

Continuously strengthened emission targets shift the focus from internal combustion (ICE) to alternative engine concepts. Various hybrid electric, battery electric and fuel cell electric concepts compete against each other. All of these concepts have at least one thing in common – they need electric engines in order to convert electric into kinetic energy. As stators add the highest value to electric engines, SITEC covers the laser welding of pin pairs with its widely known accuracy.

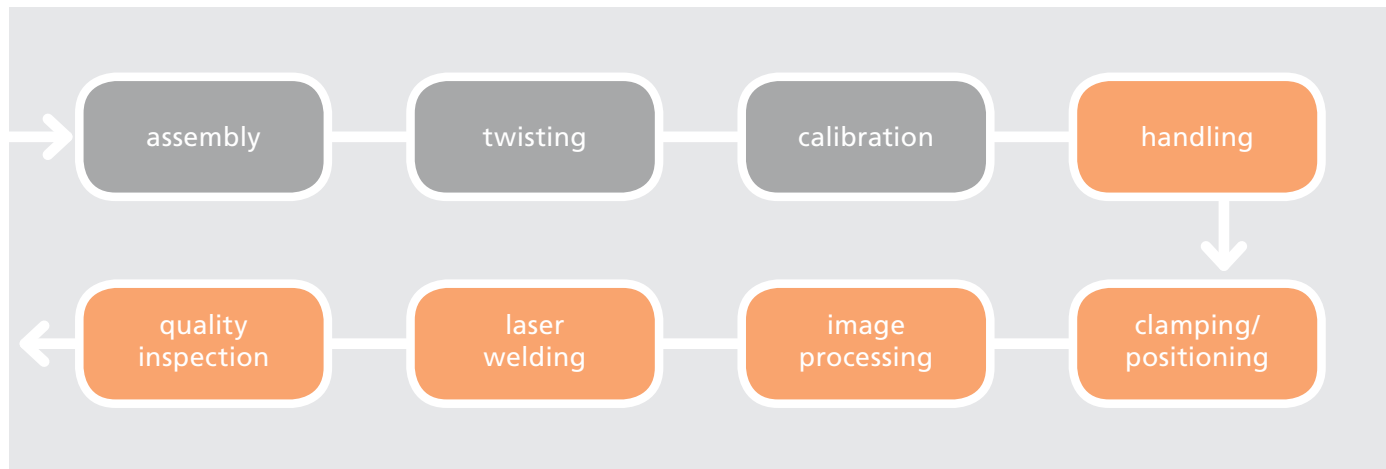
SITEC manufactured production solutions are capable to produce various types of stators or inverters from prototype to mass production quantities.

**Your requirement** With more than 30 years' experience in design and construction of automated production lines and laser machines SITEC is your partner for future challenges.

**Your SITEC solution** Twisted and calibrated stators enter our production line usually on work-piece carrier systems. Special handling systems load the raw parts into fixtures. The pins are being pre-positioned and measured by visual inspection systems. This assures that each pin pair is being welded as accurate as possible. The second side of the stator will be welded if necessary. After each of the numerous pin pairs has been welded correctly the stator will be replaced on a work piece carrier. It is available for your follow-up processes now.

**Series production** If your current output doesn't justify the investment in new production hardware, SITEC is happy to offer its series production facilities. Certified according to ISO9001 and IATF16949 - SITEC is your experienced partner for automotive supply.

### Process flow



### Production solution



#### Standardized laser machines for prototypes and series start-up

- Laser standard machine LSxx
- OEM laser source
- High accuracy scan optics
- Manual or automatic loading
- Various fixture concepts
- Small footprint
- Short delivery times

**As flexible as you!**



#### Fully automated laser welding machines for mass production

- Fully Automated laser machine
- OEM laser source
- High speed accuracy scan optics
- Including 100 % camera inspection
- VARIOVIEW® traceability system
- typical cycle time: 0,5 seconds per hair pin

**As focused as you!**