

The BSF-units in the production of precast concrete elements.



Pallets with BSF- and RVK-units in stock





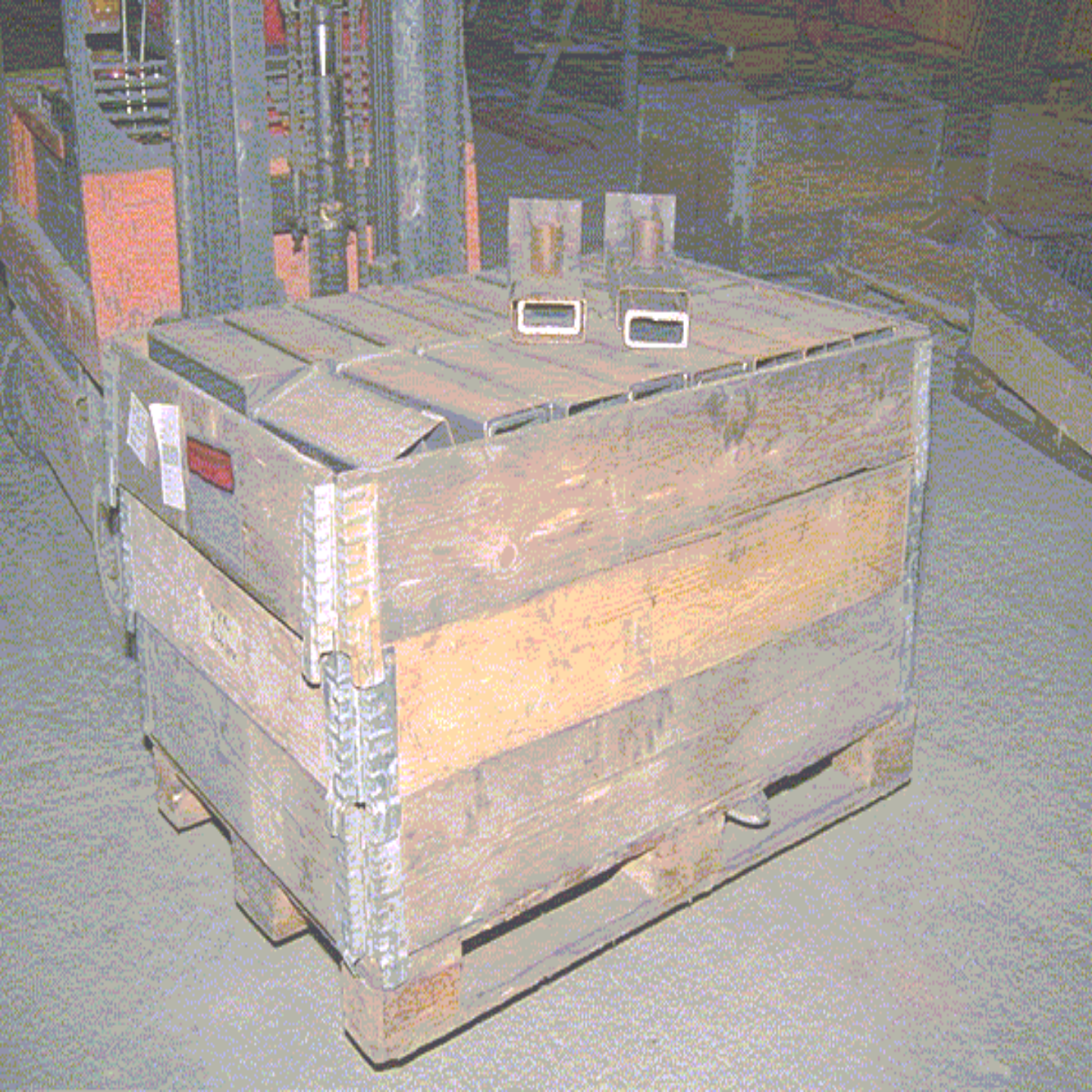
Pallet with beam units

Notice that the beam units are
delivered without the
reinforcing bars welded on.



Pallet with column units

Also the column units are delivered
without the reinforcement.



Pallet with RVK-units

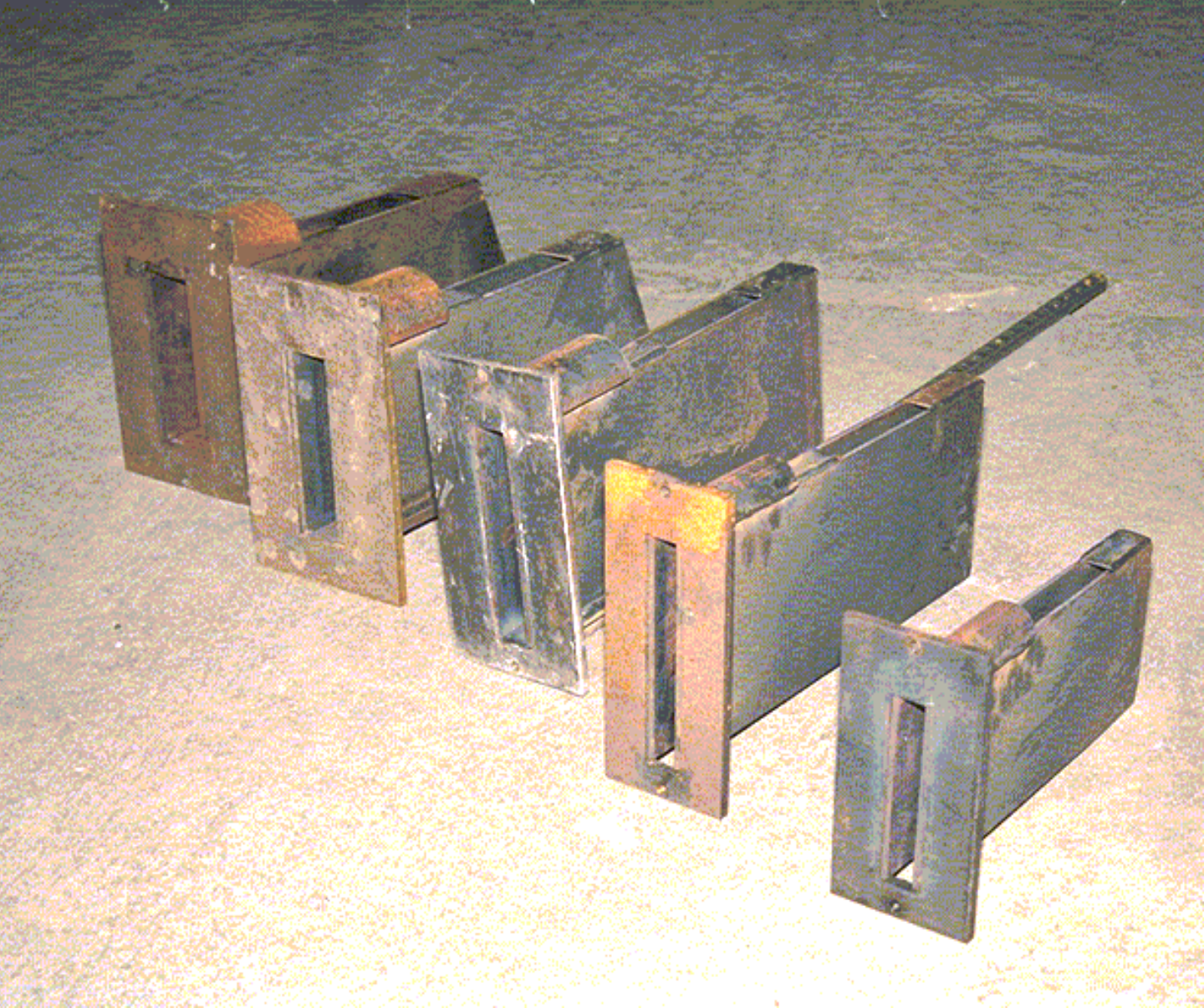
All the steel parts are delivered
in full pallets of about 1 ton.



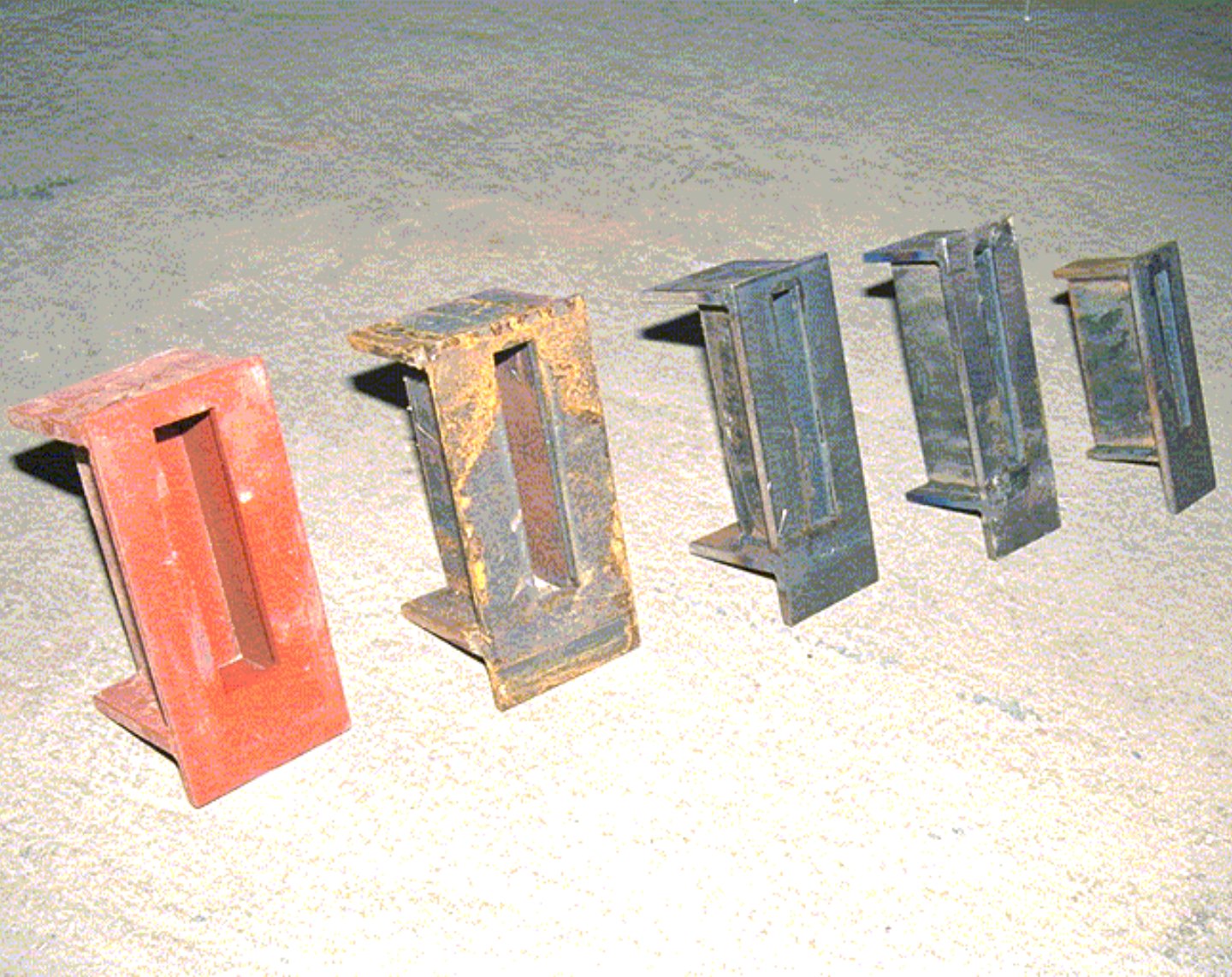


Pallet with knives

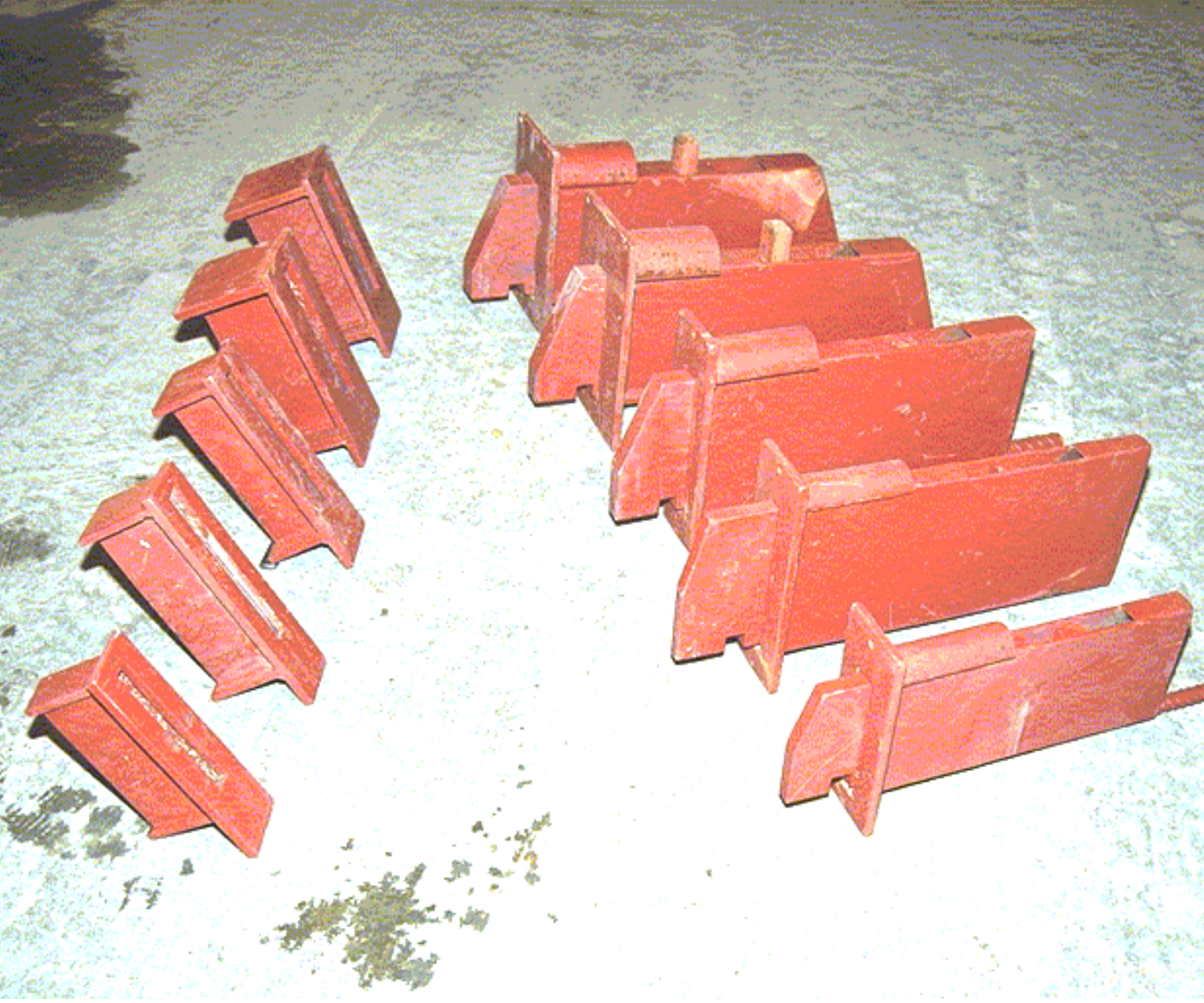
The number of units of the various types on each pallet can be found in Memo 25.



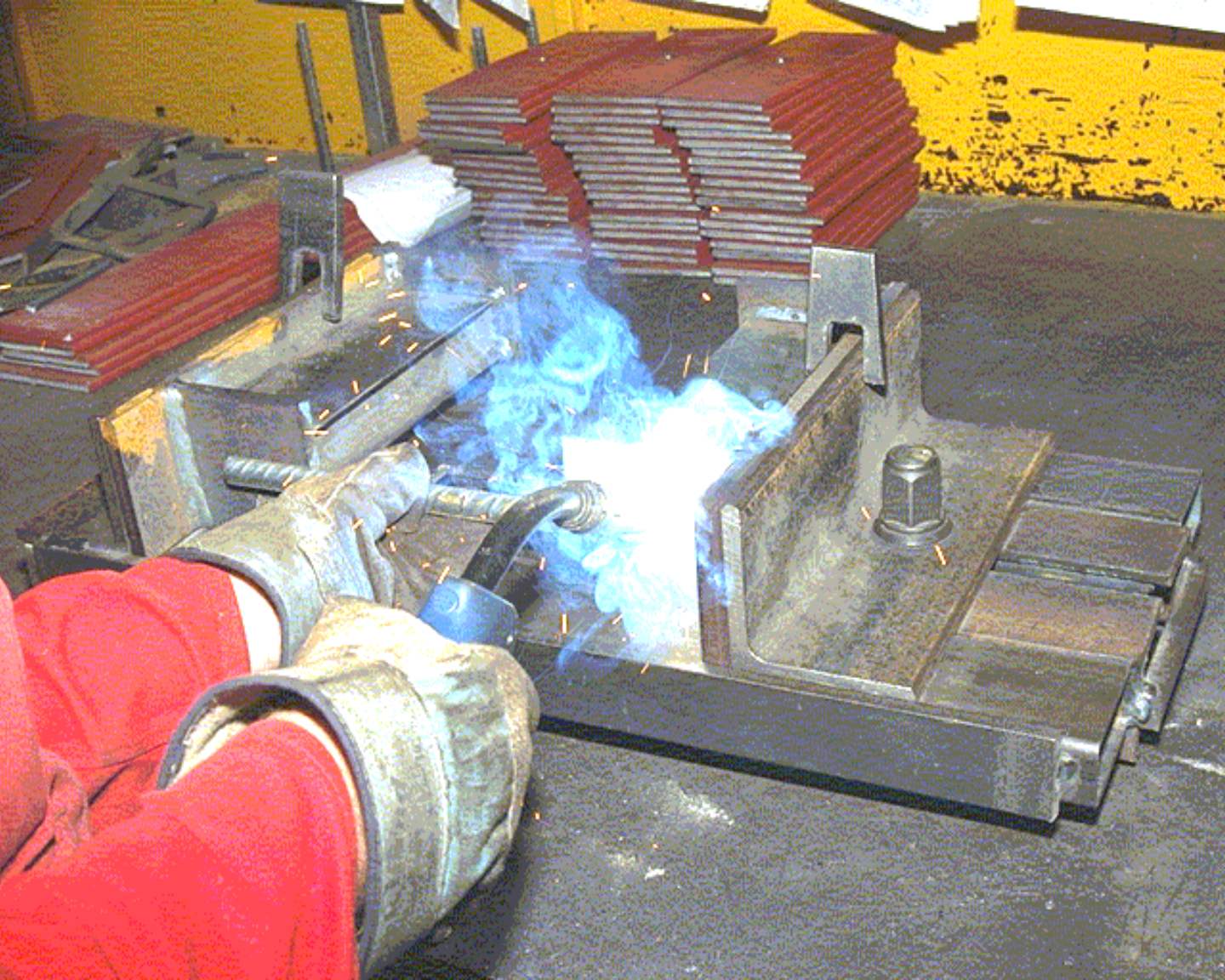
The five smallest types of BSF beam units



The five smallest types of BSF column units

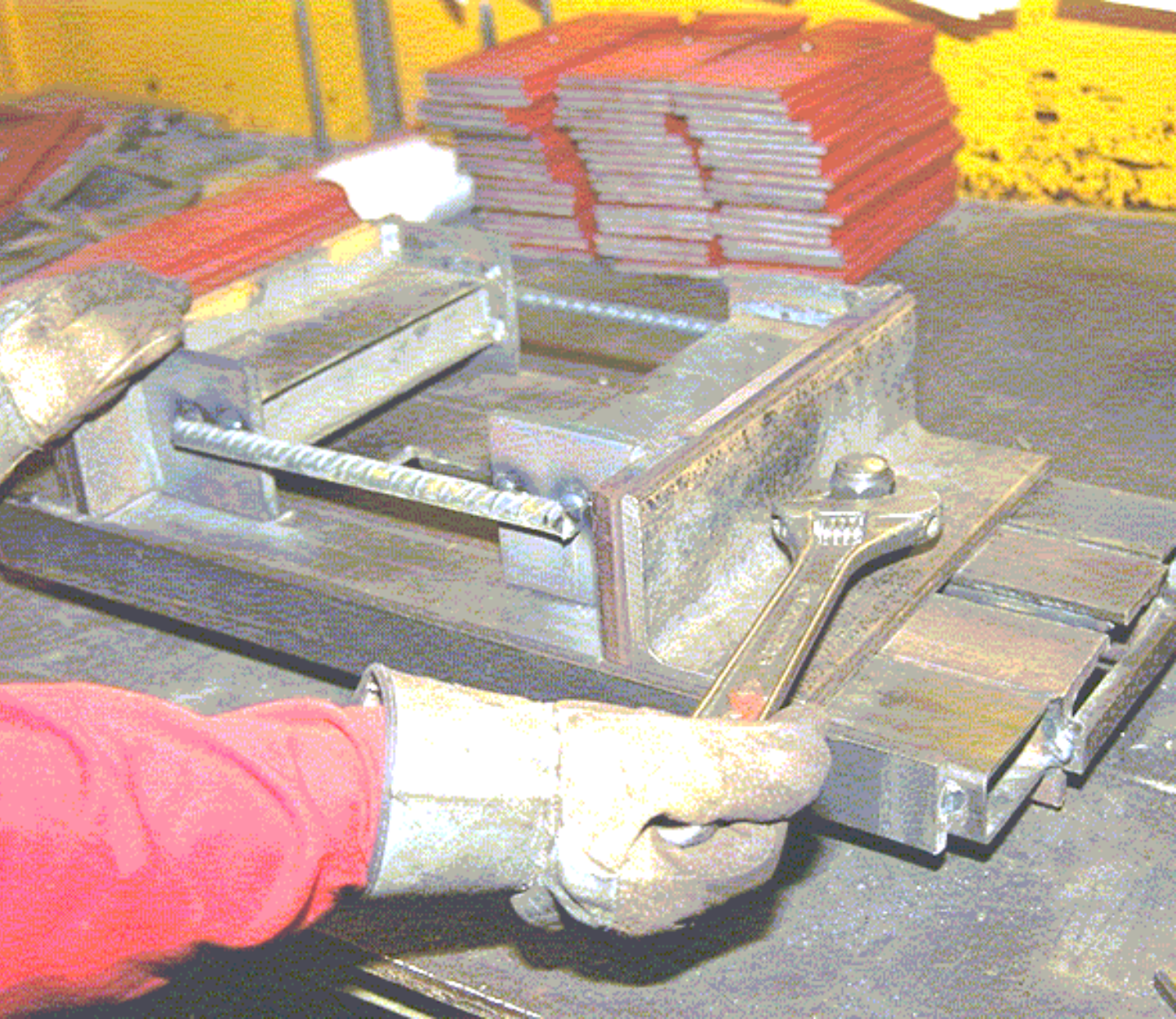


Complete sets of the five smallest BSF types



When the column units are two-sided (which is most frequent) they are placed in a jig and connected by welding on reinforcing bars.

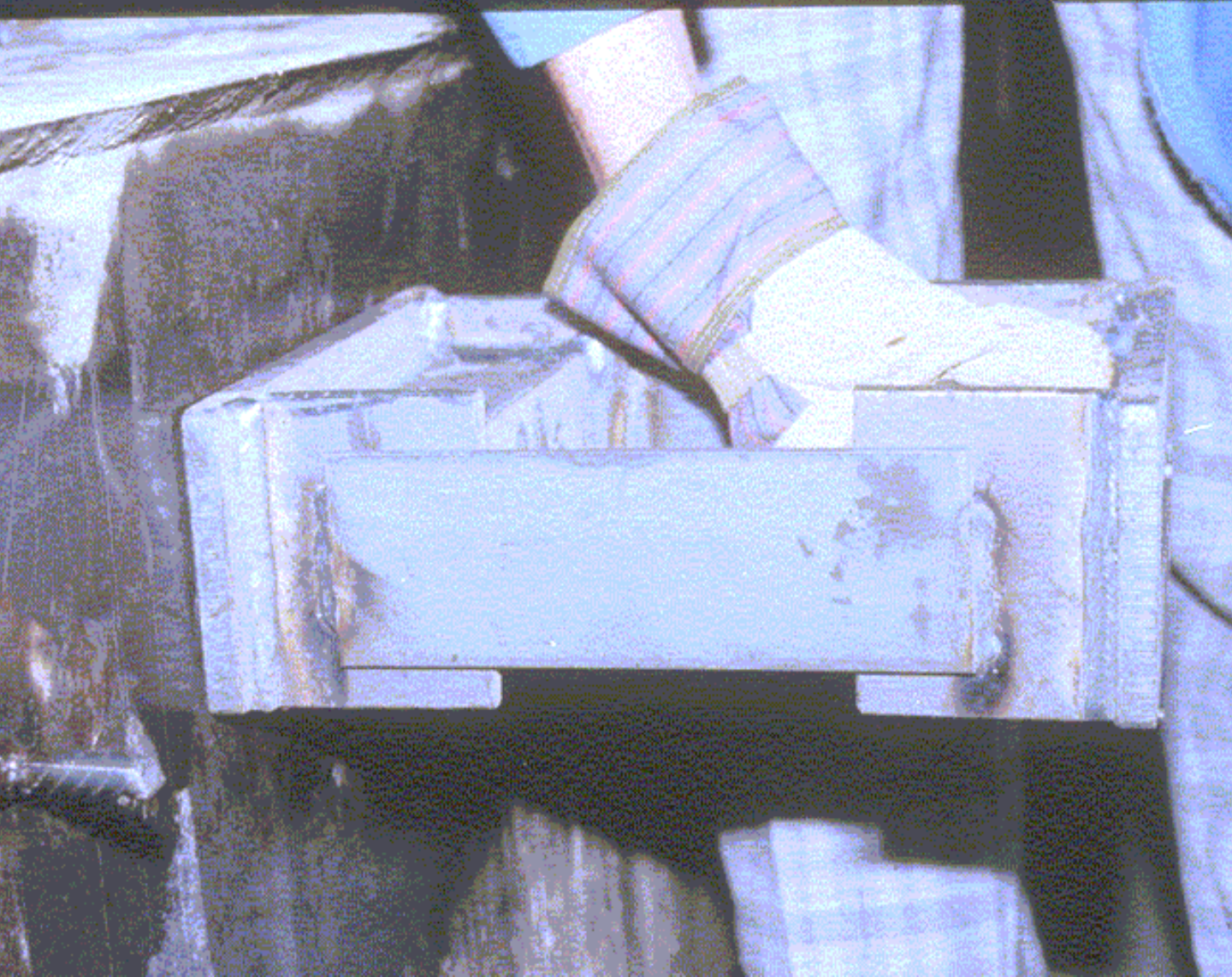
Notice the clamps pressing the column units to the angles of the jig.



The jig is adjustable in order
to fit any column size.



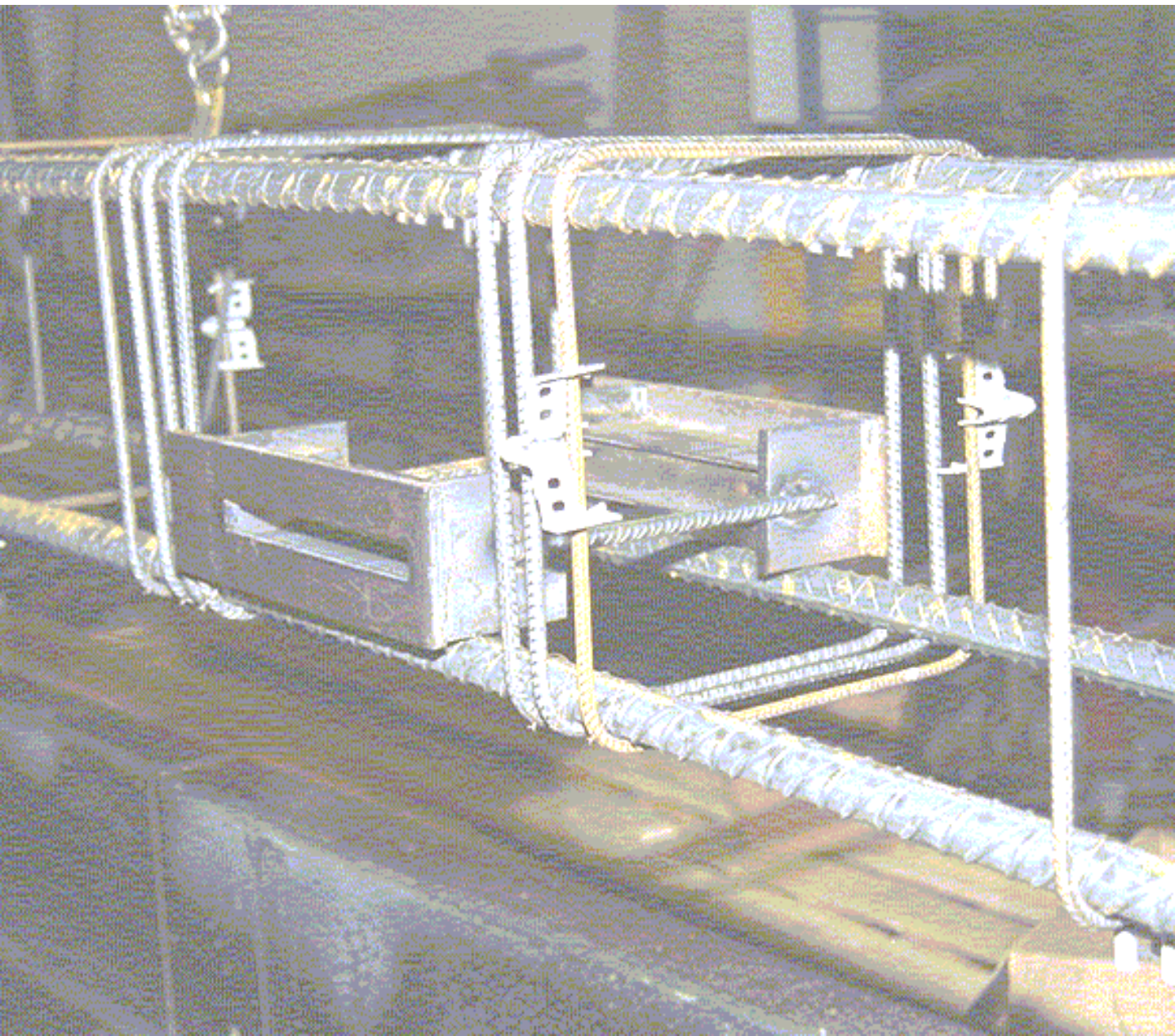
Two-sided column units after welding, ready to be placed in the reinforcement cage.



Two-sided BSF column units can also be connected by means of a flat steel.



Examples of reinforcement welded to the column units for one-sided placement in the columns.



Example of two-sided column units placed in the reinforcement cage before the reinforcement is placed in the form.

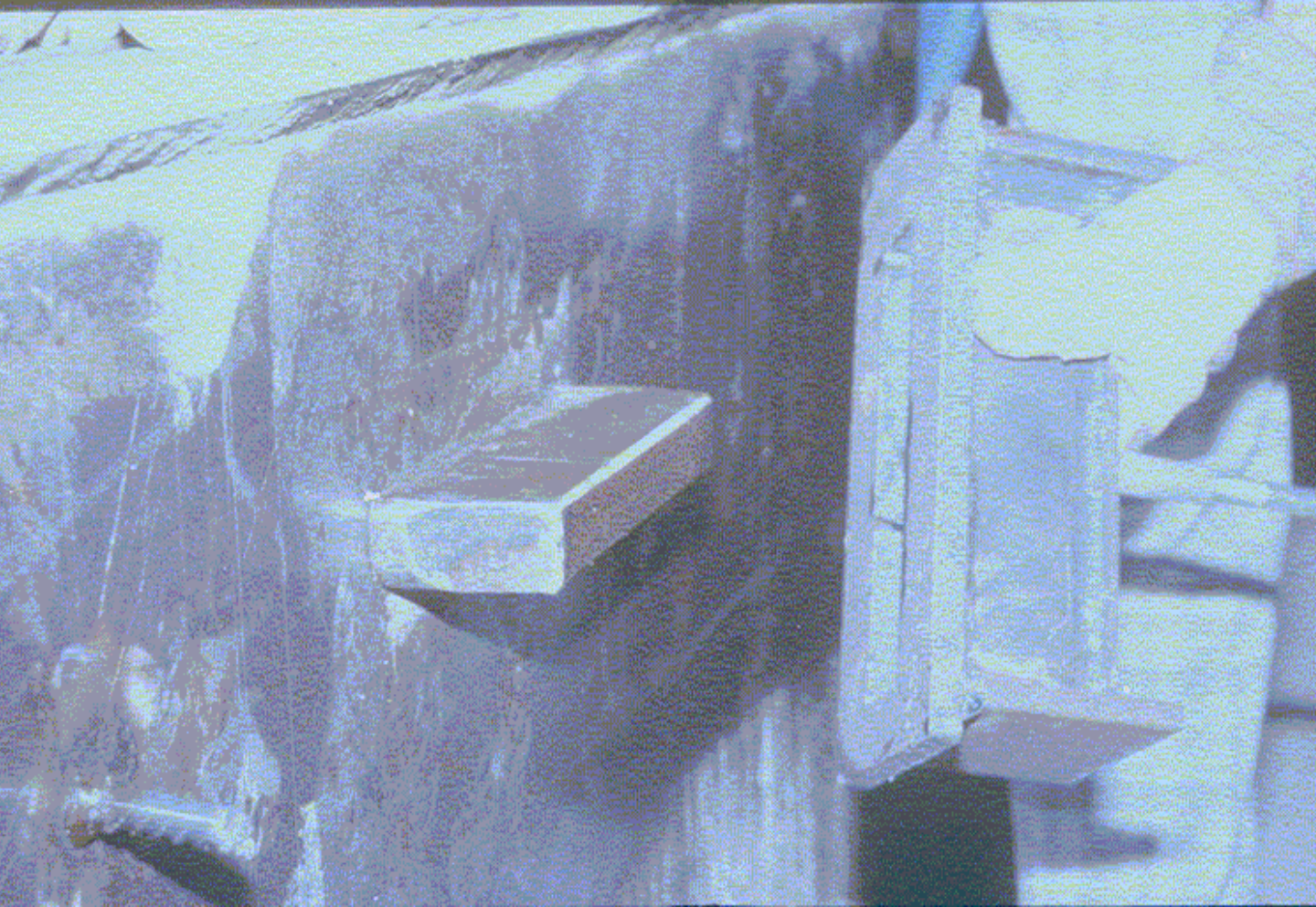


The placement of the guiding piece in the form is secured by using a plywood locating plate to position the guiding piece. See Memo 19.

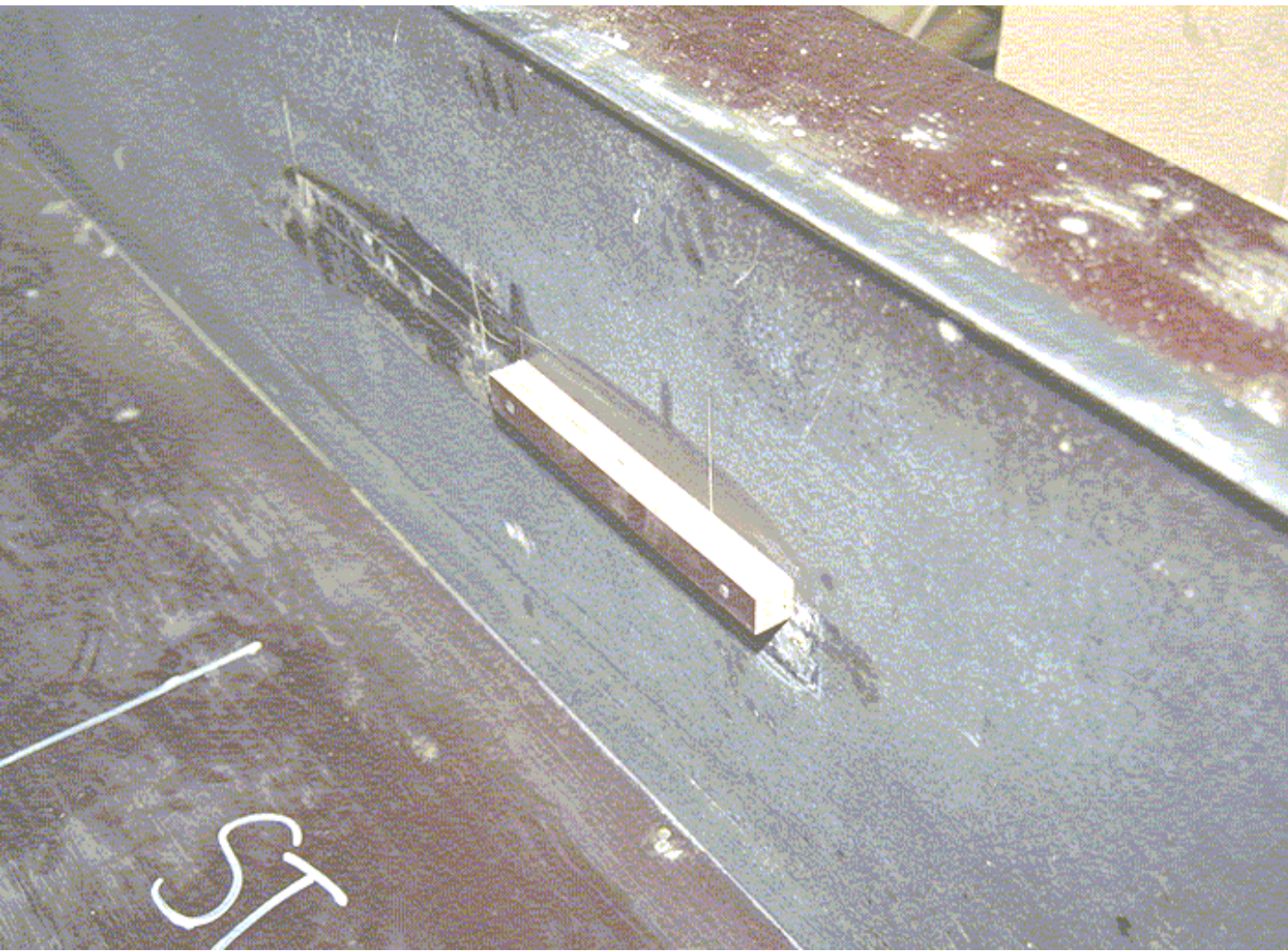
Notice the vertical line on the plate. This line corresponds to the Reference Level as defined in Memo 15, and must be lined up with a corresponding mark at the top of the form.

When the guiding piece is in the correct position it is fixed to the form.

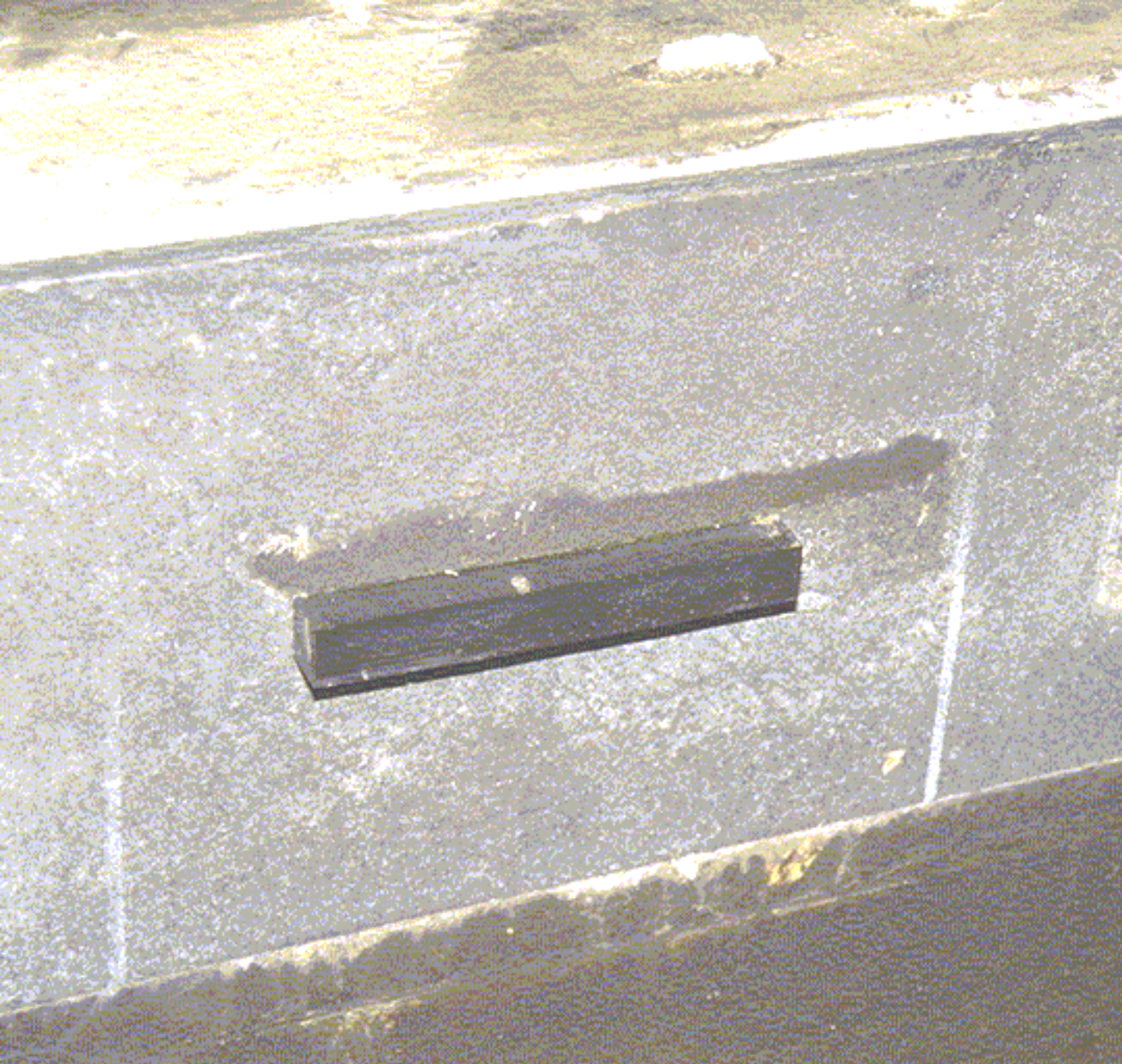




After the guiding piece is tack welded to the form, the column unit can be inserted onto the guiding piece. **In this picture it is a one-sided column unit. Notice that the picture is not quite correct to the extent that the column unit is not in the reinforcement cage. Normally the column units will be placed with the reinforcement cage.**



In plywood molds the guiding pieces are also plywood. To ensure the correct location of the guiding piece a plywood locating plate should still be used as described for a steel mold.



On steel forms also magnets
can be used as guiding pieces.



Also when the column units are in the bottom of the form the plywood locating plate must be used to ensure the correct location of the guiding piece.



When the column units are in the bottom of the form, silicone is applied around the guiding pieces.



The column unit is pressed into position on the guiding piece. The silicone will seal, and when casting the lower pressure within the column unit will effectively keep it in place.

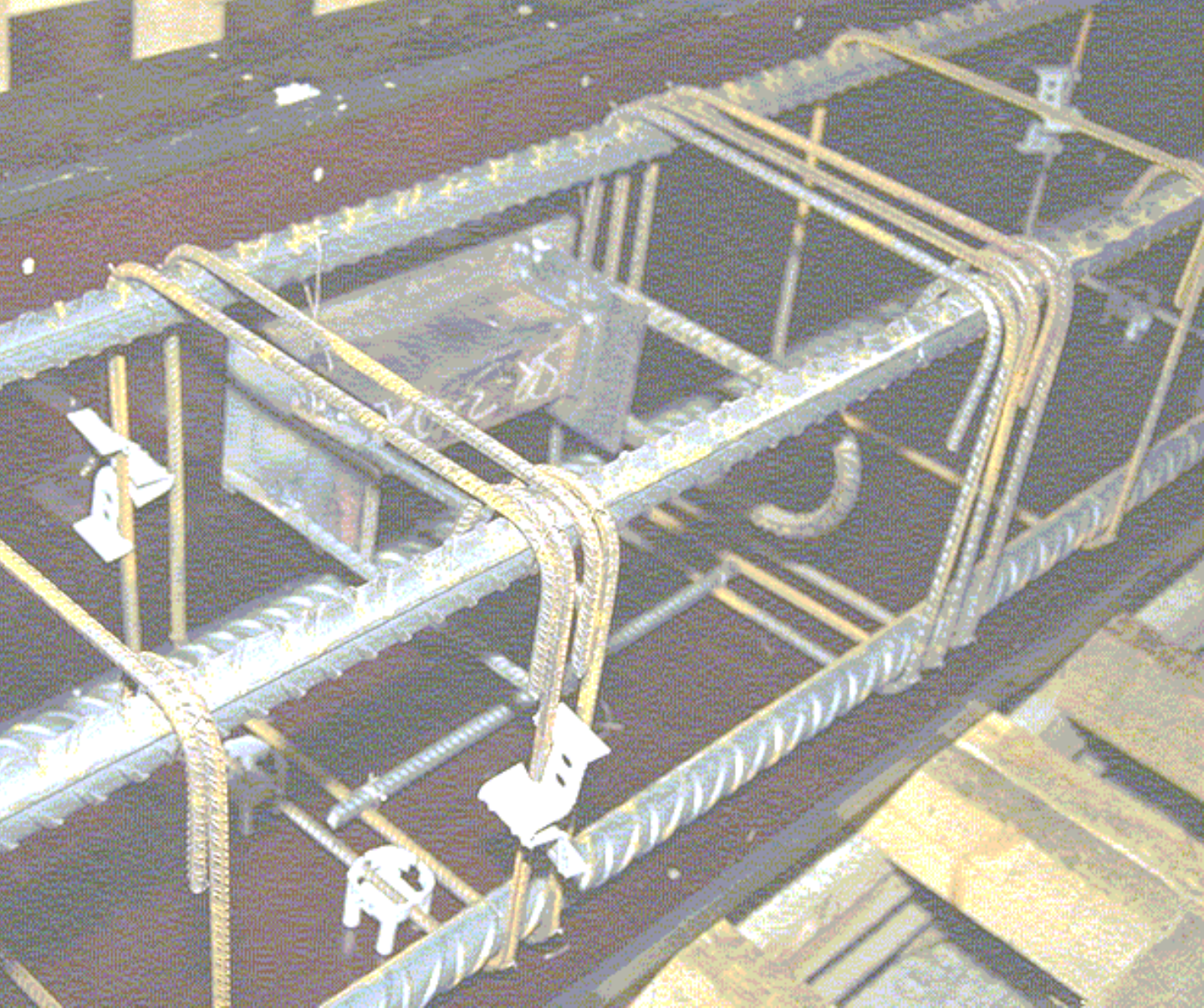




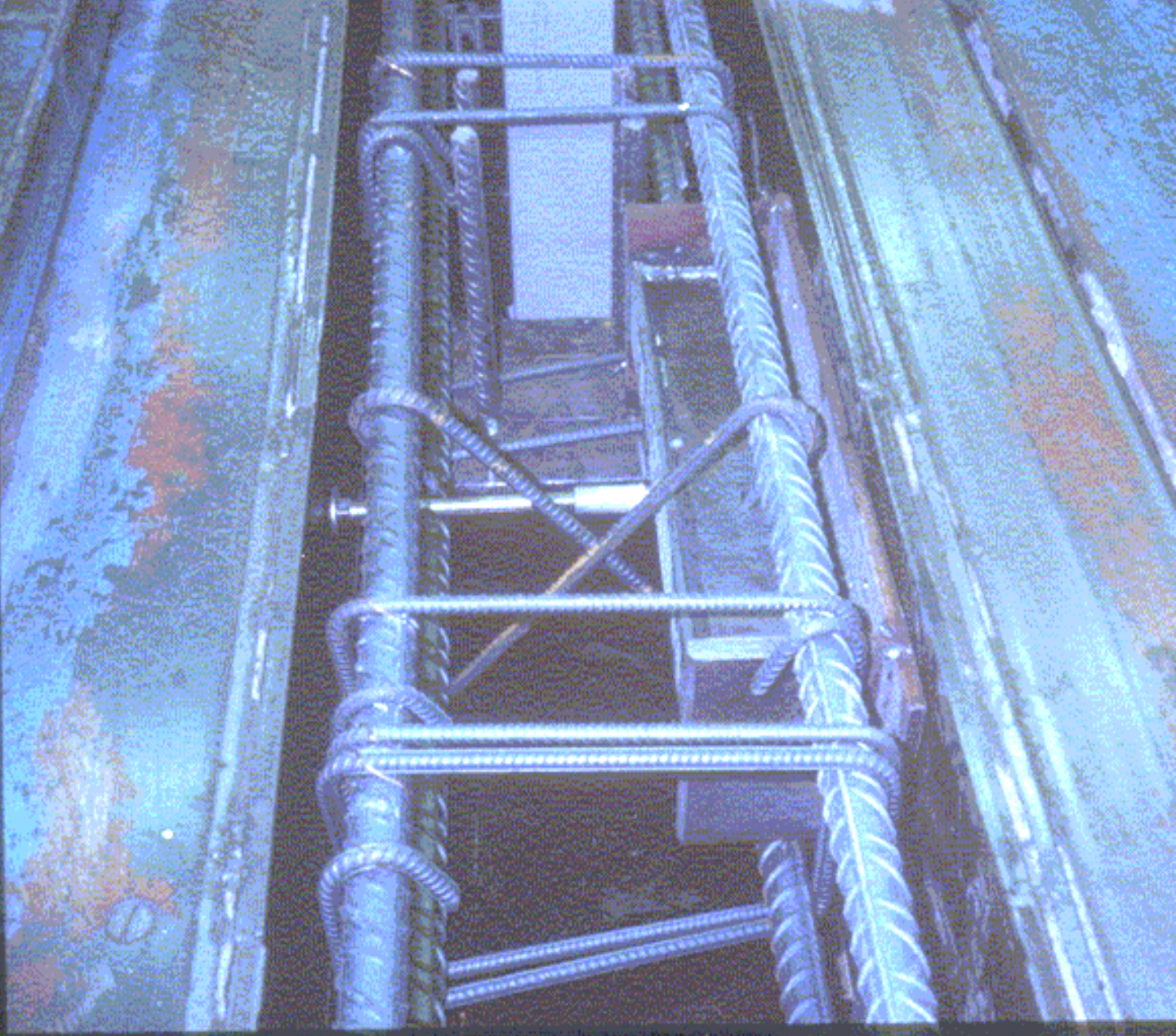
Plywood form ready for placing of the reinforcement cage with double-sided column units.



The guiding pieces ensures accurate positioning of the BSF column units.



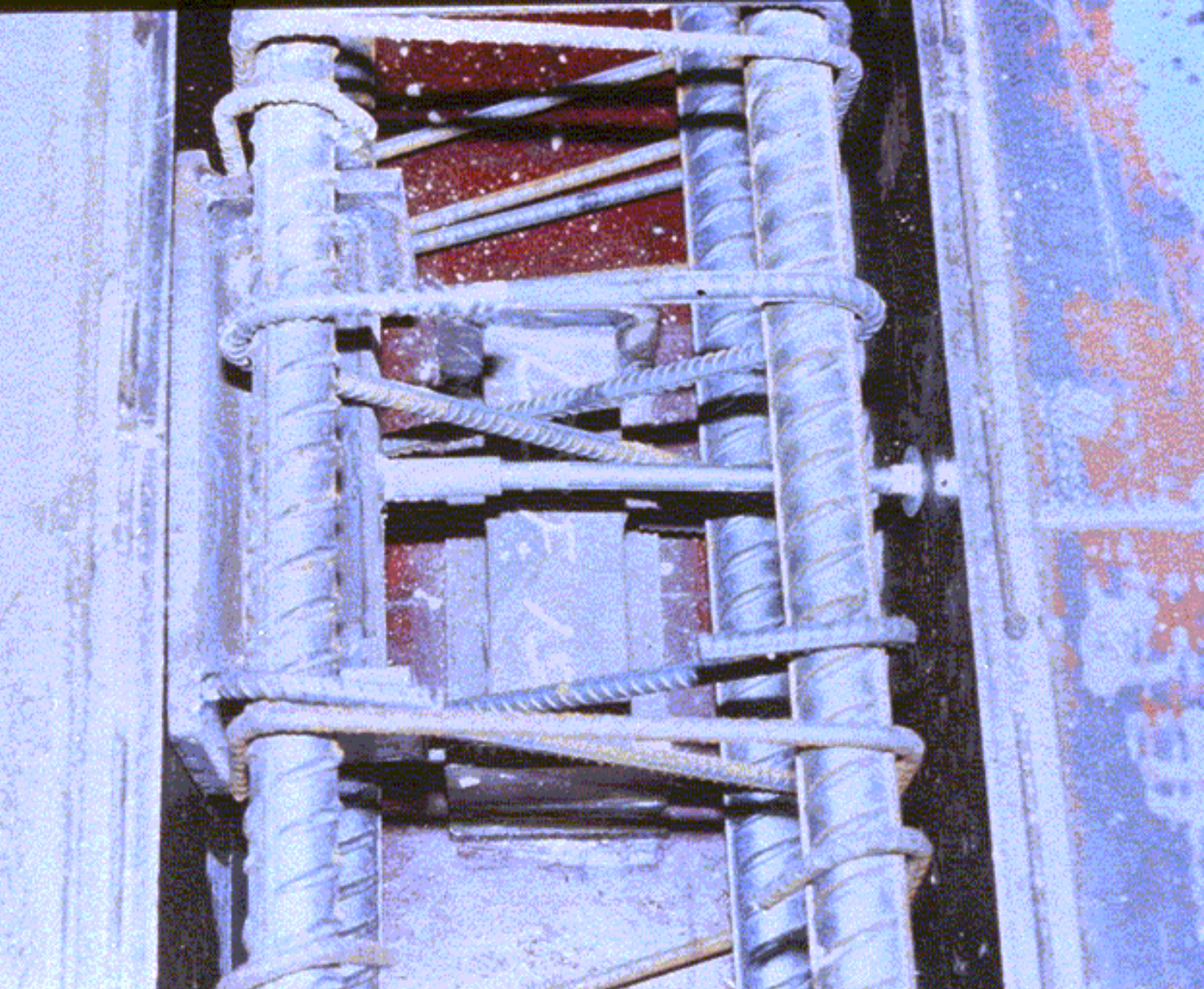
One-sided BSF column unit



Tightness for a one-sided BSF column unit can be secured with an adjustable bolt.

Notice the diagonal stirrups behind the unit.





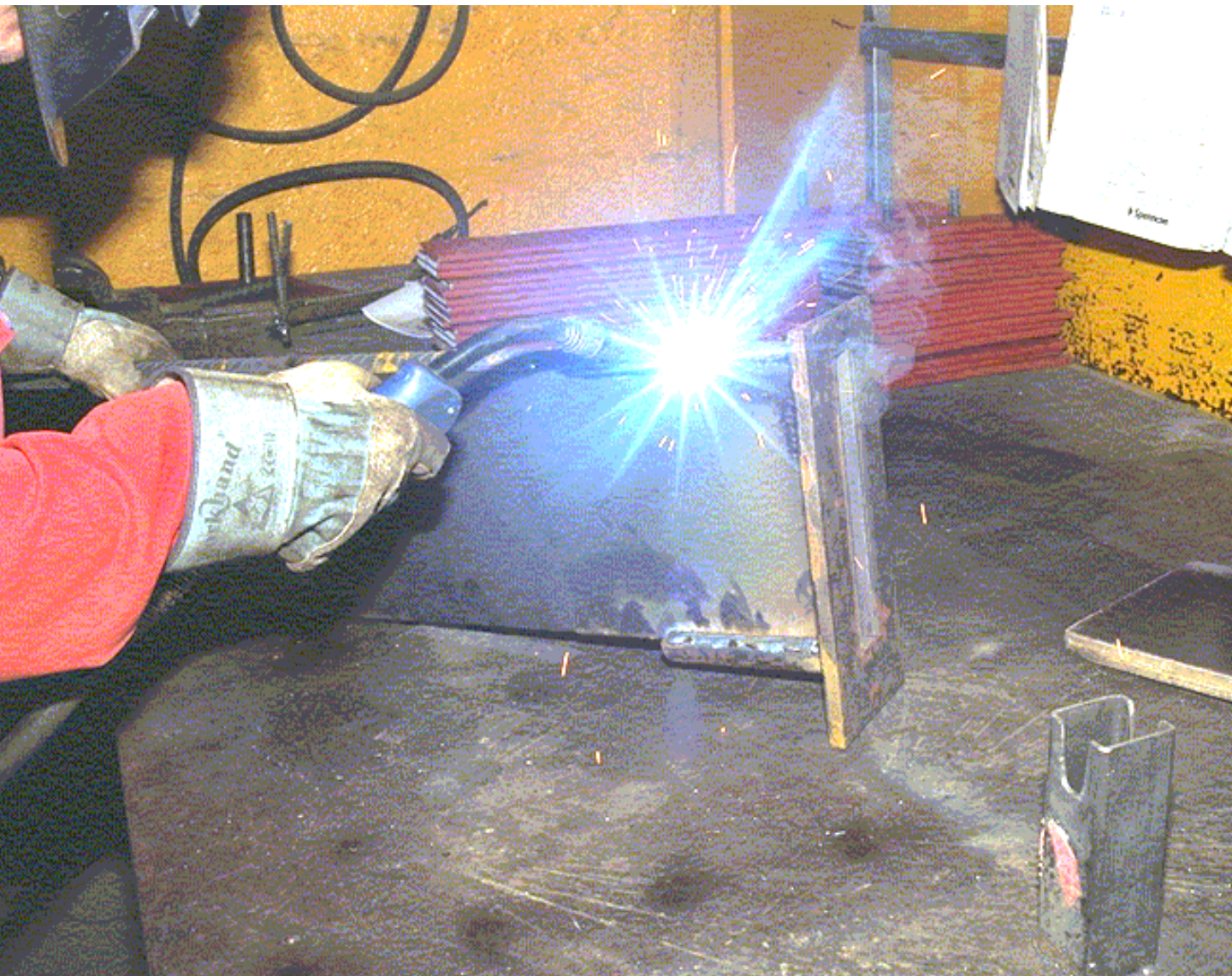
Arrangement with the BSF
column units placed in the bottom
and on the side of the mold.



When the reinforcement is welded to a BSF beam unit, the BSF beam unit is placed upside-down, and the reinforcement is tack-welded to the unit.

Notice the plywood plate used to ensure the correct position of the reinforcement.

See Memo 16.



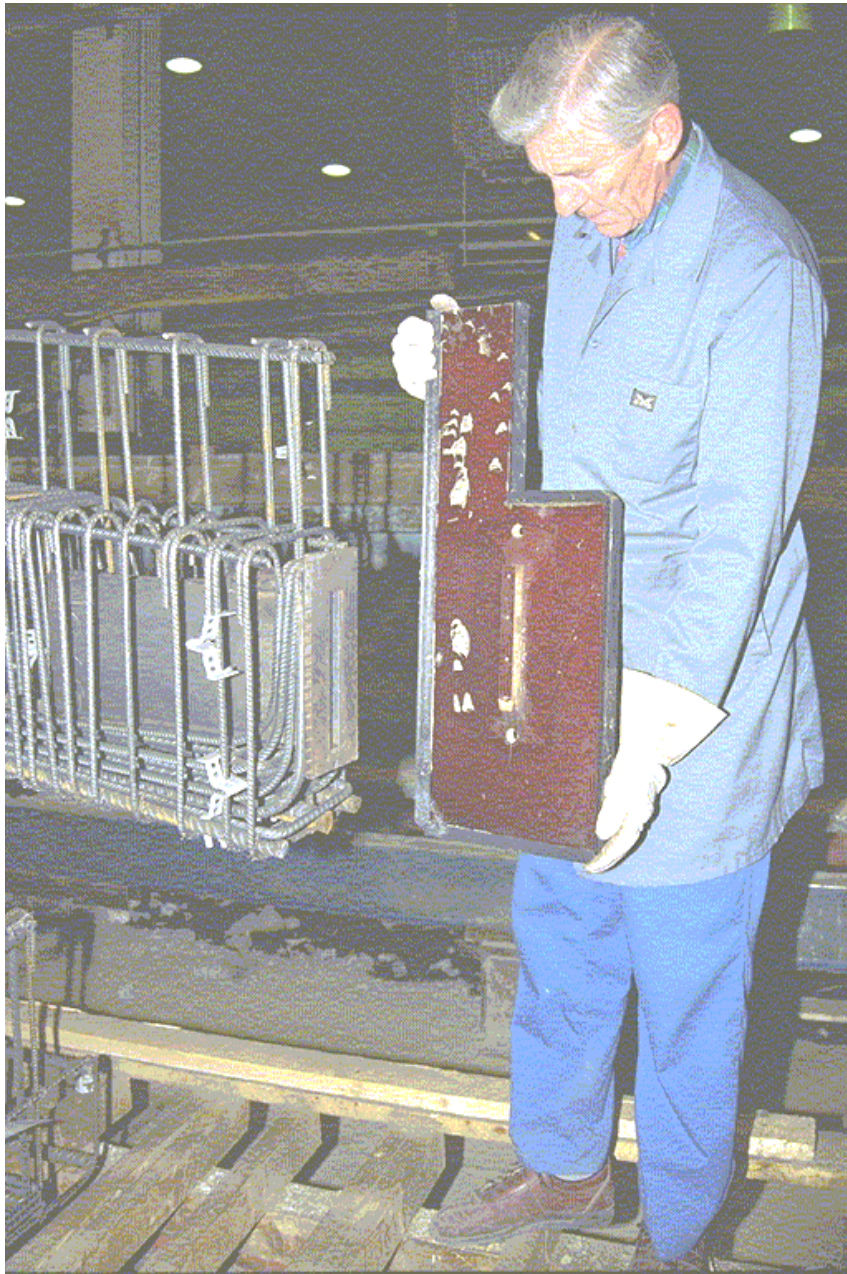
The welding of the reinforcement to the BSF beam unit is completed after removal of the plywood plate. See Memo 16.



The BSF beam unit placed in the reinforcement cage.



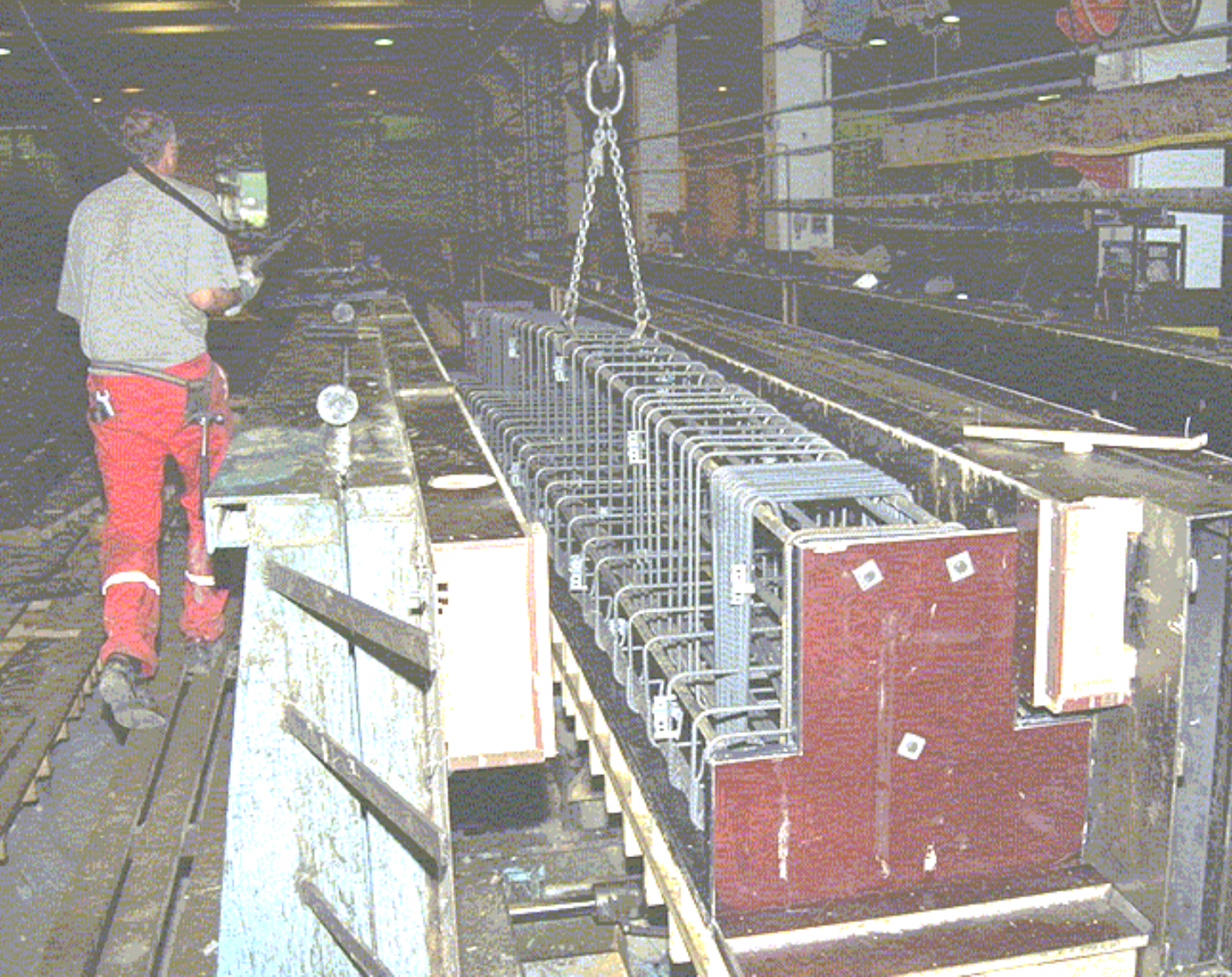
The end plate of the form for an inverted T-beam with the guiding piece attached.



The end plate of the form for a ledge beam with the guiding piece attached.



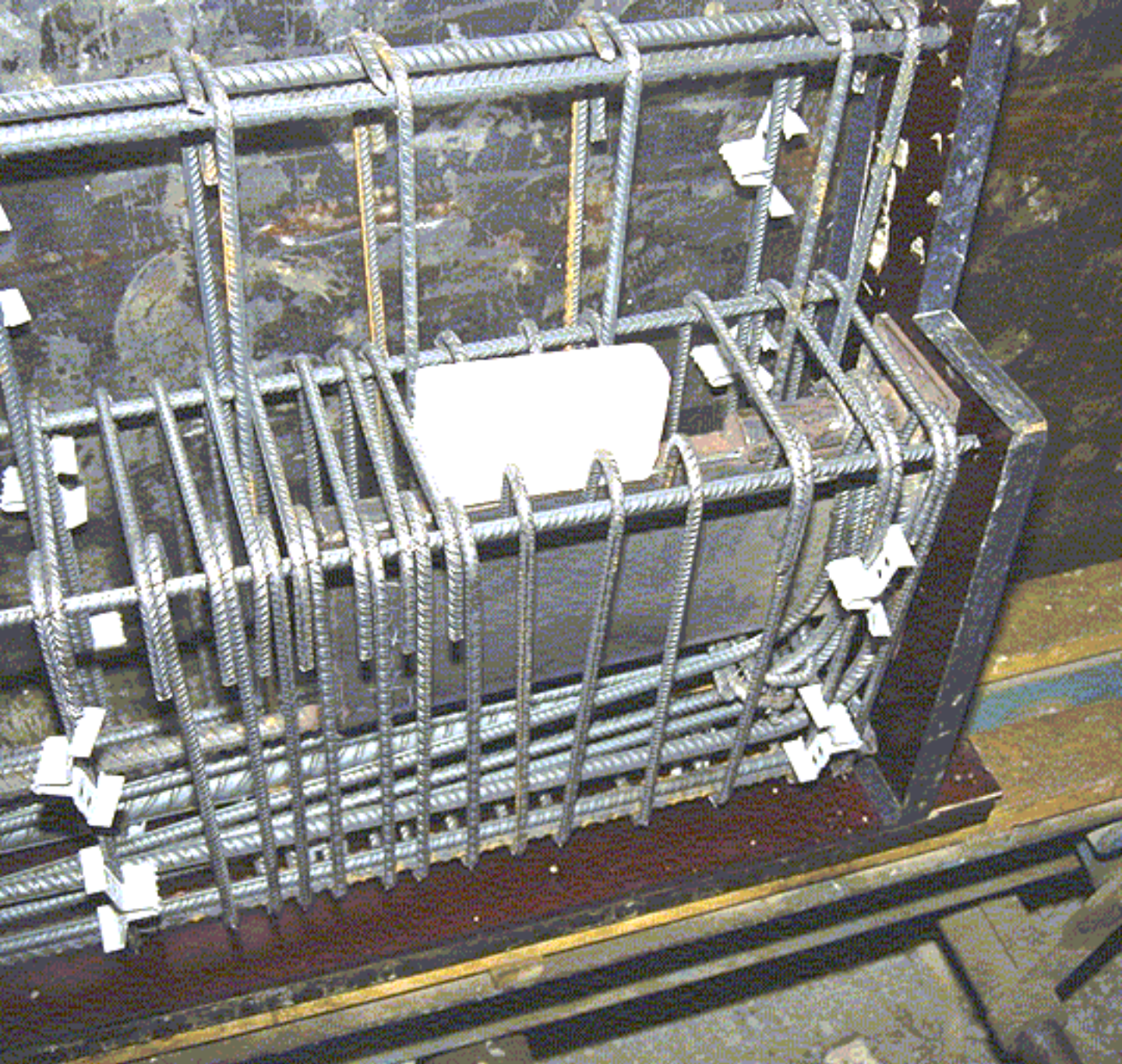
The BSF beam unit is connected to the end plate of the beam form with bolts in over-sized holes. The over-sized holes ensures that the location of the beam unit is determined by the guiding piece, and not by the holes for the bolts.



The completed reinforcement cage with the BSF beam units and the end plates for the form is hoisted into position in the form.



The end plates for the beams are locked in position against plywood guides in the form.



Polystyrene block inserted in the BSF beam unit to create the access hole through the concrete. Wood or steel may also be used to create the access hole.



The polystyrene block is shaped to fit into the BSF beam unit.



Removal of
polystyrene.





Cleaning the units for concrete residue.





Inserting the knife in the BSF beam unit.



Inserting the lock-pin to prevent the knife from falling out during handling of the precast element.



Some producers paint the units for visual appearance, and to avoid discoloring of the concrete surfaces.



Checking that the knife is easy to move back and forth inside the BSF beam unit.





Inverted T-
beams forked
around
rectangular or
circular
columns.



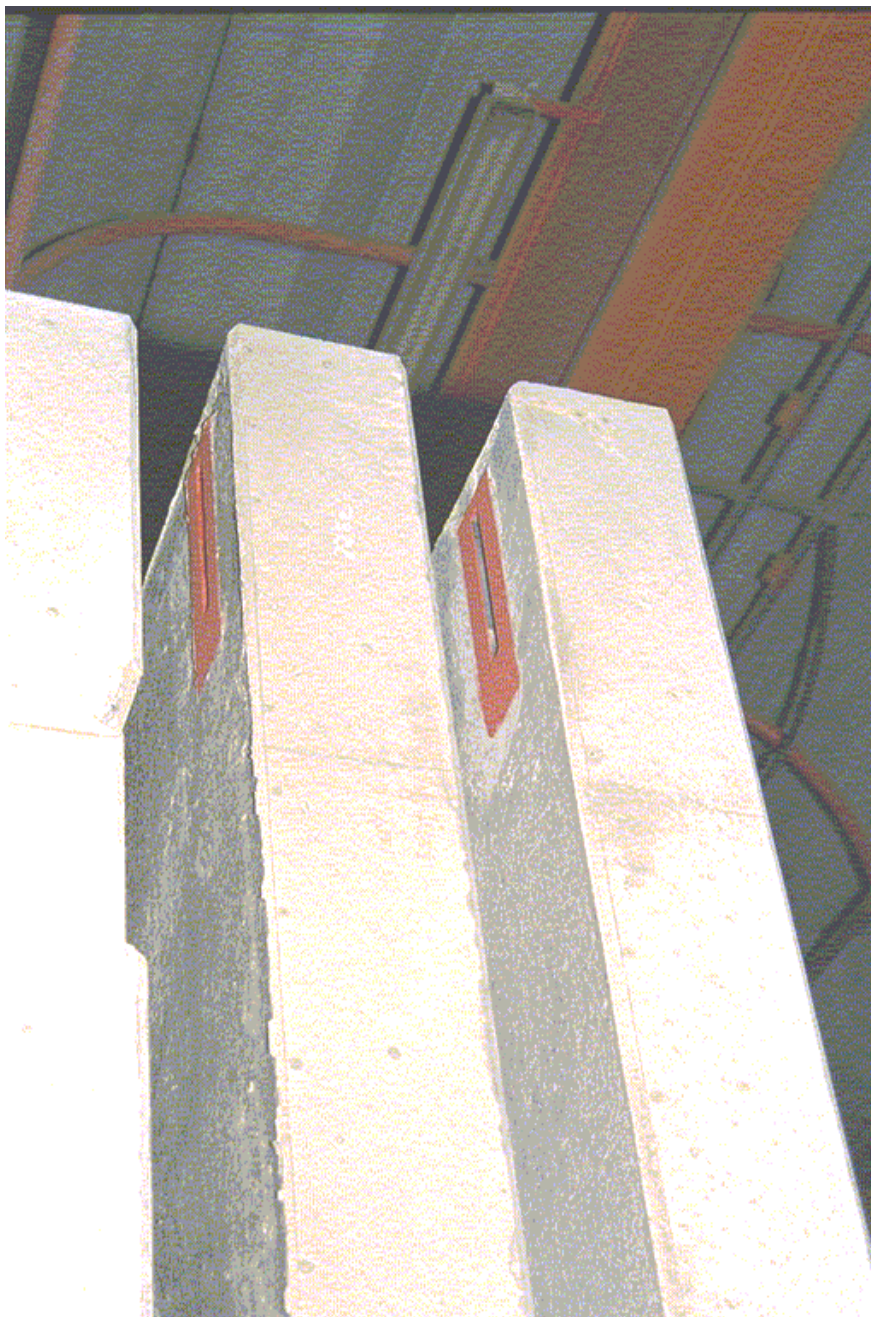


Ledge beams.

Notice the slot in the top part of the beam that ensures access to the knife.



BSF beam units in deep, curved beams.



BSF column units used in wall
elements as support for beams



Columns with BSF units takes up a lot less space in the stock yard compared to traditional corbels!



Thanks For Your Time!

If any questions, please contact:

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