Formwork element and formwork construction kit

The invention relates to formwork elements having a formwork skin, having a frame bearing the latter, and having struts which are arranged within the frame and support the formwork skin.

Furthermore, the invention also relates to a formwork construction kit which comprises such formwork elements and from which formworks of a wide variety of kinds can be formed.

Such formwork elements are already known from practice in a wide variety of embodiments and are used, for example, in concrete formwork construction.

On account of the loadings to which such formwork elements are subjected, it is necessary for the formwork elements to be configured to be robust. This is accompanied as a rule with a comparatively high weight of the formwork elements, which can make handling of such formwork elements more difficult.

It is therefore the object of the invention to provide formwork elements of the type stated at the outset whose use properties are improved by comparison with already known formwork elements.

In one aspect, the present disclosure provides a formwork element having a form work skin, having a frame bearing the latter, and having struts which are arranged within the frame and support the formwork skin, wherein the frame is produced from unprofiled flat steel, and the struts are produced from open section steel, characterized in that an even number of struts is arranged within the frame, of which two outer struts each have at least one plug-through opening for an anchor, in

that at least one strut has at least two plug-through openings, wherein a shortest distance between a first plug-through opening of the at least two plug-through openings and the frame is shorter than a shortest distance between a second plug-through opening of the at least two plug-through openings and the frame, and in that the frame has a side ratio of 3 to 5.

In a second aspect, the present disclosure provides a formwork construction kit comprising at least two different types of formwork elements according to the first aspect, in particular wherein two intersecting lines of plug-through openings of a first type of formwork elements are matched in their positions to a line of plug-through openings of a second type of formwork elements, and/or wherein at least one type of formwork elements according to the first aspect is present with at least one connection clamp, in particular wherein holding projections on clamp arms of the connection clamp are designed to fit with connection openings in the frame of the formwork elements.

In a third aspect, the present disclosure provides the use of a connection opening in a frame of a formwork element according to the first aspect and/or of a formwork construction kit according to the second aspect for selectively fastening a connection clamp and a plug-through bolt for connecting the formwork element to a further formwork element.

To achieve this object, what is proposed first of all is a formwork element having the features of the first independent claim directed to such a formwork element. In particular, to achieve this in a formwork element of the type stated at the outset, what is thus proposed is that the frame of the formwork element is produced from unprofiled flat steel and

that the struts of the formwork element are produced from open sectional steel. What can be considered as an example of an