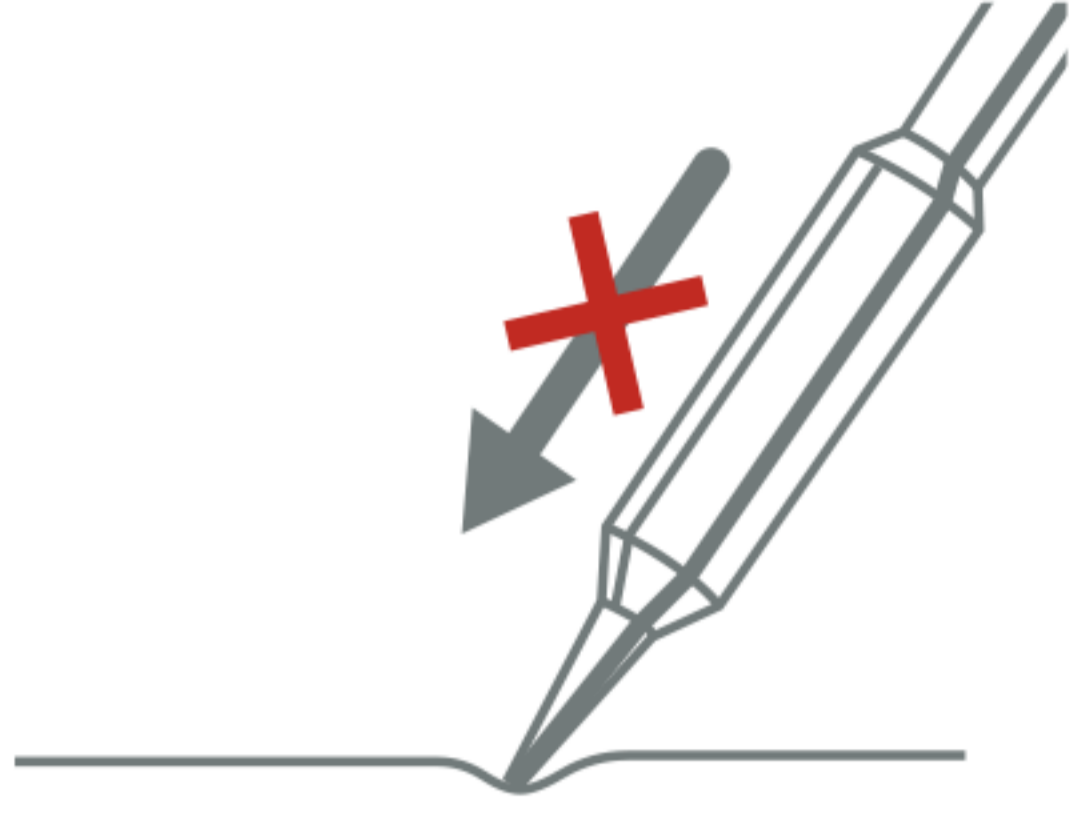


Most common mistakes in handsoldering

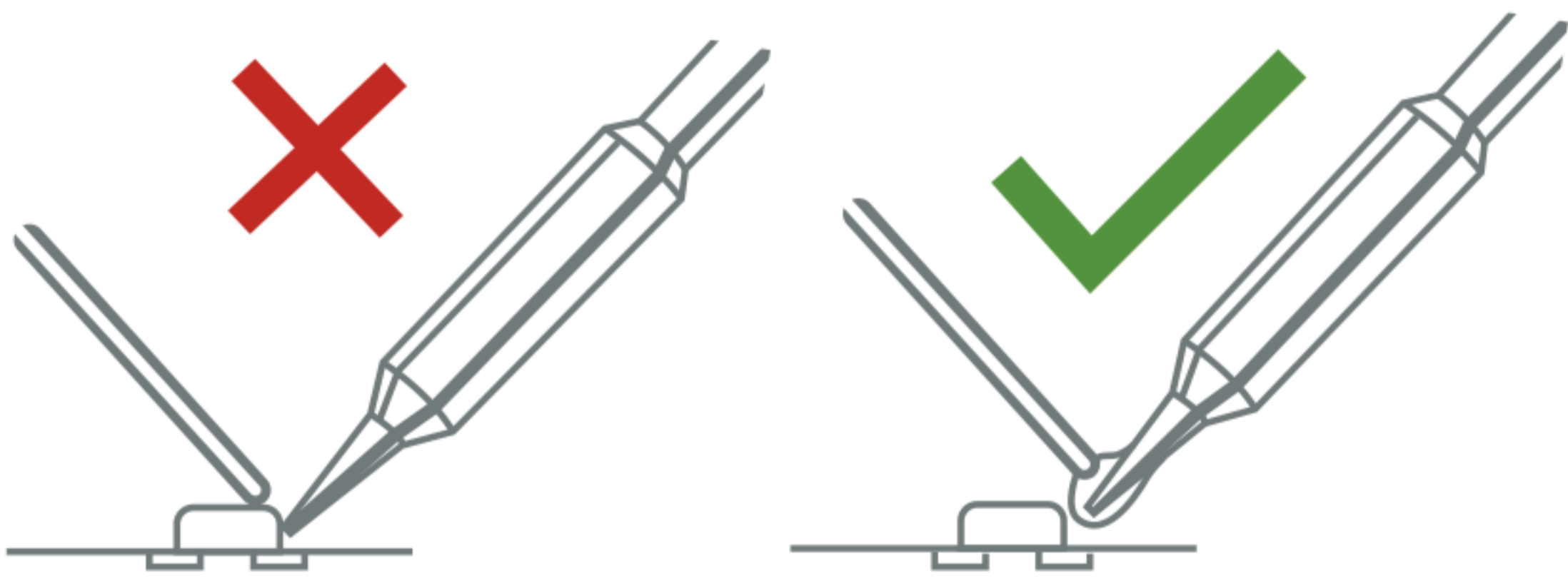
1 Excessive pressure



✗ **Avoid making pressure to the tip** during soldering process.

✓ Use **thermal efficient tools** and **keep tips clean** of oxidation.

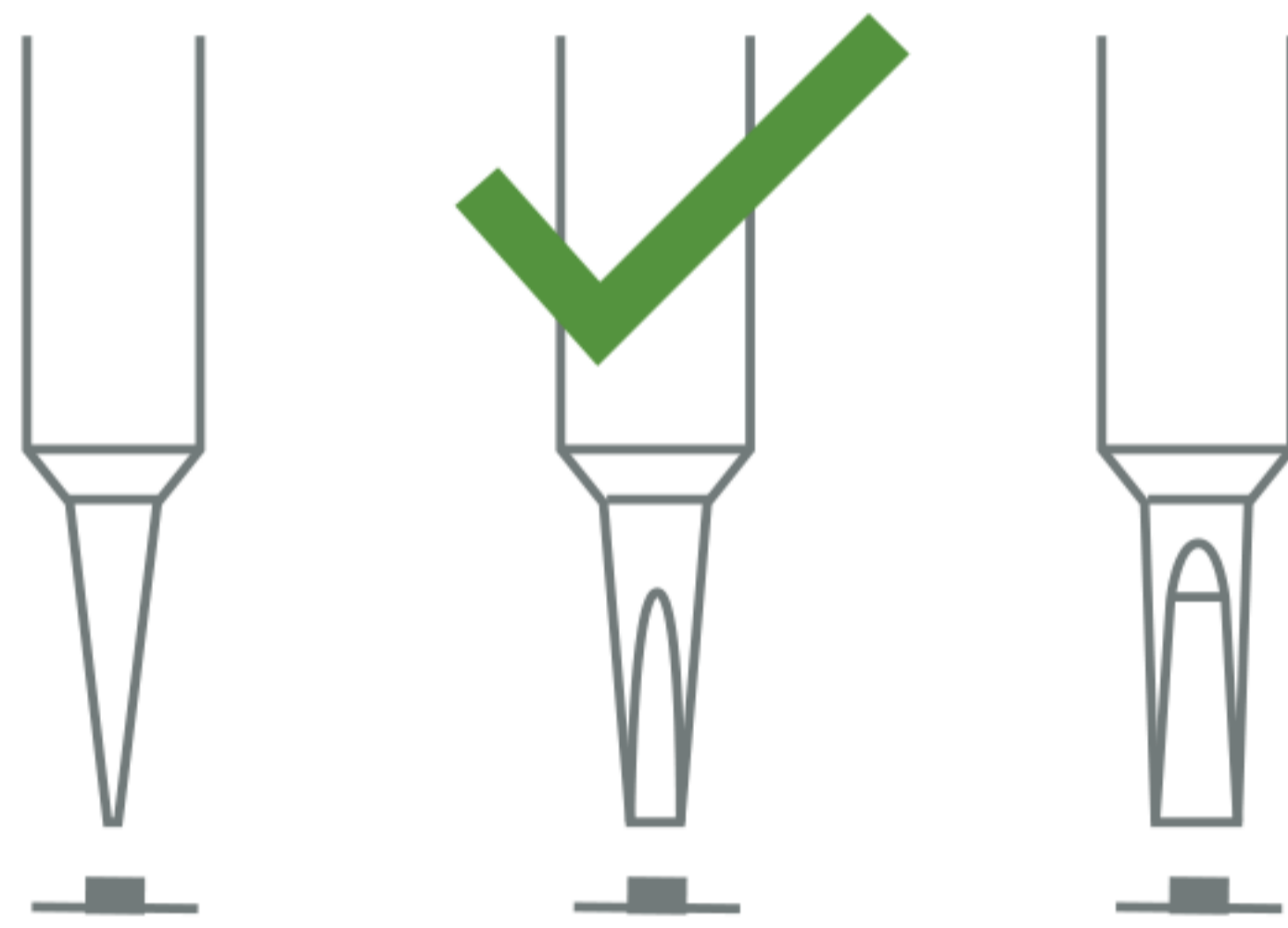
2 Improper thermal bridge



✗ **Do not apply the soldering iron first to the connection** and then feed the solder wire.

✓ **Apply a small amount of solder wire to the tip** before touching the connection.

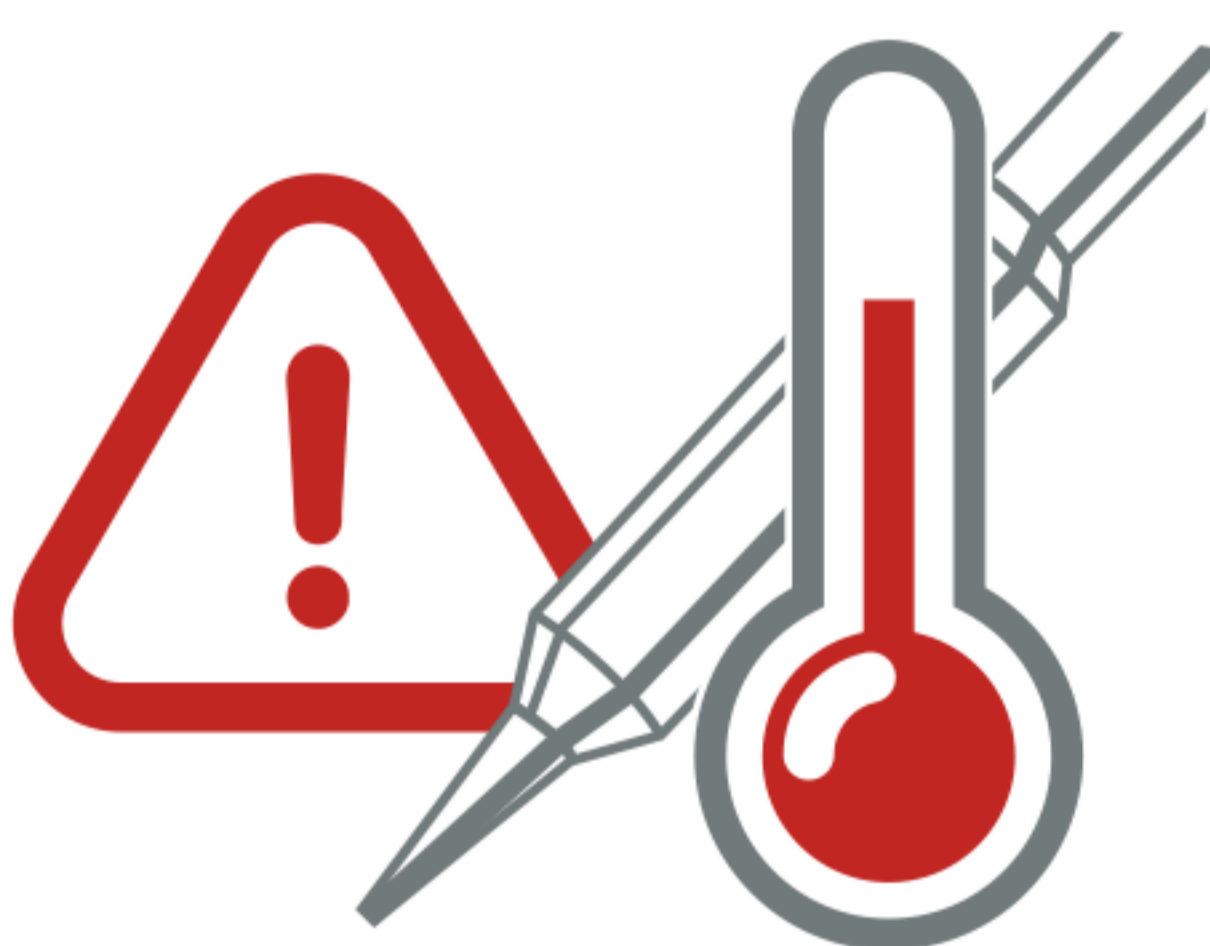
3 Wrong tip size



✗ **Do not use a tip smaller or bigger than the component/pad.** It can cause incomplete solder flow, a cold solder joint, board damage...

✓ **Select the tip that has the greater contact area.** Use the largest tip possible for each solder joint.

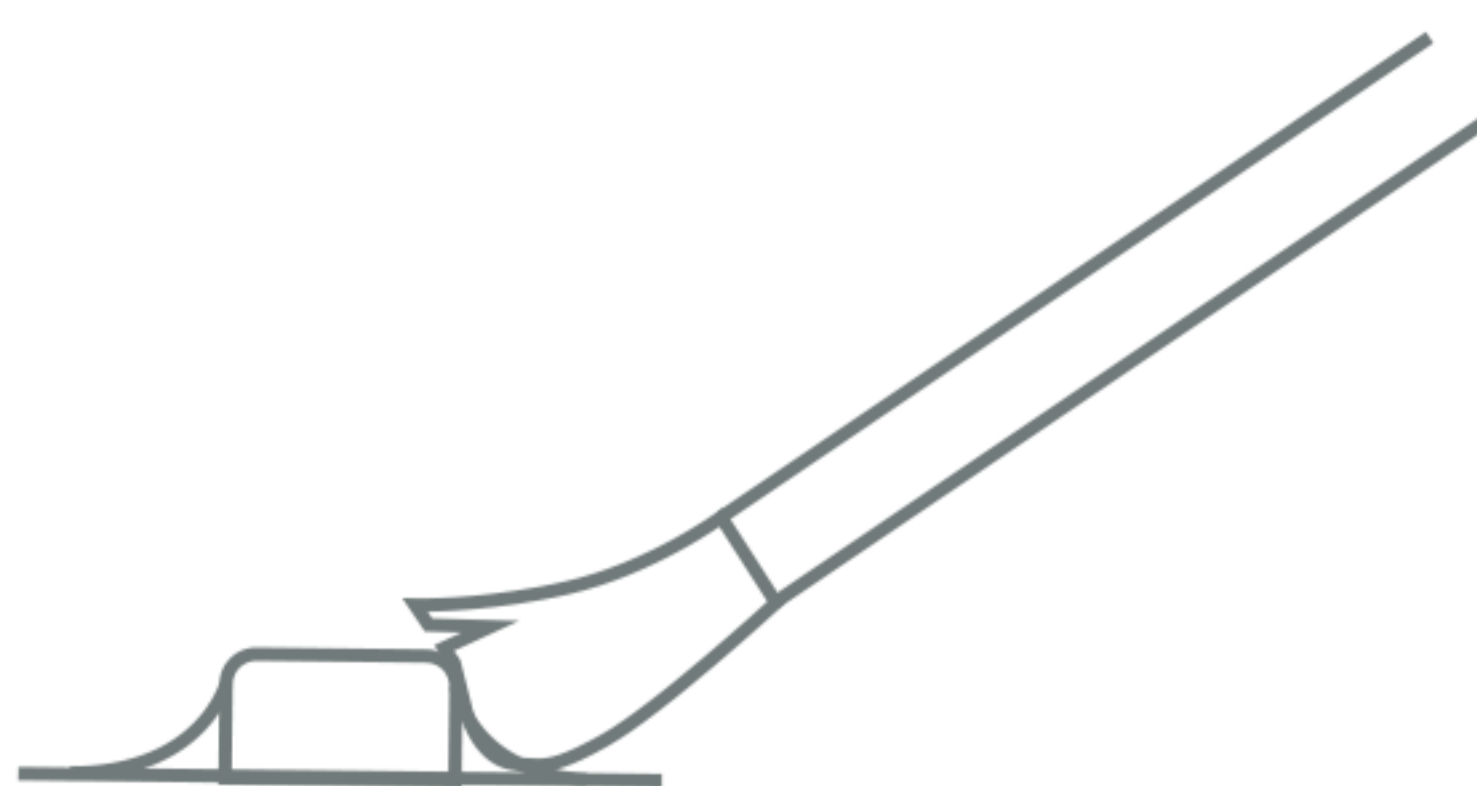
4 Excessive temperature



✗ **Do not increase tip temperature.** It can cause lifted lands, overheated solder joints and board damage.

✓ **Work with the lowest possible tip temperature.** If the solder joint needs more heat, use a preheater.

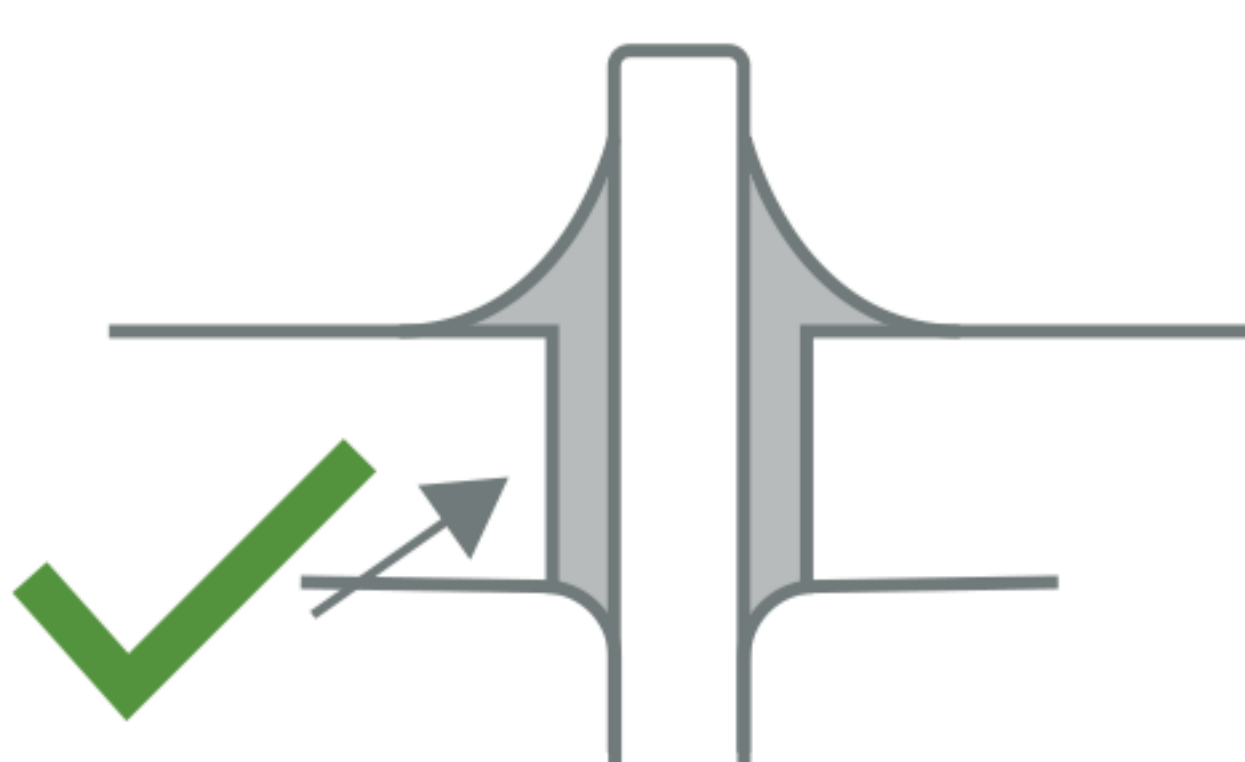
5 Improper flux use



✗ **Do not use aggressive flux unnecessarily.** It may cause corrosion and electromigration.

✓ **Use the flux contained in the solder wire.** Provide external flux if necessary, with a pen or needle dispenser.

6 Unnecessary rework



✗ **Do not use surface appearance** of the solder joint **as a criterion.**

✓ **Perform touch-up** or rework operation **only when necessary.**