Welding guidelines for axle beams

General

BPW axles are made of weldable material (S 355 J2) and do not need to be pre-heated prior to welding. The load-bearing strength and functioning of the axles are not reduced by welding work if the following points are observed.

Welding methods

Two different welding methods are prescribed:

- Inert gas welding
  Welding wire quality G 42 0 (DIN EN 440)
- Manual arc welding
  Rod electrodes E 42 2 (DIN EN 499)

The mechanical quality values must correspond to the base material S 355 J2 and the maximum weld thickness allowed is 5mm (DIN EN 25817). End craters and undercuts must be avoided.

Important for all welding work

Do not alter the camber or tracking of the axles except within BPW tolerances and observe the weld lengths shown in Fig. 1. It is not permitted to heat the air suspension hanger brackets for alignment work. The trailing arms, air bags and plastic pipes must be protected against flying sparks and spatter during all welding. **Do not attach the earth terminal to the trailing arm or the hub and never perform any welding on the trailing arms or on the lower tensile zone of the axle beam!**

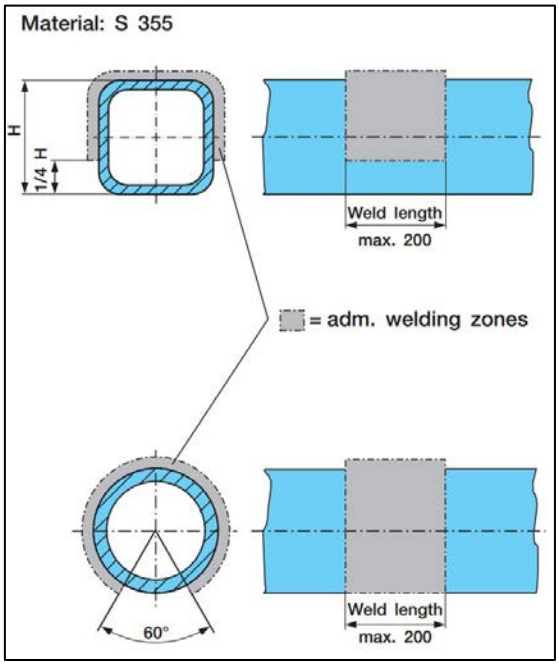

Fig. 1