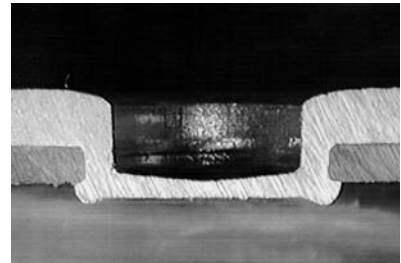
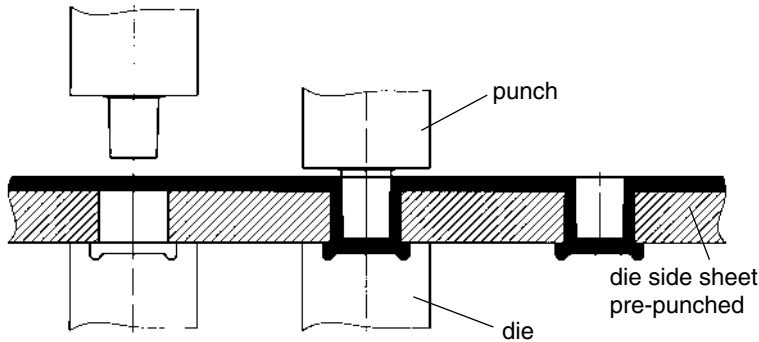


The TOX®-Vario-Points for difficult cases

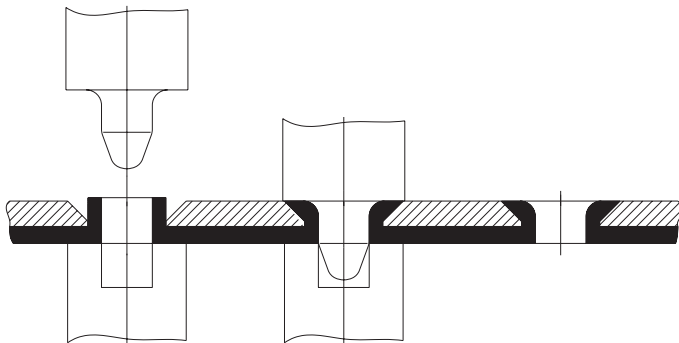
A further component in the TOX® joining technology

Variant I



Specials available on request

Variant II



Specials available on request

Areas of application:

Joining of sheet metals with large differences in thickness.

Joining of a non-ductile or high tensile strength sheet metal material with a ductile one, e.g. joining of sheet metal and cast steel/spring steel combinations.

Joining of sheet metals with non-metallic materials (e.g. plastics, elastomers, paper, cardboard).

Easily join high strength materials.

An optimisation is possible by adjusting the punching geometry. Thickness differences from 1:4 to 4:1 are thereby feasible.

Adjustment to the existing punch hole possible.

Features:

Pre-punched material on the die side required (for Variant I)

Pre-punched material on punch side with face (for Variant II)

Forming of only one sheet metal layer

Multipoint capability

Able to take both radial and axial force

Minimum joining/stripper forces

Increase tool life

Exact positioning of the components required

TOX® service: we offer the only way for a reliable clinching application, with a functional guarantee. **TOX® test report** with all relevant data for the TOX® application with guaranteed strength data for the TOX®-Vario-Point.