - 88	89 - 135	136 - 148	> 148
300	< 79	79 - 88	89 - 135	136 - 148	> 148
301	< 80	80 - 89	90 - 136	137 - 149	> 149
302	< 80	80 - 89	90 - 136	137 - 149	> 149
303	< 80	80 - 89	90 - 136	137 - 149	> 149
304	< 80	80 - 89	90 - 136	137 - 149	> 149
304	< 80	80 - 89	90 - 136	137 - 149	> 149
305	< 80	80 - 89	90 - 136	137 - 149	> 149
306	< 81	81 - 90	91 - 137	138 - 150	> 150
307	< 81	81 - 90	91 - 137	138 - 150	> 150
308	< 81	81 - 90	91 - 137	138 - 150	> 150
309	< 81	81 - 90	91 - 137	138 - 150	> 150
310	< 81	81 - 90	91 - 137	138 - 150	> 150
311	< 82	82 - 91	92 - 138	139 - 151	> 151
312	< 82	82 - 91	92 - 138	139 - 151	> 151
313	< 82	82 - 91	92 - 138	139 - 151	> 151
314	< 82	82 - 91	92 - 138	139 - 151	> 151
315	< 82	82 - 91	92 - 138	139 - 151	> 151
316	< 82	82 - 91	92 - 138	139 - 151	> 151
317	< 83	83 - 92	93 - 139	140 - 152	> 152
318	< 83	83 - 92	93 - 139	140 - 152	> 152
319	< 83	83 - 92	93 - 139	140 - 152	> 152
320	< 83	83 - 92	93 - 139	140 - 152	> 152
321	< 83	83 - 92	93 - 139	140 - 152	> 152
322	< 84	84 - 93	94 - 140	141 - 153	> 153

Table 6 – Rideability Requirements for Resurfacing

Initial Ride	107%	105%	100%	95%	Repair
323	< 84	84 - 93	94 - 140	141 - 153	> 153
323	< 84	84 - 93	94 - 140	141 - 153	> 153
324	< 84	84 - 93	94 - 140	141 - 153	> 153
325	< 84	84 - 93	94 - 140	141 - 153	> 153
326	< 84	84 - 93	94 - 140	141 - 153	> 153
327	< 85	85 - 94	95 - 141	142 - 154	> 154
328	< 85	85 - 94	95 - 141	142 - 154	> 154
329	< 85	85 - 94	95 - 141	142 - 154	> 154
330	< 85	85 - 94	95 - 141	142 - 154	> 154
331	< 85	85 - 94	95 - 141	142 - 154	> 154
332	< 86	86 - 95	96 - 142	143 - 155	> 155
333	< 86	86 - 95	96 - 142	143 - 155	> 155
334	< 86	86 - 95	96 - 142	143 - 155	> 155
335	< 86	86 - 95	96 - 142	143 - 155	> 155
336	< 86	86 - 95	96 - 142	143 - 155	> 155
337	< 86	86 - 95	96 - 142	143 - 155	> 155
338	< 87	87 - 96	97 - 144	145 - 156	> 156
339	< 87	87 - 96	97 - 144	145 - 156	> 156
340	< 87	87 - 96	97 - 144	145 - 156	> 156
341	< 87	87 - 96	97 - 144	145 - 156	> 156
341	< 87	87 - 96	97 - 144	145 - 156	> 156
342	< 87	87 - 96	97 - 144	145 - 156	> 156
343	< 88	88 - 97	98 - 145	146 - 157	> 157
344	< 88	88 - 97	98 - 145	146 - 157	> 157
345	< 88	88 - 97	98 - 145	146 - 157	> 157
346	< 88	88 - 97	98 - 145	146 - 157	> 157
347	< 88	88 - 97	98 - 145	146 - 157	> 157
348	< 88	88 - 97	98 - 145	146 - 157	> 157
349	< 89	89 - 98	99 - 146	147 - 158	> 158
350	< 89	89 - 98	99 - 146	147 - 158	> 158
351	< 89	89 - 98	99 - 146	147 - 158	> 158
352	< 89	89 - 98	99 - 146	147 - 158	> 158
353	< 89	89 - 98	99 - 146	147 - 158	> 158
354	< 90	90 - 100	101 - 147	148 - 159	> 159
355	< 90	90 - 100	101 - 147	148 - 159	> 159
356	< 90	90 - 100	101 - 147	148 - 159	> 159
357	< 90	90 - 100	101 - 147	148 - 159	> 159
358	< 90	90 - 100	101 - 147	148 - 159	> 159
359	< 90	90 - 100	101 - 147	148 - 159	> 159
359	< 91	91 - 101	102 - 148	149 - 160	> 160

Table 6 – Rideability Requirements for Resurfacing

Initial Ride	107%	105%	100%	95%	Repair
360	< 91	91 - 101	102 - 148	149 - 160	> 160
361	< 91	91 - 101	102 - 148	149 - 160	> 160
362	< 91	91 - 101	102 - 148	149 - 160	> 160
363	< 91	91 - 101	102 - 148	149 - 160	> 160
364	< 91	91 - 101	102 - 148	149 - 160	> 160
365	< 92	92 - 102	103 - 149	150 - 161	> 161
366	< 92	92 - 102	103 - 149	150 - 161	> 161
367	< 92	92 - 102	103 - 149	150 - 161	> 161
368	< 92	92 - 102	103 - 149	150 - 161	> 161
369	< 92	92 - 102	103 - 149	150 - 161	> 161
370	< 92	92 - 102	103 - 149	150 - 161	> 161
371	< 93	93 - 103	104 - 150	151 - 162	> 162
372	< 93	93 - 103	104 - 150	151 - 162	> 162
373	< 93	93 - 103	104 - 150	151 - 162	> 162
374	< 93	93 - 103	104 - 150	151 - 162	> 162
375	< 93	93 - 103	104 - 150	151 - 162	> 162
376	< 93	93 - 103	104 - 150	151 - 162	> 162
377	< 94	94 - 104	105 - 151	152 - 163	> 163
377	< 94	94 - 104	105 - 151	152 - 163	> 163
378	< 94	94 - 104	105 - 151	152 - 163	> 163
379	< 94	94 - 104	105 - 151	152 - 163	> 163
380	< 94	94 - 104	105 - 151	152 - 163	> 163
381	< 94	94 - 104	105 - 151	152 - 163	> 163
382	< 95	95 - 105	106 - 152	153 - 164	> 164
383	< 95	95 - 105	106 - 152	153 - 164	> 164
384	< 95	95 - 105	106 - 152	153 - 164	> 164
385	< 95	95 - 105	106 - 152	153 - 164	> 164
386	< 95	95 - 105	106 - 152	153 - 164	> 164
387	< 95	95 - 105	106 - 152	153 - 164	> 164
388	< 96	96 - 106	107 - 153	154 - 165	> 165
389	< 96	96 - 106	107 - 153	154 - 165	> 165
390	< 96	96 - 106	107 - 153	154 - 165	> 165
391	< 96	96 - 106	107 - 153	154 - 165	> 165
392	< 96	96 - 106	107 - 153	154 - 165	> 165
393	< 96	96 - 106	107 - 153	154 - 165	> 165
394	< 97	97 - 107	108 - 154	155 - 166	> 166
395	< 97	97 - 107	108 - 154	155 - 166	> 166
396	< 97	97 - 107	108 - 154	155 - 166	> 166
396	< 97	97 - 107	108 - 154	155 - 166	> 166
397	< 97	97 - 107	108 - 154	155 - 166	> 166

Table 6 – Rideability Requirements for Resurfacing

Initial Ride	107%	105%	100%	95%	Repair
398	< 97	97 - 107	108 - 154	155 - 166	> 166
399	< 98	98 - 108	109 - 155	156 - 167	> 167
400	< 98	98 - 108	109 - 155	156 - 167	> 167
401	< 98	98 - 108	109 - 155	156 - 167	> 167
402	< 98	98 - 108	109 - 155	156 - 167	> 167
403	< 98	98 - 108	109 - 155	156 - 167	> 167
404	< 98	98 - 108	109 - 155	156 - 167	> 167
405	< 100	100 - 109	110 - 156	157 - 168	> 168
406	< 100	100 - 109	110 - 156	157 - 168	> 168
407	< 100	100 - 109	110 - 156	157 - 168	> 168
408	< 100	100 - 109	110 - 156	157 - 168	> 168
409	< 100	100 - 109	110 - 156	157 - 168	> 168
410	< 100	100 - 109	110 - 156	157 - 168	> 168
411	< 101	101 - 110	111 - 157	158 - 169	> 169
412	< 101	101 - 110	111 - 157	158 - 169	> 169
413	< 101	101 - 110	111 - 157	158 - 169	> 169
414	< 101	101 - 110	111 - 157	158 - 169	> 169
414	< 101	101 - 110	111 - 157	158 - 169	> 169
415	< 101	101 - 110	111 - 157	158 - 169	> 169
416	< 102	102 - 111	112 - 158	159 - 170	> 170
417	< 102	102 - 111	112 - 158	159 - 170	> 170
418	< 102	102 - 111	112 - 158	159 - 170	> 170
419	< 102	102 - 111	112 - 158	159 - 170	> 170
420	< 102	102 - 111	112 - 158	159 - 170	> 170
421	< 102	102 - 111	112 - 158	159 - 170	> 170
422	< 102	102 - 111	112 - 158	159 - 170	> 170
423	< 103	103 - 112	113 - 159	160 - 171	> 171
424	< 103	103 - 112	113 - 159	160 - 171	> 171
425	< 103	103 - 112	113 - 159	160 - 171	> 171
426	< 103	103 - 112	113 - 159	160 - 171	> 171
427	< 103	103 - 112	113 - 159	160 - 171	> 171
428	< 103	103 - 112	113 - 159	160 - 171	> 171
429	< 104	104 - 113	114 - 160	161 - 172	> 172
430	< 104	104 - 113	114 - 160	161 - 172	> 172
431	< 104	104 - 113	114 - 160	161 - 172	> 172
432	< 104	104 - 113	114 - 160	161 - 172	> 172
432	< 104	104 - 113	114 - 160	161 - 172	> 172
433	< 104	104 - 113	114 - 160	161 - 172	> 172
434	< 105	105 - 114	115 - 161	162 - 173	> 173
435	< 105	105 - 114	115 - 161	162 - 173	> 173

Table 6 – Rideability Requirements for Resurfacing

Initial Ride	107%	105%	100%	95%	Repair
436	< 105	105 - 114	115 - 161	162 - 173	> 173
437	< 105	105 - 114	115 - 161	162 - 173	> 173
438	< 105	105 - 114	115 - 161	162 - 173	> 173
439	< 105	105 - 114	115 - 161	162 - 173	> 173
440	< 105	105 - 114	115 - 161	162 - 173	> 173
441	< 106	106 - 115	116 - 162	163 - 174	> 174
442	< 106	106 - 115	116 - 162	163 - 174	> 174
443	< 106	106 - 115	116 - 162	163 - 174	> 174
444	< 106	106 - 115	116 - 162	163 - 174	> 174
445	< 106	106 - 115	116 - 162	163 - 174	> 174
446	< 106	106 - 115	116 - 162	163 - 174	> 174
447	< 107	107 - 116	117 - 163	164 - 175	> 175
448	< 107	107 - 116	117 - 163	164 - 175	> 175
449	< 107	107 - 116	117 - 163	164 - 175	> 175
450	< 107	107 - 116	117 - 163	164 - 175	> 175
450	< 107	107 - 116	117 - 163	164 - 175	> 175
451	< 107	107 - 116	117 - 163	164 - 175	> 175
452	< 107	107 - 116	117 - 163	164 - 175	> 175
453	< 108	108 - 117	118 - 164	165 - 176	> 176
454	< 108	108 - 117	118 - 164	165 - 176	> 176
455	< 108	108 - 117	118 - 164	165 - 176	> 176
456	< 108	108 - 117	118 - 164	165 - 176	> 176
457	< 108	108 - 117	118 - 164	165 - 176	> 176
458	< 108	108 - 117	118 - 164	165 - 176	> 176
459	< 109	109 - 118	119 - 165	166 - 177	> 177
460	< 109	109 - 118	119 - 165	166 - 177	> 177
461	< 109	109 - 118	119 - 165	166 - 177	> 177
462	< 109	109 - 118	119 - 165	166 - 177	> 177
463	< 109	109 - 118	119 - 165	166 - 177	> 177
464	< 109	109 - 118	119 - 165	166 - 177	> 177
465	< 109	109 - 118	119 - 165	166 - 177	> 177
466	< 110	110 - 119	120 - 166	167 - 178	> 178
467	< 110	110 - 119	120 - 166	167 - 178	> 178
468	< 110	110 - 119	120 - 166	167 - 178	> 178
469	< 110	110 - 119	120 - 166	167 - 178	> 178
469	< 110	110 - 119	120 - 166	167 - 178	> 178
470	< 110	110 - 119	120 - 166	167 - 178	> 178
471	< 111	111 - 120	121 - 167	168 - 179	> 179
472	< 111	111 - 120	121 - 167	168 - 179	> 179
473	< 111	111 - 120	121 - 167	168 - 179	> 179

Table 6 – Rideability Requirements for Resurfacing

Initial Ride	107%	105%	100%	95%	Repair
474	< 111	111 - 120	121 - 167	168 - 179	> 179
475	< 111	111 - 120	121 - 167	168 - 179	> 179