



Gain greater design freedom  
through high-quality joins and  
superior aesthetics.

**Branson™ GPX platform**

Unique heat staking technology for joining complex, delicate and sensitive plastic components



## The Branson GPX platform provides manufacturers with greater design freedom and optimized production performance



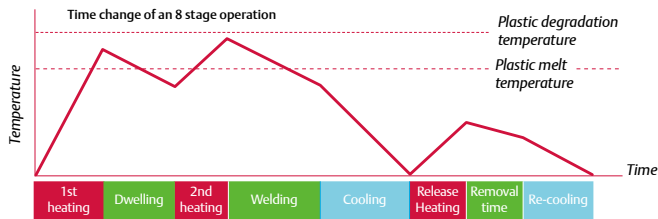
The Branson GPX platform is designed to give manufacturers greater design freedom by enabling them to join more complex, delicate and sensitive components to plastic moldings. Unique pulse staking technology optimizes the heat staking process to produce high-quality joins, superior product aesthetics and energy savings in increasingly

challenging applications. These include parts made of dissimilar materials with complex 3D geometries, closely aligned features and fragile or heat-sensitive components, such as soldered components or sensors, and using a greater number of blended, glass-reinforced, chromed and metallicized plastics.

|                                | Handheld unit            | GPX-100                     | GPX-150                     | GPX-200                     |
|--------------------------------|--------------------------|-----------------------------|-----------------------------|-----------------------------|
| Overall Dimensions             | 155 W x 285 H x 465 D mm | 1420 W x 2300 H x 1150 D mm | 1920 W x 2300 H x 1150 D mm | 2230 W x 2300 H x 1150 D mm |
| Central drive stroke           | N/A                      | 550 mm                      |                             |                             |
| Central drive speed            | N/A                      | 550 mm/s                    |                             |                             |
| Maximum number of welding tips | 2 pcs                    | 24 pcs                      | 48 pcs                      | 60 pcs                      |

## Benefits

### Unique staking process



- Localized heating and cooling prevents damage to nearby components
- Adjustable heating and cooling cycle times delivering an optimized low energy heat staking
- Optimized heating process of polymer reducing internal stresses

### High performance



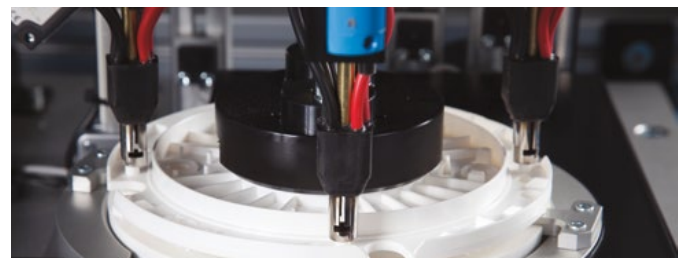
No vibration, burning smells, particulates or burn marks enables more delicate and sensitive parts to be joined with consistently high-performance aesthetics.

### Design flexibility



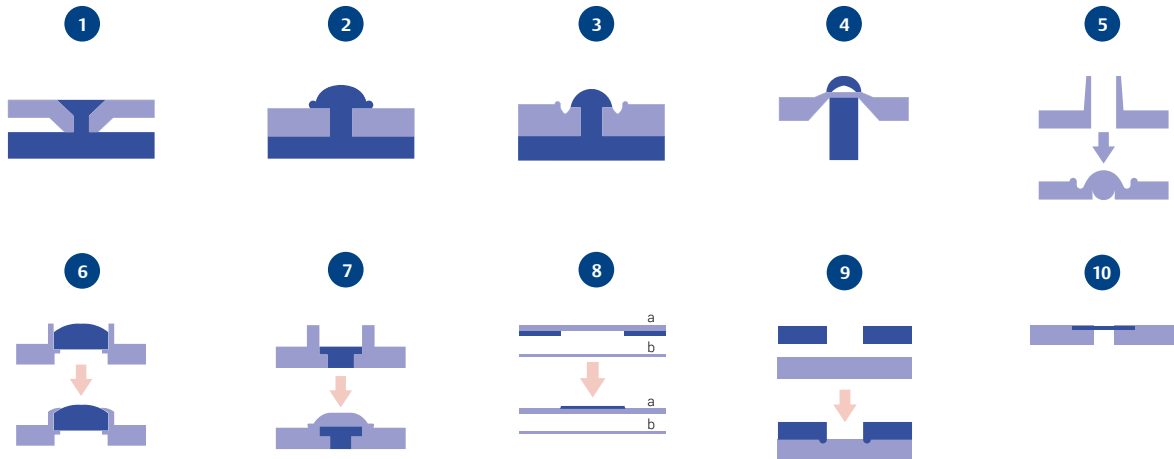
Wide range of heat staking tip designs, which can be adapted to meet any complex stake welding requirements.

### Multiple point staking



Ability to stake multiple points and polymers simultaneously provide manufacturers with greater design freedom.

## Applications



- 1 Flat head tip welding - used in the assembly of battery terminals and metal plate fixing.
- 2 Polymer to polymer and other materials - where the material with the boss is thermoplastic, used for automotive door rims, keyboard buttons, retaining metal shims and holding circuit boards.
- 3 Polymer to polymer - both materials are the same and the stake point is deeper, used in the assembly of cooling pot lids and fishing reels.
- 4 Bonding - a fibrous material without a hole in the material, used in the assembly of sound damping material to automotive pillars, doors and panels.
- 5 Rim swaging - to lock parts in position, used in the assembly of camera lenses and retaining bearings.
- 6 Sealing holes - used in the assembly of relay cases, blow molding gates and security sealing.
- 7 Embedding parts - including bolts or pins, sealing holes or access to screws, used in the assembly of cellular phones and automotive components.
- 8 Polymer to mesh - to bond a mesh without making a hole in the mesh, used in the assembly of automotive louvred covers or filter fixing.
- 9 Polymer to Polymer welding - used to weld two polymers together, whereby a hole in one piece facilitates a weld where it contacts the adjacent polymer.
- 10 Breathable membrane - attachment of breathable membrane to plastic parts.

Join more complex, delicate and sensitive components to plastic moldings, providing greater design freedom.



**BRANSON™**

The unique heat staking process provided by the Branson GPX platform offers manufacturers a broad range of benefits, such as superior product aesthetics and reduced energy use.

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