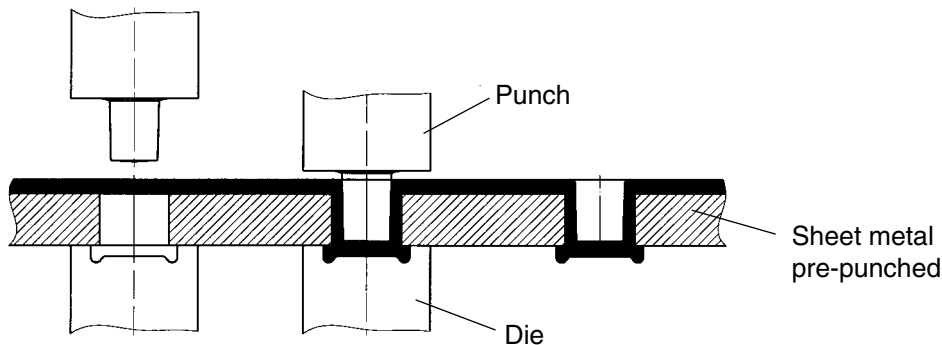


# TOX®-VARIO-POINT

## The TOX® point for difficult to join cases

The TOX®-Vario-Point is a complement to the existing TOX® joining technology: the TOX® round point  and the TOX® flat point .



80.80

08/00

### Areas of application:

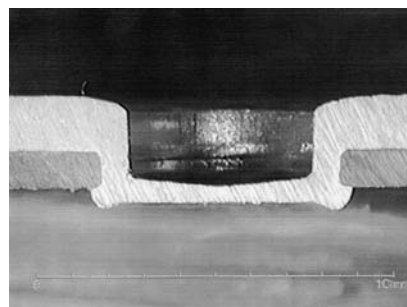
Joining of sheet metals with large differences in thickness.

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

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

An optimization is possible by adjusting the hole geometry. Thickness differences from 1:4 to 4:1 are feasible.

Possibility to use existing holes.



### Characteristics:

Die side material needs to be pre-punched.

Only one sheet metal is formed.

Joint is strong in both radial and axial directions.

Low joining force requirement.

Requires exact positioning of the components.

**TOX®-Service:** we offer the only way to a reliable clinching application with a functional guarantee. The **TOX®-Test-Report** contains all relevant data for the TOX® application with guaranteed strength data for the TOX®-Vario-Point.