

Ford Recommended Steel Repairability Matrix

| Grade | Trade Descriptions | Welding Method | | | Cold Repairs | Use of Heat for Repair | Temperature Range | Maximum Heat |
|--|---|------------------|---|------------------|------------------|------------------------|-------------------------|----------------|
| | | MIG | Squeeze-Type Resistance Spot Welding (STRW) | MIG Braze | | | | |
| Mild Steel | Mild | Yes | Yes | N/A | Yes ^a | Yes | Up to 650° C (1,200° F) | 90 seconds x 2 |
| Laminate Steel | Quiet Steel | No | Yes | No | Yes ^a | NA | NA | NA |
| Bake Hardened Steel (BH) | Bake Hardened Steel (BH) 180, 200, 210, 220, 250, 280 | Yes | Yes | Yes ^b | Yes ^a | Yes | Up to 650° C (1,200° F) | 90 seconds x 2 |
| Solid Solution Strengthened | - | Yes | Yes | Yes ^b | Yes ^a | Yes | Up to 650° C (1,200° F) | 90 seconds x 2 |
| High-Strength Low Alloy (HSLA) | High-Strength Low Alloy (HSLA) 200, 250, 260, 300, 340, 350, 500, 550 | Yes | Yes | Yes ^b | Yes ^a | Yes | Up to 650° C (1,200° F) | 90 seconds x 2 |
| Dual Phase Steel (DP) | Dual Phase Steel (DP) 500, 600 | Yes | Yes | Yes ^b | Yes ^a | No | NA | NA |
| Dual Phase Steel (DP) ^c | Dual Phase Steel (DP) 700, 900, 1,000 | Yes ^d | Yes | Yes ^b | No | No | NA | NA |
| Ultra High Strength Steel (UHSS) (Martensitic, Boron) ^e | Boron, Martensitic | Yes ^a | Yes | Yes ^b | No | No | NA | NA |
| Transformation Induced Plasticity Steel (TRIP) | Transformation Induced Plasticity Steel (TRIP) 590, 780, 980 | NA | NA | NA | NA | NA | NA | NA |

^aCold repairs can be performed if damage excludes kinks. May section only if approved procedure in workshop manual.

^bMetal inert Gas (MIG) braze allowed for non-structural applications only.

^cDual phase steels DP 700 class, DP 900 class and DP 1,000 class must be replaced at factory joints, no sectioning unless approved procedure in workshop manual.

^dFor DP 900, 1,000 and Boron use Metal Inert Gas (MIG) plug welding only, so stitch welding.

^eBoron and Ultra High Strength (UHSS)-Martensitic components must be replaced at factory joints, no sectioning allowed.