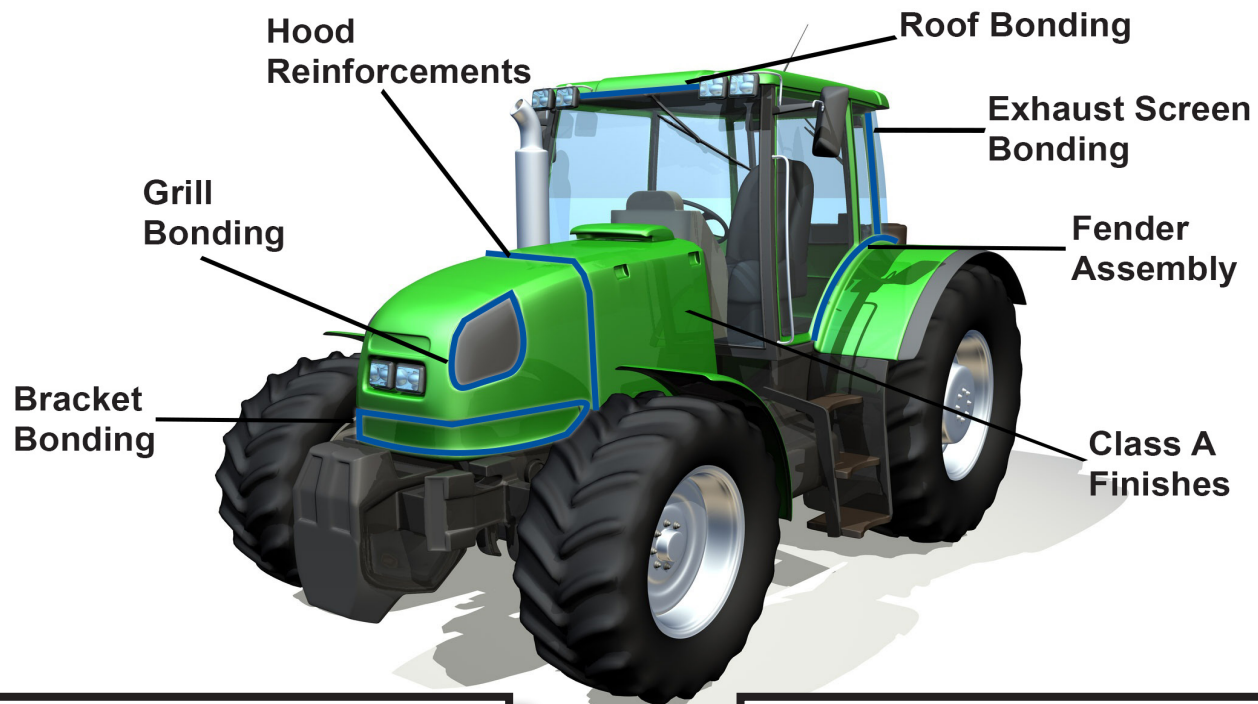


# **PLEXUS**® Structural Bonding Solutions for Agriculture Vehicles



## ***The Problem: Fasteners & Welding***

- Are unable to join certain dissimilar materials
- May result in stress cracking leading to shortened vehicle life
- May cause galvanic corrosion with joined aluminum and steel components
- May cause weld distortion, preventing Class A finishes

## ***The Solution: Plexus® Adhesives***

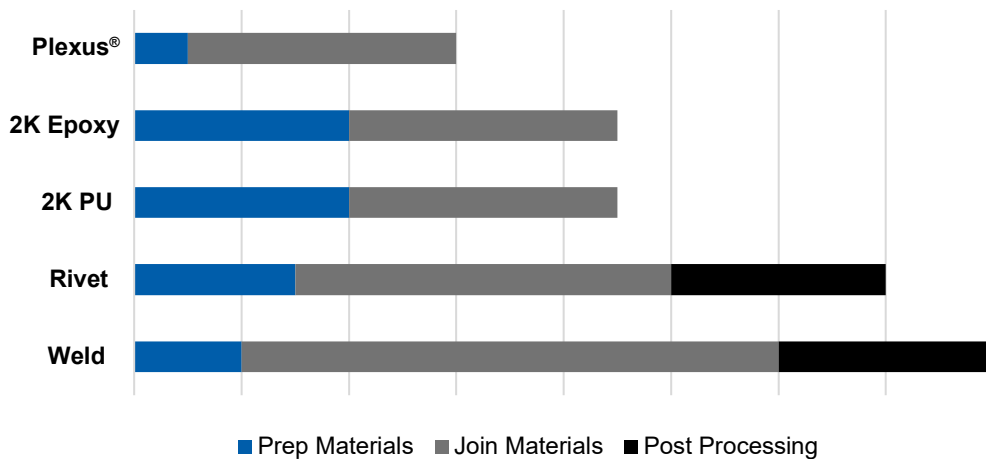
- Enable primerless adhesion to multiple materials
- Distribute stress with unparalleled durability
- Enable use of non-corrosive materials like composites, thermoplastics and aluminum
- Create clean “class A” surfaces

## Structural Bonding Solutions for Agriculture Vehicles

| Product | Chemistry | Description                                       | Mix ratio by volume | Working time, mins | Tensile strength, psi(MPa) | Tensile elongation, % |          |           |          |           |                 |           |     |       |     |      |     |    |    |    |   |
|---------|-----------|---|---------------------|--------------------|----------------------------|-----------------------|----------|-----------|----------|-----------|-----------------|-----------|-----|-------|-----|------|-----|----|----|----|---|
|         |           |   |                     |                    |                            |                       | Aluminum | Raw Steel | E-Coated | Galvaneal | Stainless Steel | Cast Iron | ABS | Nylon | FRP | DCPD | SMC |    |    |    |   |
| MA8110  | MMA       | Bracket bonding, multimerial bonding              | 1:1                 | 8 - 12             | 3,350(23.1)                | 40 - 70               | ++       | ++        | ++       | ++        | ++              | ++        | ++  | ++    | ++  | ++   | ++  | ++ | ++ | ++ | + |
| MA8120  | MMA       | Bracket bonding, multimerial bonding              | 1:1                 | 18 - 22            | 2,750(19.0)                | 50 - 80               | ++       | ++        | ++       | ++        | ++              | ++        | ++  | ++    | ++  | ++   | ++  | ++ | ++ | ++ | + |
| MA420   | MMA       | Composite and thermoplastic bonding               | 10:1                | 4 - 6              | 2,850(19.7)                | 20 - 50               | ++       | ++        | ++       | ++        | ++              | -         | ++  | -     | ++  | ++   | ++  | ++ | ++ | +  |   |
| MA320   | MMA       | Composite and thermoplastic bonding               | 10:1                | 8 - 12             | 1,950(13.5)                | 60 - 100              | ++       | ++        | ++       | ++        | ++              | -         | ++  | -     | ++  | ++   | ++  | ++ | ++ | +  |   |
| MA422   | MMA       | Composite bonding, aluminum to painted steel      | 10:1                | 17 - 24            | 2,850(19.7)                | 75 - 100              | ++       | ++        | ++       | ++        | ++              | -         | ++  | -     | ++  | ++   | ++  | ++ | ++ | +  |   |
| PU2105  | PU        | Rigid paintable seam sealer                       | 1:1                 | 4 - 6              | 4,000(28.0)                | 5                     | ++       | +         | ++       | ++        | ++              | -         | -   | -     | ++  | ++   | ++  | ++ | ++ | +  |   |
| AC1700  | Polyester | Sprayable body filler, fills pinholes on castings | 2%                  | 3 - 6              | n/a                        | n/a                   | ++       | ++        | -        | ++        | +               | ++        | -   | -     | ++  | -    | -   | ++ | -  | -  |   |

++ Excellent adhesion with no to little surface preparation. + Good adhesion with some surface preparation. - Not recommended. \* Use PC120 Cleaner Conditioner for optimum long term environmental durability

### Relative Time to Assemble



### Plexus Adhesives

- Ensure great stress distribution and fatigue resistance for optimal durability
- Have excellent weather resistance
- Offer high elongation enabling dissimilar material joining

