|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Measurement of roundness by Dial gauge deflections of 6-mm Diameter Stainless Steel (SS) Round Bar After Straightening** | | | | | | | | | | | | | | | | | | | | | | | |  |
|  | **Mean values of Dial Gauge Deflection Readings after straightening of 6 mm SS round bar x 0.01 mm** | | | | | | | | | | | | | | | | | | | | | | | |  |
|  | Angles in Degrees | | | | | | | | | | | | | | | | | | | | | | | |  |
| Length in cm | 0o | 15o | 30o | 45o | 60o | 75o | 90o | 105o | 120o | 135o | 150o | 165o | 180o | 195o | 210o | 225o | 240o | 255o | 270o | 285o | 300o | 315o | 330o | 345o | STD  DEV (mm) |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 15 | 193 | 193 | 191 | 188 | 185 | 181 | 178 | 175 | 170 | 168 | 167 | 159 | 160 | 158 | 153 | 157 | 160 | 165 | 174 | 179 | 182 | 188 | 191 | 194 | 0.1343 |
| 20 | 192 | 191 | 192 | 193 | 191 | 188 | 187 | 185 | 179 | 176 | 172 | 168 | 164 | 162 | 156 | 163 | 159 | 163 | 167 | 174 | 179 | 185 | 189 | 192 | 0.1248 |
| 25 | 192 | 193 | 194 | 194 | 194 | 193 | 190 | 187 | 186 | 184 | 182 | 178 | 176 | 174 | 171 | 168 | 165 | 168 | 166 | 172 | 179 | 184 | 189 | 192 | 0.1002 |
| 30 | 194 | 196 | 195 | 196 | 195 | 196 | 195 | 193 | 188 | 186 | 181 | 176 | 175 | 178 | 175 | 172 | 163 | 166 | 170 | 177 | 176 | 188 | 186 | 198 | 0.109 |
| 35 | 192 | 195 | 194 | 195 | 196 | 197 | 194 | 192 | 190 | 188 | 186 | 183 | 173 | 176 | 172 | 169 | 168 | 167 | 172 | 168 | 173 | 176 | 181 | 188 | 0.1062 |
| 40 | 194 | 197 | 196 | 196 | 197 | 198 | 196 | 195 | 193 | 190 | 188 | 185 | 178 | 177 | 174 | 167 | 166 | 165 | 165 | 169 | 175 | 182 | 183 | 195 | 0.1191 |
| 45 | 192 | 196 | 198 | 199 | 198 | 199 | 199 | 194 | 191 | 187 | 186 | 184 | 183 | 180 | 176 | 173 | 169 | 171 | 166 | 166 | 172 | 176 | 185 | 186 | 0.112 |
| 50 | 189 | 192 | 195 | 194 | 196 | 195 | 197 | 191 | 188 | 185 | 184 | 183 | 180 | 179 | 174 | 171 | 175 | 172 | 169 | 168 | 174 | 178 | 185 | 179 | 0.0925 |
| 54 | 188 | 190 | 192 | 193 | 194 | 193 | 194 | 189 | 182 | 183 | 181 | 177 | 175 | 176 | 172 | 170 | 172 | 173 | 175 | 171 | 182 | 182 | 186 | 193 | 0.084 |
| 57.5 | 190 | 189 | 190 | 191 | 192 | 193 | 191 | 187 | 185 | 182 | 179 | 176 | 173 | 171 | 170 | 173 | 168 | 169 | 176 | 175 | 184 | 183 | 184 | 190 | 0.0832 |
| 62.5 | 189 | 188 | 189 | 190 | 189 | 192 | 188 | 185 | 183 | 180 | 178 | 174 | 171 | 168 | 169 | 168 | 166 | 172 | 179 | 174 | 185 | 184 | 186 | 190 | 0.0842 |
| 66.5 | 187 | 186 | 188 | 189 | 188 | 190 | 187 | 182 | 180 | 178 | 175 | 172 | 169 | 167 | 168 | 169 | 169 | 171 | 183 | 181 | 184 | 185 | 188 | 187 | 0.0796 |
| 71.5 | 186 | 184 | 186 | 187 | 186 | 188 | 186 | 184 | 178 | 175 | 176 | 174 | 170 | 163 | 164 | 165 | 172 | 177 | 181 | 184 | 182 | 184 | 189 | 188 | 0.08 |
| 75.3 | 178 | 177 | 174 | 168 | 173 | 178 | 181 | 172 | 175 | 157 | 165 | 163 | 167 | 160 | 165 | 172 | 175 | 184 | 187 | 189 | 186 | 183 | 188 | 187 | 0.0934 |

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Measurement of roundness by Dial gauge deflections of 8-mm Diameter Stainless Steel (SS) Round Bar After Straightening** | | | | | | | | | | | | | | | | | | | | | | | |  |
|  | **Mean values of Dial Gauge Deflection Readings after straightening of 8 mm Stainless Steel (SS) round bar x 0.01 mm** | | | | | | | | | | | | | | | | | | | | | | | |  |
|  | **Angles in Degrees** | | | | | | | | | | | | | | | | | | | | | | | |  |
| **Length in cm** | **0o** | **15o** | **30o** | **45o** | **60o** | **75o** | **90o** | **105o** | **120o** | **135o** | **150o** | **165o** | **180o** | **195o** | **210o** | **225o** | **240o** | **255o** | **270o** | **285o** | **300o** | **315o** | **330o** | **345o** | **STD**  **DEV (mm)** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 11 | 183 | 181 | 181 | 181 | 179 | 178 | 178 | 177 | 175 | 175 | 175 | 175 | 176 | 177 | 178 | 179 | 180 | 180 | 181 | 181 | 180 | 180 | 182 | 181 | 0.0244 |
| 14 | 176 | 174 | 175 | 174 | 173 | 172 | 171 | 170 | 168 | 168 | 168 | 167 | 168 | 168 | 170 | 170 | 172 | 172 | 173 | 173 | 173 | 173 | 174 | 173 | 0.0263 |
| 18 | 174 | 172 | 169 | 169 | 168 | 168 | 168 | 166 | 165 | 168 | 166 | 167 | 165 | 164 | 165 | 166 | 166 | 168 | 169 | 168 | 169 | 169 | 170 | 169 | 0.0233 |
| 21 | 168 | 164 | 165 | 163 | 164 | 165 | 166 | 165 | 163 | 165 | 168 | 165 | 164 | 165 | 165 | 166 | 167 | 166 | 167 | 167 | 165 | 165 | 165 | 165 | 0.0141 |
| 24 | 169 | 171 | 169 | 169 | 169 | 169 | 168 | 167 | 167 | 166 | 168 | 168 | 169 | 169 | 170 | 170 | 172 | 172 | 172 | 172 | 171 | 171 | 171 | 170 | 0.0168 |
| 28 | 169 | 169 | 168 | 167 | 167 | 167 | 166 | 166 | 166 | 165 | 165 | 166 | 168 | 168 | 169 | 170 | 170 | 170 | 170 | 170 | 169 | 169 | 168 | 168 | 0.0167 |
| 32 | 167 | 167 | 167 | 165 | 166 | 165 | 163 | 163 | 163 | 163 | 163 | 168 | 163 | 163 | 163 | 163 | 164 | 165 | 165 | 164 | 165 | 165 | 165 | 166 | 0.0149 |
| 35 | 167 | 166 | 165 | 165 | 164 | 163 | 163 | 163 | 165 | 164 | 165 | 166 | 164 | 165 | 166 | 163 | 164 | 164 | 164 | 164 | 163 | 164 | 165 | 165 | 0.0115 |
| 38 | 164 | 164 | 164 | 163 | 163 | 162 | 161 | 161 | 161 | 161 | 162 | 164 | 164 | 165 | 166 | 167 | 168 | 168 | 168 | 167 | 166 | 165 | 165 | 164 | 0.0216 |
| 41 | 166 | 163 | 163 | 163 | 163 | 162 | 161 | 161 | 160 | 160 | 161 | 161 | 163 | 163 | 164 | 165 | 166 | 166 | 166 | 165 | 165 | 164 | 164 | 164 | 0.0184 |
| 44 | 163 | 163 | 161 | 161 | 161 | 160 | 160 | 158 | 159 | 159 | 160 | 161 | 163 | 163 | 164 | 165 | 165 | 165 | 166 | 165 | 164 | 163 | 163 | 163 | 0.022 |
| 47 | 162 | 161 | 160 | 160 | 159 | 158 | 158 | 157 | 158 | 158 | 159 | 160 | 162 | 161 | 162 | 163 | 163 | 163 | 163 | 163 | 162 | 162 | 161 | 159 | 0.0195 |
| 50 | 164 | 164 | 159 | 159 | 158 | 156 | 156 | 156 | 157 | 157 | 158 | 159 | 160 | 160 | 161 | 162 | 162 | 162 | 162 | 162 | 160 | 160 | 159 | 159 | 0.0237 |
| 53 | 162 | 163 | 160 | 159 | 159 | 159 | 159 | 159 | 160 | 160 | 162 | 163 | 164 | 164 | 165 | 166 | 166 | 166 | 166 | 165 | 165 | 164 | 164 | 163 | 0.0271 |
| 57 | *163* | 162 | 159 | 159 | 158 | 158 | 158 | 159 | 160 | 161 | 163 | 163 | 164 | 165 | 165 | 166 | 166 | 166 | 166 | 165 | 164 | 163 | 163 | 162 | 0.0282 |
| 61 | 164 | 159 | 158 | 158 | 157 | 157 | 157 | 158 | 159 | 159 | 161 | 161 | 164 | 164 | 165 | 165 | 166 | 166 | 165 | 164 | 164 | 163 | 163 | 162 | 0.0319 |
| 65 | 162 | 158 | 157 | 156 | 156 | 156 | 155 | 156 | 156 | 157 | 158 | 160 | 162 | 162 | 163 | 164 | 165 | 165 | 165 | 164 | 164 | 163 | 162 | 161 | 0.0347 |
| 69 | 162 | 157 | 156 | 155 | 154 | 153 | 154 | 154 | 154 | 156 | 157 | 159 | 159 | 161 | 162 | 163 | 164 | 164 | 163 | 163 | 162 | 161 | 160 | 158 | 0.0361 |
| 73 | 160 | 156 | 155 | 154 | 153 | 153 | 153 | 153 | 154 | 154 | 155 | 157 | 158 | 159 | 160 | 161 | 161 | 162 | 162 | 161 | 160 | 159 | 158 | 157 | 0.032 |
| 77 | 157 | 155 | 154 | 153 | 152 | 152 | 152 | 152 | 153 | 154 | 154 | 156 | 156 | 157 | 158 | 159 | 159 | 160 | 160 | 160 | 160 | 158 | 157 | 157 | 0.0281 |
| 80 | 158 | 154 | 153 | 153 | 152 | 151 | 155 | 152 | 152 | 153 | 154 | 155 | 156 | 157 | 158 | 158 | 159 | 159 | 159 | 159 | 159 | 158 | 158 | 157 | 0.0275 |
| 84 | 154 | 153 | 152 | 154 | 153 | 153 | 154 | 151 | 153 | 151 | 153 | 153 | 154 | 156 | 157 | 157 | 158 | 158 | 158 | 158 | 158 | 157 | 156 | 155 | 0.0231 |
| 88 | 153 | 153 | 152 | 150 | 152 | 151 | 153 | 151 | 152 | 148 | 152 | 152 | 153 | 154 | 156 | 156 | 157 | 157 | 158 | 158 | 157 | 156 | 155 | 155 | 0.027 |
| 92.7 | 151 | 152 | 148 | 144 | 145 | 146 | 145 | 147 | 146 | 145 | 146 | 148 | 149 | 152 | 153 | 154 | 156 | 154 | 153 | 147 | 145 | 146 | 148 | 151 | 0.0356 |
| 95.7 | 149 | 148 | 146 | 145 | 143 | 144 | 143 | 146 | 143 | 146 | 144 | 145 | 146 | 147 | 150 | 152 | 154 | 153 | 148 | 144 | 146 | 143 | 145 | 147 | 0.0315 |
| 99.7 | 146 | 146 | 144 | 144 | 144 | 146 | 144 | 145 | 145 | 143 | 144 | 146 | 143 | 145 | 148 | 150 | 144 | 145 | 146 | 145 | 147 | 144 | 147 | 145 | 0.0162 |
|  | **Angles in Degrees** | | | | | | | | | | | | | | | | | | | | | | | |  |
| **Length in cm** | **0o** | **15o** | **30o** | **45o** | **60o** | **75o** | **90o** | **105o** | **120o** | **135o** | **150o** | **165o** | **180o** | **195o** | **210o** | **225o** | **240o** | **255o** | **270o** | **285o** | **300o** | **315o** | **330o** | **345o** | **STD**  **DEV (mm)** |
| 103.7 | 147 | 144 | 145 | 146 | 144 | 144 | 146 | 144 | 146 | 144 | 145 | 144 | 146 | 144 | 145 | 148 | 146 | 144 | 147 | 145 | 144 | 143 | 145 | 146 | 0.0125 |
| 108.2 | 146 | 145 | 143 | 144 | 145 | 146 | 143 | 144 | 145 | 143 | 146 | 144 | 145 | 147 | 144 | 145 | 145 | 146 | 144 | 144 | 143 | 145 | 144 | 145 | 0.011 |
| 111.7 | 144 | 146 | 144 | 143 | 144 | 145 | 144 | 146 | 147 | 144 | 145 | 145 | 146 | 146 | 146 | 146 | 146 | 145 | 144 | 145 | 146 | 147 | 145 | 144 | 0.0108 |
| 114.7 | 146 | 144 | 143 | 145 | 147 | 145 | 144 | 147 | 146 | 144 | 145 | 145 | 146 | 146 | 148 | 146 | 146 | 145 | 144 | 144 | 146 | 144 | 143 | 144 | 0.013 |
| 117.7 | 147 | 146 | 144 | 146 | 145 | 144 | 144 | 143 | 145 | 145 | 146 | 145 | 144 | 148 | 147 | 148 | 144 | 144 | 145 | 146 | 144 | 143 | 144 | 145 | 0.0141 |
| 120.7 | 144 | 145 | 146 | 145 | 144 | 145 | 145 | 146 | 144 | 146 | 145 | 146 | 143 | 144 | 146 | 144 | 144 | 145 | 146 | 144 | 142 | 144 | 143 | 146 | 0.0113 |
| 124.7 | 145 | 146 | 144 | 147 | 145 | 146 | 143 | 145 | 144 | 146 | 144 | 145 | 144 | 145 | 143 | 143 | 145 | 144 | 145 | 145 | 145 | 145 | 144 | 145 | 0.01 |
| 128.7 | 145 | 144 | 142 | 144 | 146 | 144 | 146 | 145 | 145 | 144 | 144 | 146 | 145 | 144 | 145 | 145 | 144 | 145 | 145 | 146 | 144 | 144 | 143 | 146 | 0.0101 |
| 132.7 | 143 | 143 | 145 | 146 | 144 | 145 | 143 | 144 | 143 | 144 | 145 | 146 | 143 | 143 | 143 | 143 | 143 | 143 | 143 | 143 | 142 | 146 | 144 | 144 | 0.0131 |
| 135.7 | 143 | 144 | 144 | 145 | 145 | 140 | 141 | 139 | 142 | 143 | 143 | 143 | 144 | 144 | 145 | 144 | 145 | 144 | 143 | 143 | 143 | 145 | 144 | 143 | 0.0159 |
| 141.7 | 145 | 144 | 143 | 143 | 143 | 142 | 142 | 142 | 143 | 143 | 144 | 144 | 144 | 145 | 145 | 145 | 145 | 144 | 144 | 145 | 143 | 142 | 141 | 143 | 0.0121 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Measurement of roundness by Dial gauge deflections of 10-mm Diameter Stainless Steel (SS) Round Bar After Straightening** | | | | | | | | | | | | | | | | | | | | | | | |  | | | | |
|  | **Mean values of Dial Gauge Deflection Readings after straightening of 10 mm Stainless Steel (SS) round bar x 0.01 mm** | | | | | | | | | | | | | | | | | | | | | | | |  | | | | |
|  | **Angles in Degrees** | | | | | | | | | | | | | | | | | | | | | | | |  | | | | |
| **Length in cm** | **0o** | **15o** | **30o** | **45o** | **60o** | **75o** | **90o** | **105o** | | **120o** | **135o** | | **150o** | | **165o** | **180o** | **195o** | **210o** | **225o** | **240o** | **255o** | **270o** | **285o** | **300o** | **315o** | **330o** | | **345o** | **STD**  **DEV (mm)** |
|  |  |  |  |  |  |  |  |  | |  |  | |  | |  |  |  |  |  |  |  |  |  |  |  |  | |  |  |
| 12 | 148.5 | 149.8 | 151.0 | 151.8 | 152.5 | 154 | 155.5 | 156.3 | 157.0 | | | 157 | | 157.0 | 156.8 | 156.5 | 155.8 | 155.0 | 154 | 153.0 | 151.5 | 150.0 | 149.8 | 149.5 | 149 | 148.5 | 148.5 | | 0.03 |
| 15 | 146.5 | 148 | 149.5 | 151 | 152.5 | 154 | 155.5 | 156.5 | 157.5 | | | 157.3 | | 157.0 | 156.8 | 156.5 | 155.8 | 155.0 | 154.3 | 153.5 | 152 | 150.5 | 149 | 147.5 | 147.3 | 147.0 | 147 | | 0.04 |
| 17 | 147.0 | 148.3 | 149.5 | 151 | 152.5 | 154 | 155.5 | 156.5 | 157.5 | | | 157.3 | | 157.0 | 156.8 | 156.5 | 156 | 155.5 | 154.5 | 153.5 | 152.3 | 151.0 | 149.5 | 148.0 | 147.5 | 147.0 | 147.3 | | 0.04 |
| 20 | 148.5 | 149 | 149.5 | 150.5 | 151.5 | 153 | 154.5 | 155.5 | 156.5 | | | 156.8 | | 157.0 | 157 | 157.0 | 156.8 | 156.5 | 155 | 153.5 | 152.5 | 151.5 | 150.5 | 149.5 | 148.8 | 148.0 | 148.3 | | 0.03 |
| 23 | 146.5 | 147.5 | 148.5 | 149.8 | 151.0 | 151.8 | 152.5 | 153.3 | 154.0 | | | 154.8 | | 155.5 | 155.3 | 155.0 | 154.8 | 154.5 | 153 | 151.5 | 150.5 | 149.5 | 149 | 148.5 | 147.8 | 147.0 | 147 | | 0.03 |
| 25 | 147.0 | 148.3 | 149.5 | 151.3 | 153.0 | 153.8 | 154.5 | 155 | 155.5 | | | 155.8 | | 156.0 | 156 | 156.0 | 155.5 | 155.0 | 153.8 | 152.5 | 151.5 | 150.5 | 149.5 | 148.5 | 148.5 | 148.5 | 148.3 | | 0.03 |
| 27 | 147.5 | 148.3 | 149.0 | 150.8 | 152.5 | 153.5 | 154.5 | 155.5 | 156.5 | | | 156.8 | | 157.0 | 156.8 | 156.5 | 156 | 155.5 | 154.3 | 153.0 | 152.3 | 151.5 | 150.5 | 149.5 | 149 | 148.5 | 148.3 | | 0.033 |
| 30 | 148.0 | 148.3 | 148.5 | 150 | 151.5 | 152.8 | 154.0 | 155.3 | 156.5 | | | 157 | | 157.5 | 157.5 | 157.5 | 156.8 | 156.0 | 155.8 | 155.5 | 154.3 | 153.0 | 151.8 | 150.5 | 149.8 | 149.0 | 148.5 | | 0.034 |
| 32 | 148.5 | 149 | 149.5 | 150.5 | 151.5 | 153 | 154.5 | 155.8 | 157.0 | | | 157.5 | | 158.0 | 157.8 | 157.5 | 157 | 156.5 | 155.3 | 154.0 | 153.3 | 152.5 | 151.3 | 150.0 | 149.3 | 148.5 | 148.5 | | 0.034 |
| 34 | 147.5 | 148 | 148.5 | 149.8 | 151.0 | 153.8 | 156.5 | 156 | 155.5 | | | 156.3 | | 157.0 | 158 | 159.0 | 158.3 | 157.5 | 156 | 154.5 | 153.5 | 152.5 | 150.8 | 149.0 | 148.5 | 148.0 | 148 | | 0.04 |
| 37.5 | 151.0 | 152.5 | 154.0 | 155.3 | 156.5 | 156 | 155.5 | 156.3 | 157.0 | | | 158 | | 159.0 | 159.5 | 160.0 | 159.8 | 159.5 | 158.5 | 157.5 | 156.5 | 155.5 | 154.5 | 153.5 | 152 | 150.5 | 150.5 | | 0.03 |
| 44 | 152.0 | 151.5 | 151.0 | 150.3 | 149.5 | 149.8 | 150.0 | 150.8 | 151.5 | | | 153 | | 154.5 | 155.8 | 157.0 | 158 | 159.0 | 160.3 | 161.5 | 160.8 | 160.0 | 159.8 | 159.5 | 158 | 156.5 | 154.3 | | 0.04 |
| 46 | 152.5 | 153 | 153.5 | 152.5 | 151.5 | 152 | 152.5 | 153.3 | 154.0 | | | 155.3 | | 156.5 | 157.5 | 158.5 | 161 | 163.5 | 163.3 | 163.0 | 161.5 | 160.0 | 159.5 | 159.0 | 158 | 157.0 | 155 | | 0.04 |
| 49 | 151.0 | 151 | 151.0 | 151 | 151.0 | 151.8 | 152.5 | 153.5 | 154.5 | | | 155.3 | | 156.0 | 157.5 | 159.0 | 159.8 | 160.5 | 160.5 | 160.5 | 160 | 159.5 | 158 | 156.5 | 155.3 | 154.0 | 153.3 | | 0.036 |
| 52 | 151.5 | 151.3 | 151.0 | 151 | 151.0 | 151 | 151.0 | 151.5 | 152.0 | | | 153.8 | | 155.5 | 156.5 | 157.5 | 158 | 158.5 | 158.5 | 158.5 | 158.5 | 158.5 | 157 | 155.5 | 154.5 | 153.5 | 153.3 | | 0.030 |
| 55 | 152.0 | 152.3 | 152.5 | 152.8 | 153.0 | 153.8 | 154.5 | 155.3 | 156.0 | | | 157.3 | | 158.5 | 159.5 | 160.5 | 160.8 | 161.0 | 161 | 161.0 | 160 | 159.0 | 157.8 | 156.5 | 155.5 | 154.5 | 154 | | 0.032 |
| 58 | 149.5 | 149.5 | 149.5 | 149.8 | 150.0 | 151.3 | 152.5 | 154 | 155.5 | | | 156.3 | | 157.0 | 157.8 | 158.5 | 159 | 159.5 | 159.3 | 159.0 | 158.3 | 157.5 | 156.3 | 155.0 | 153.8 | 152.5 | 151.3 | | 0.036 |
| 61 | 149.5 | 149.5 | 149.5 | 150 | 150.5 | 151.5 | 152.5 | 153.8 | 155.0 | | | 156.3 | | 157.5 | 158 | 158.5 | 158.8 | 159.0 | 158.8 | 158.5 | 157.5 | 156.5 | 155 | 153.5 | 152.8 | 152.0 | 151 | | 0.035 |
| 64 | 149.5 | 149.5 | 149.5 | 149.8 | 150.0 | 151 | 152 | 154 | 156 | | | 157 | | 158 | 158.8 | 159.5 | 159.5 | 159.5 | 158.8 | 158.0 | 157.3 | 156.5 | 155.3 | 154.0 | 152.8 | 151.5 | 150.8 | | 0.037 |
| 68 | 149.0 | 149.5 | 150.0 | 150.8 | 151.5 | 152.3 | 153.0 | 154.5 | 156.0 | | | 156.8 | | 157.5 | 158.3 | 159.0 | 159 | 159.0 | 158 | 157 | 156 | 155.0 | 154 | 153.0 | 151.8 | 150.5 | 150.3 | | 0.034 |

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Measurement of roundness by Dial gauge deflections of 12-mm Diameter Stainless Steel (SS) Round Bar After Straightening** | | | | | | | | | | | | | | | | | | | | | | | |  |
|  | **Mean values of Dial Gauge Deflection Readings after straightening of 12 mm Stainless Steel (SS) round bar x 0.01 mm** | | | | | | | | | | | | | | | | | | | | | | | |  |
|  | **Angles in Degrees** | | | | | | | | | | | | | | | | | | | | | | | |  |
| **Length in cm** | **0o** | **15o** | **30o** | **45o** | **60o** | **75o** | **90o** | **105o** | **120o** | **135o** | **150o** | **165o** | **180o** | **195o** | **210o** | **225o** | **240o** | **255o** | **270o** | **285o** | **300o** | **315o** | **330o** | **345o** | **STD**  **DEV (mm)** |
| 5 | 65 | 64.3 | 63.5 | 63.5 | 63.5 | 64.3 | 65 | 65 | 65 | 65.3 | 65.5 | 65.8 | 66 | 65.8 | 65.5 | 65.3 | 65 | 64.5 | 64 | 64.3 | 64.5 | 64 | 63.5 | 63 | 0.0084 |
| 11 | 109.0 | 109 | 109.5 | 110 | 110.5 | 110 | 110.0 | 110 | 110.0 | 110 | 110.5 | 111 | 111.0 | 111 | 111.5 | 111 | 110.5 | 111 | 110.5 | 110 | 110.0 | 110 | 110.0 | 110 | 0.0059 |
| 15 | 108.0 | 108 | 108.0 | 108 | 107.5 | 108 | 108.5 | 109 | 109.0 | 109 | 109.5 | 110 | 110.0 | 110 | 110.5 | 110 | 110.0 | 110 | 109.5 | 110 | 109.5 | 109 | 109.0 | 109 | 0.0087 |
| 19 | 106.0 | 106 | 106.5 | 107 | 106.5 | 106 | 106.0 | 106 | 106.0 | 106 | 106.0 | 107 | 108.0 | 108 | 108.0 | 108 | 108.5 | 108 | 108.0 | 108 | 108.5 | 108 | 108.0 | 108 | 0.0102 |
| 24.5 | 108.5 | 108 | 108.0 | 108 | 108.0 | 108 | 107.0 | 107 | 107.5 | 108 | 108.0 | 109 | 109.0 | 109 | 109.0 | 110 | 110.5 | 110 | 110.0 | 111 | 111.0 | 111 | 110.0 | 110 | 0.012 |
| 31 | 107.0 | 108 | 109.0 | 109 | 108.0 | 108 | 108.0 | 108 | 107.0 | 107 | 106.5 | 107 | 108.0 | 108 | 108.0 | 108 | 108.5 | 109 | 108.5 | 109 | 109.5 | 110 | 109.5 | 110 | 0.009 |
| 35 | 106.0 | 106 | 106.0 | 106 | 106.0 | 106 | 106.0 | 106 | 106.0 | 106 | 106.0 | 106 | 106.0 | 106 | 105.0 | 106 | 107.0 | 107 | 107.0 | 107 | 107.5 | 107 | 105.5 | 106 | 0.0058 |
| 40 | 104.0 | 105 | 105.0 | 105 | 105.0 | 105 | 105.0 | 105 | 105.5 | 106 | 105.5 | 106 | 106.0 | 106 | 106.0 | 106 | 106.0 | 106 | 106.0 | 106 | 106.0 | 106 | 106.0 | 106 | 0.0057 |
| 45 | 106.0 | 105 | 106.0 | 105 | 104.0 | 105 | 106.0 | 106 | 106.0 | 106 | 106.0 | 106 | 106.0 | 106 | 105.0 | 106 | 106.0 | 107 | 107.0 | 107 | 106.0 | 106 | 106.0 | 106 | 0.0062 |
| 48 | 105.0 | 106 | 107.0 | 107 | 107.0 | 108 | 108.0 | 108 | 108.0 | 108 | 108.0 | 108 | 107.0 | 107 | 107.0 | 107 | 107.5 | 107 | 107.0 | 107 | 106.5 | 107 | 107.0 | 107 | 0.0069 |
| 53 | 108.0 | 108 | 107.0 | 107 | 107.5 | 107 | 107.0 | 107 | 106.0 | 106 | 106.0 | 106 | 106.0 | 106 | 106.5 | 107 | 106.5 | 107 | 107.5 | 108 | 107.5 | 108 | 107.5 | 108 | 0.0065 |
| 60 | 107.5 | 108 | 108.5 | 109 | 108.5 | 108 | 108.0 | 109 | 109.0 | 109 | 109.0 | 109 | 108.5 | 109 | 109.0 | 109 | 108.0 | 109 | 109.0 | 109 | 108.0 | 108 | 108.5 | 108 | 0.0039 |
| 65 | 108.0 | 108 | 108.5 | 109 | 109.5 | 110 | 110.0 | 111 | 111.0 | 110 | 109.0 | 109 | 109.5 | 110 | 109.5 | 109 | 109.0 | 109 | 108.5 | 108 | 108.0 | 109 | 109.0 | 109 | 0.0077 |
| 70 | 108.5 | 109 | 109.0 | 109 | 109.5 | 110 | 110.0 | 110 | 110.5 | 111 | 110.5 | 111 | 110.5 | 110 | 110.0 | 110 | 110.0 | 110 | 109.5 | 109 | 109.0 | 109 | 109.0 | 109 | 0.0064 |
| 75 | 108.0 | 110 | 111.0 | 111 | 111.0 | 111 | 110.5 | 111 | 111.0 | 111 | 111.0 | 111 | 111.0 | 111 | 110.5 | 111 | 110.5 | 110 | 109.5 | 109 | 109.0 | 109 | 109.5 | 109 | 0.0086 |
| 80 | 112.0 | 112 | 111.5 | 112 | 112.0 | 113 | 113.0 | 113 | 113.0 | 113 | 113.0 | 113 | 113.0 | 113 | 113.0 | 113 | 112.5 | 113 | 112.5 | 113 | 112.5 | 113 | 112.5 | 113 | 0.0046 |
| 84 | 111.0 | 112 | 113.0 | 113 | 113.5 | 114 | 114.0 | 114 | 113.5 | 113 | 113.0 | 113 | 113.0 | 113 | 113.0 | 113 | 113.0 | 113 | 112.5 | 113 | 112.5 | 112 | 112.0 | 113 | 0.0066 |