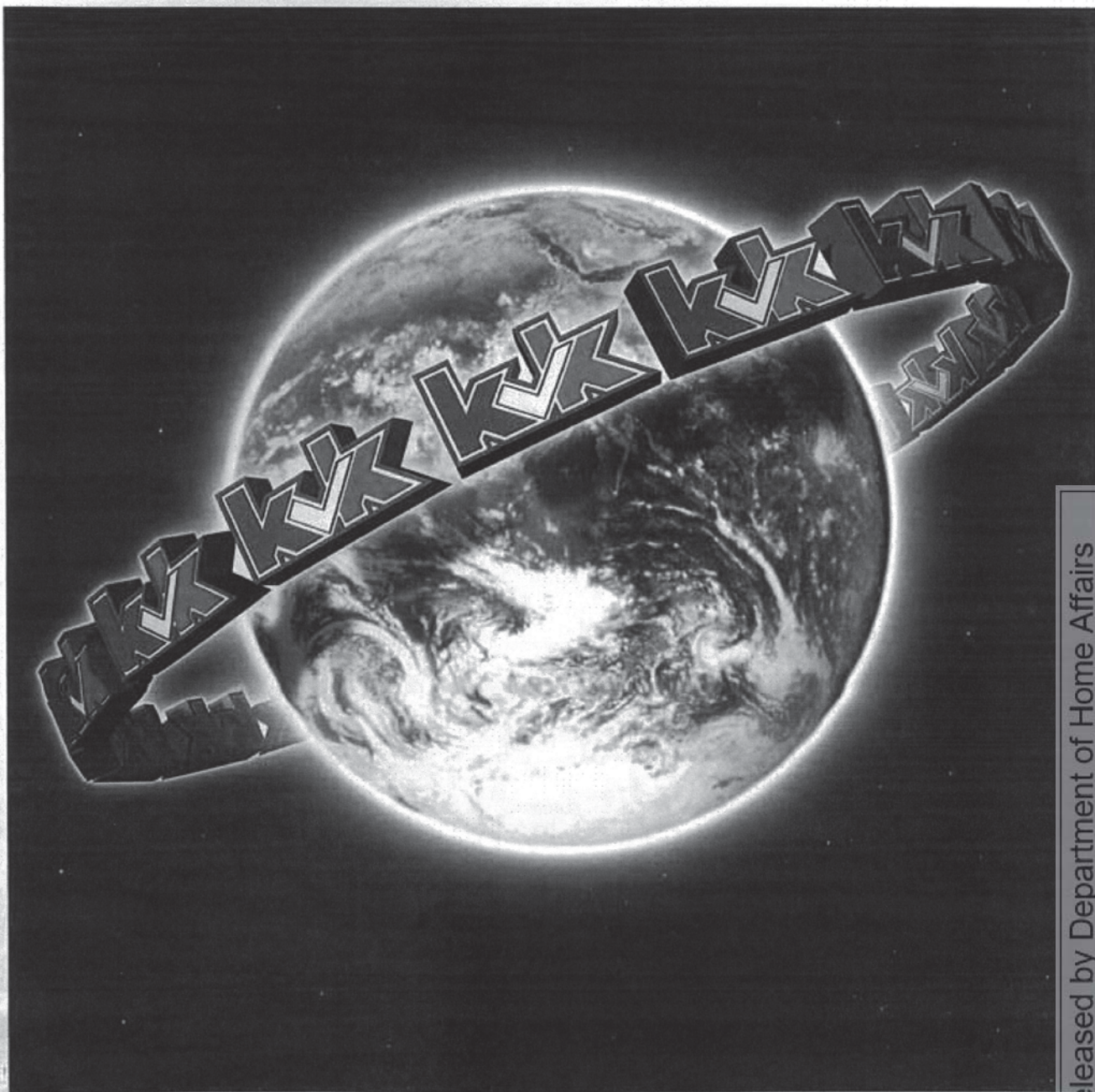


KOERNER **kvk**[®]

KVK Pickling Tanks

World-wide the toughest



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In 1970 KOERNER started the production of pickling tanks for galvanizing plants, tube mills and other metal treatment plants. Today KOERNER is known world-wide for its KVK tanks – the toughest pickling tanks – available in every size.

Technical Facts



KVK panels

The KVK tanks are built from panels which have a special sandwich-construction: an impact-resistant core of synthetic ceramic, coated on both sides with fibre-reinforced laminates to form an inseparable piece.

The resulting exceptionally high impact strength resists even the most severe mechanical shocks.

Chemical resistance

KVK pickling tanks are resistant to most chemicals used in pickling processes, e.g. hydrochloric, sulphuric, hydrofluoric and nitric acids.

No welds

The tank walls are manufactured as one continuous seamless piece over the entire length and breadth of the tank which, by eliminating the need for welding, ensures the complete integrity of the tank.

This is an important advantage when compared with tanks made from polypropylene sheets, which may contain many metres of welds.

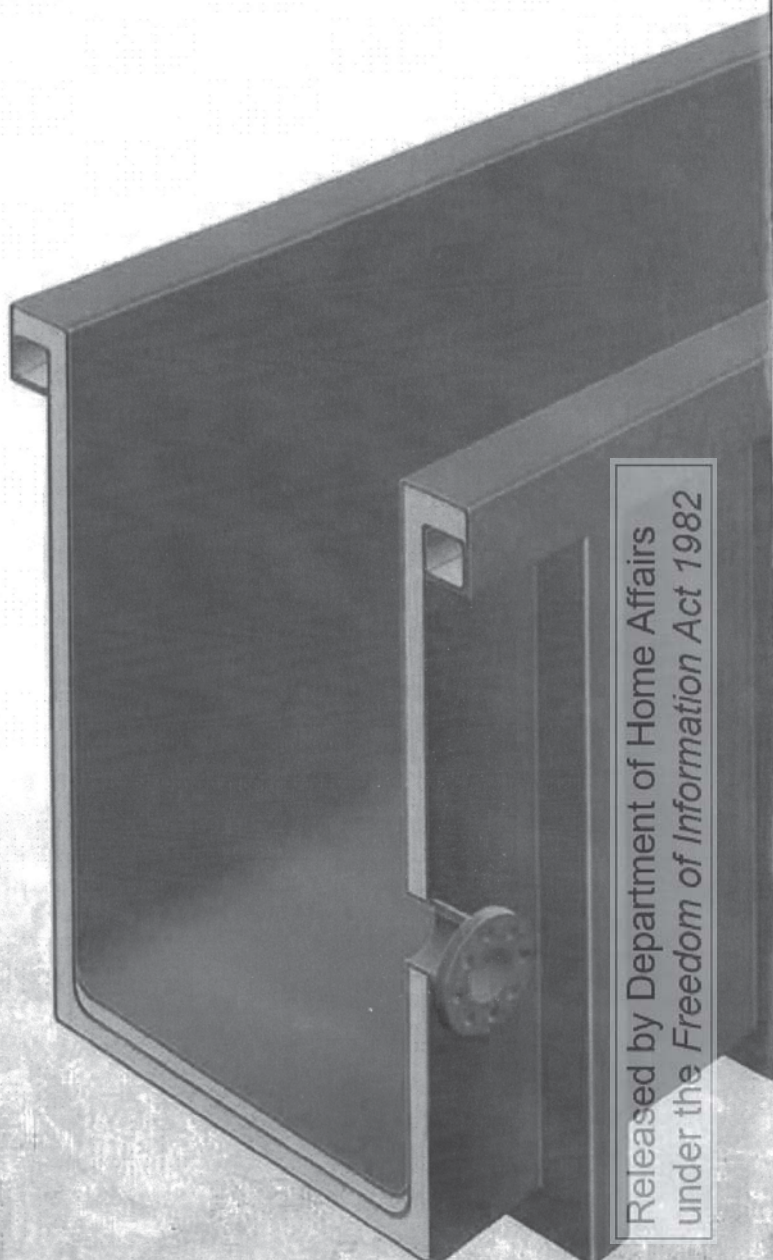
Temperature resistant

KVK panels have a much better performance at high temperature (e. g. with preflux solutions) than polypropylene, which is classified as a thermoplastic material, and tends to get brittle when exposed continuously to high temperatures.

Wear-resistant

KVK pickling tanks are further protected from mechanical shocks and abrasions by additional hard-wearing surfaces which substantially increase their operational life-span.

The upper tank rim is provided with a 40 mm thick wear-resistant strip to offer protection against damage from jig/carrier frame support arms. The tank's internal floor is similarly protected.



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Optional Equipment

- Protection plates for bottom and end walls - to make KVK tanks practically maintenance free
- KVK heating plates - a low cost heating system, fully integrated in the tank and protected against damage
- KVK bath circulation
- Fume extraction ducts integrated in the lateral tank walls
- Pump sumps, inlet and outlet flanges to any size

Easy, fast repairs

When a sharp piece of steel strikes the tank wall during dipping only minor local damage occurs to the KVK tank wall. This damage can easily be repaired by in-house staff.

If the same accident happens in a polypropylene tank, the extent of the damage is quite different: cracks can grow in the tank wall which often run through the entire panel and cause tank leakage. This type of damage is more difficult to repair.

Exterior protection

All KVK tanks are constructed around a robust well-proportioned steel framework. This framework is totally protected by the application of special KVK reinforced glass-fibre resins which form a complete and impervious barrier against acid attack.

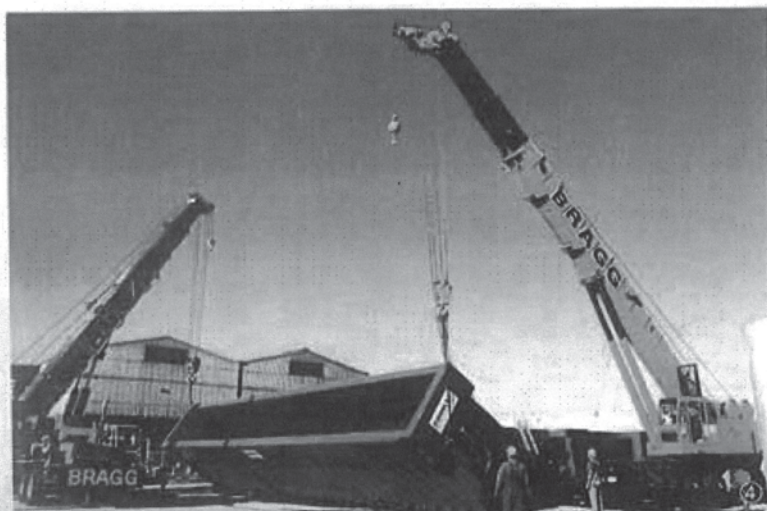
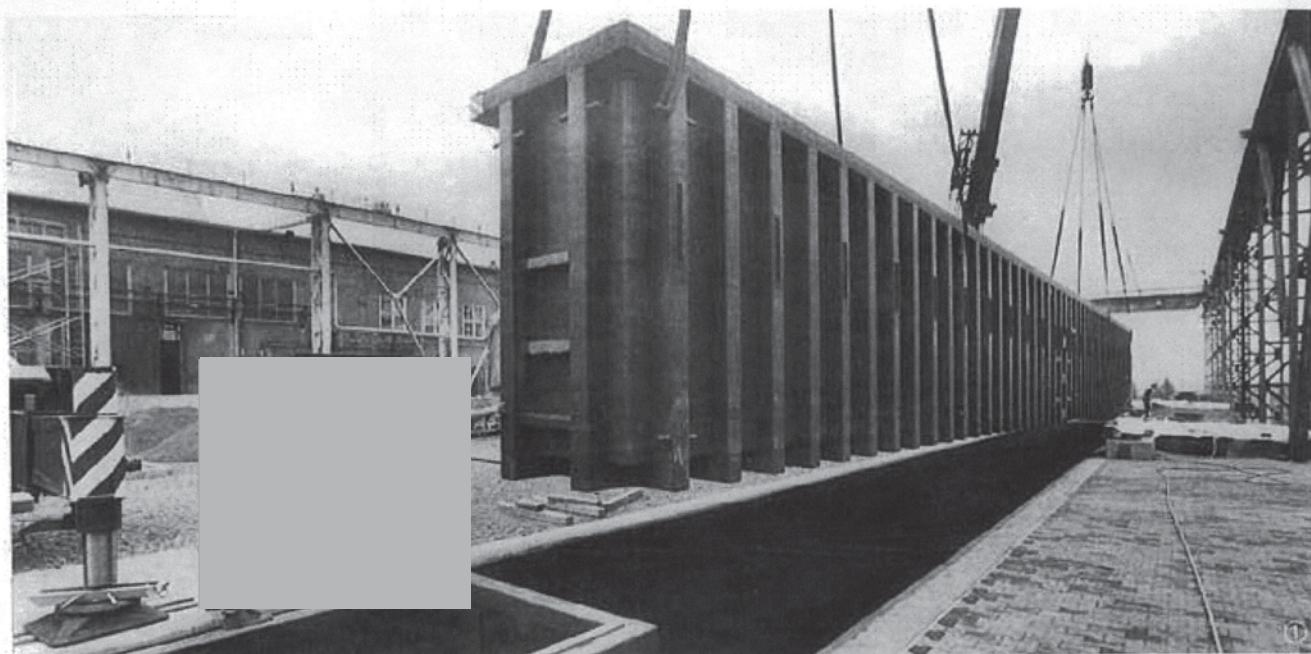
Environmental control

Every KVK pickling tank is designed as an individual self-supporting unit and would normally be installed in a pre-treatment foundation pit of sufficient size to enable free access for inspections.

This complies fully with the latest, most stringent environmental and pollution regulations appertaining to tank inspection and leakage control.

World-wide References

The biggest Galvanizing Plants in Europe and the U.S. use KVK pickling tanks.



- ① Biggest KVK Pickling Tank in Europe
Int. Dim.: 31 x 1.55 x 3.20 m
Weight: 41 to
- ② First KVK Galvanizing Plant for Kenya
Tank Size: 13.60 x 1.20 x 3.50 m
- ③ Biggest Tank for Galva Power Group,
Belgium/France
Tank Size: 25.60 x 2.60 x 3.50 m
- ④ Largest KVK Tanks delivered in USA
Tank Size: 19.70 x 2.70 x 3.70 m
(Built for Calwest Galvanizing, Pasadena, CA)

KOERNER kkv®

KOERNER Chemieanlagenbau Ges.m.b.H., 8551 Wies, Austria, Am Bahnhof 26
Tel.: +43-3465-2513, Fax: +43-3465-2118, E-Mail: office@koerner.at, www.koerner.at

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pickling technology of the future the "KVK-system"

KOERNER 

pickling tanks

⇒ **chemical resistant**

⇒ **strong**

⇒ **little maintenance**

⇒ **easy to repair**



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Steel frame

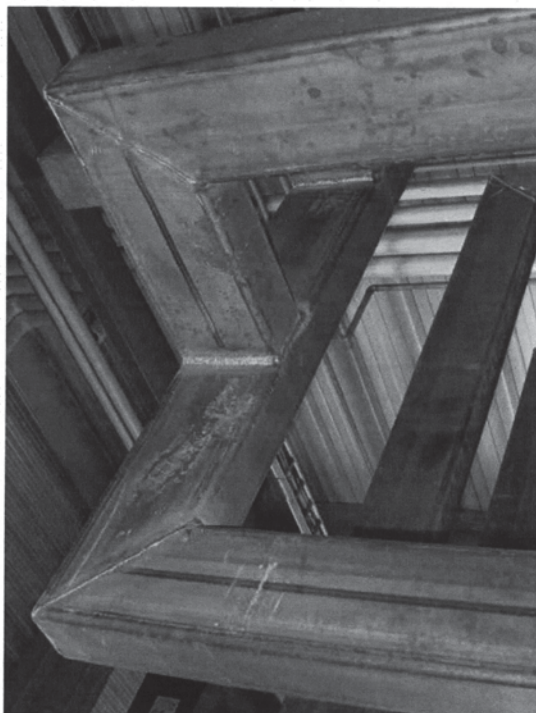


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Steel frame:



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KVK wall



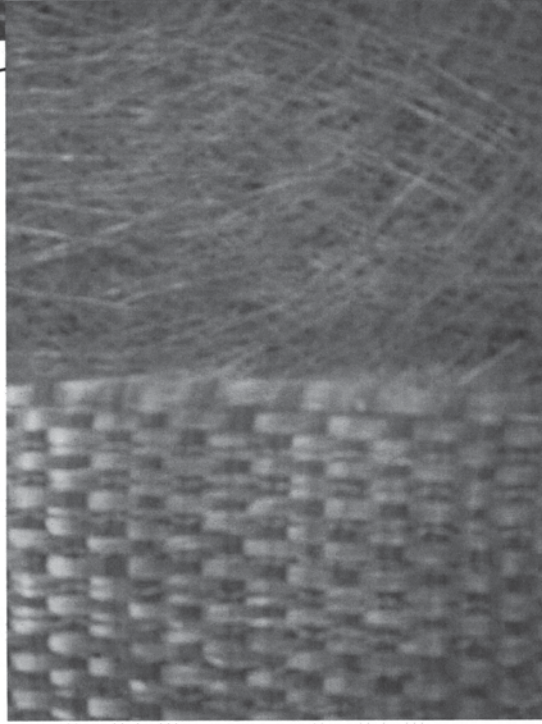
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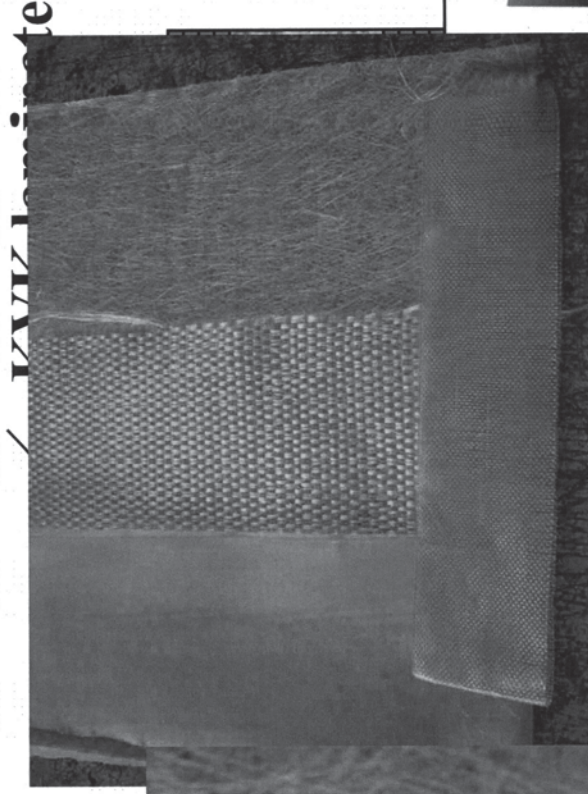
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KVK plate
sandwich-construction

Synthetic ceramic
core



heated table



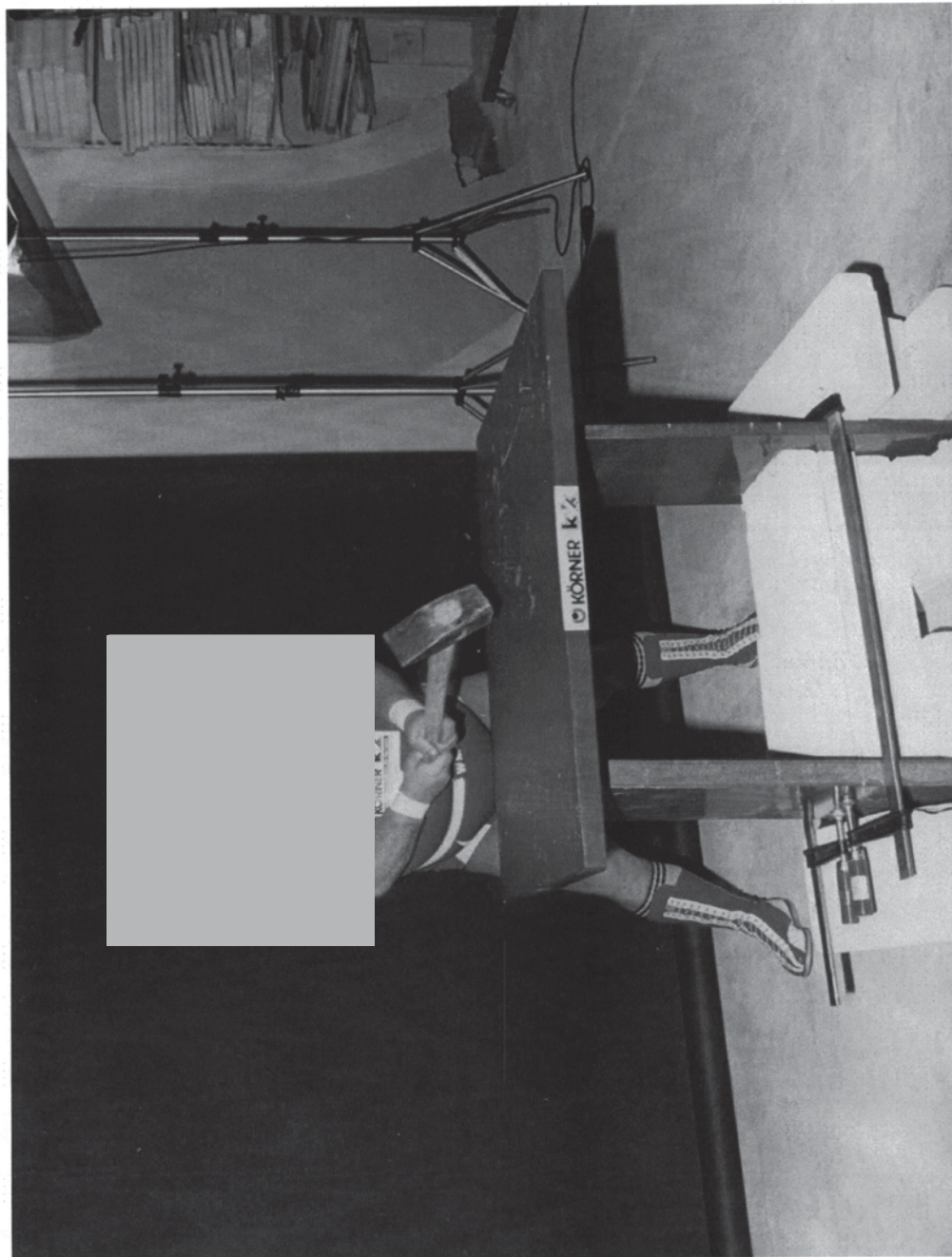
KVK laminate



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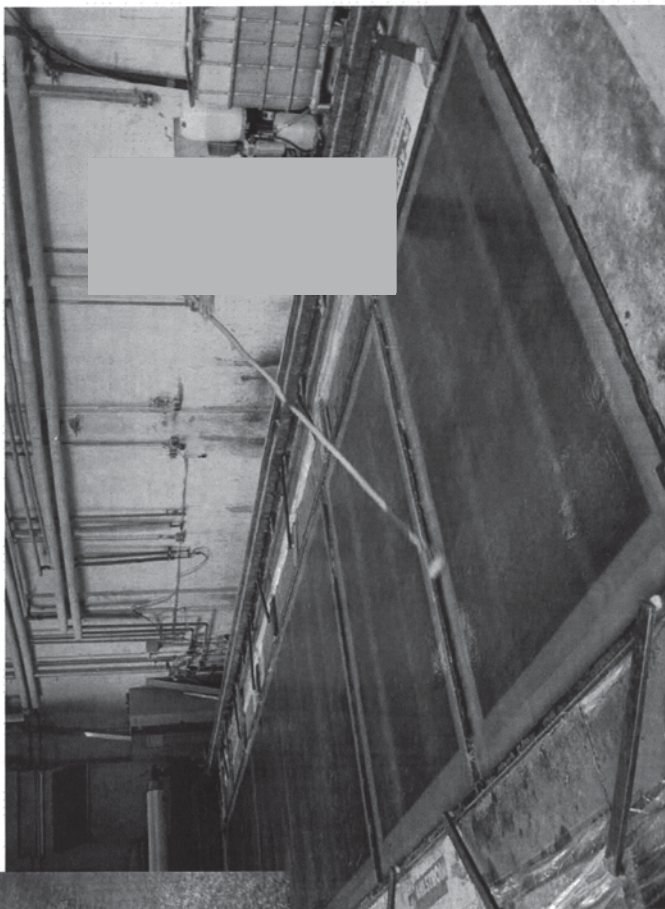


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plate manufacturing:

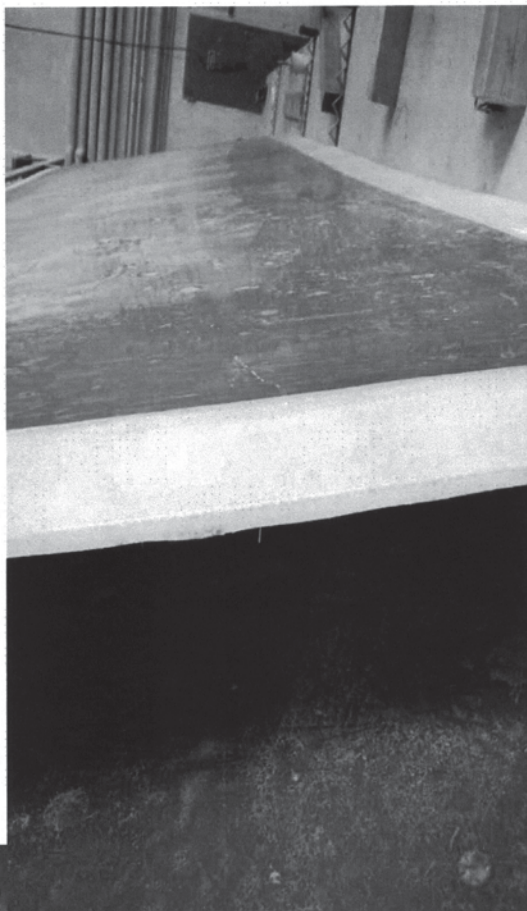
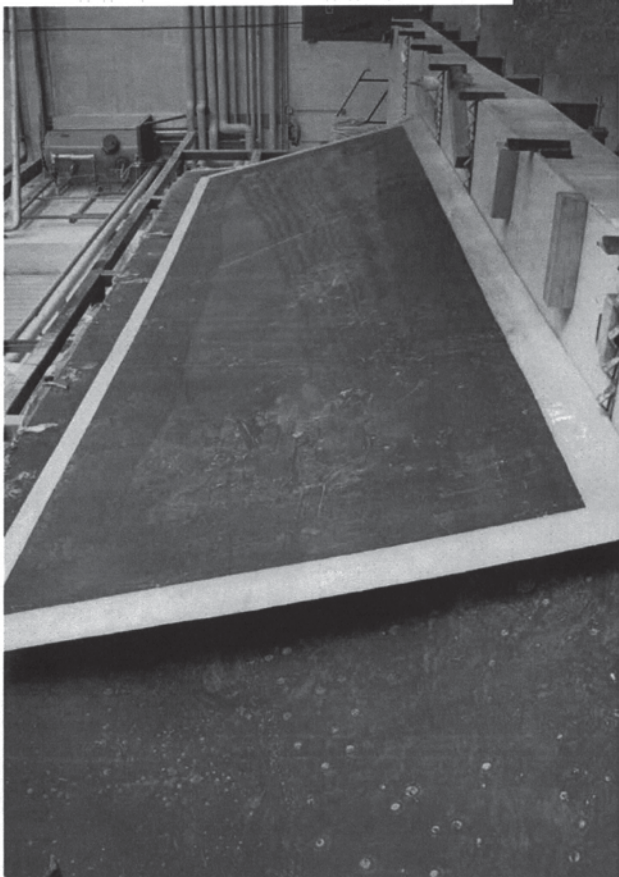


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tank wall:

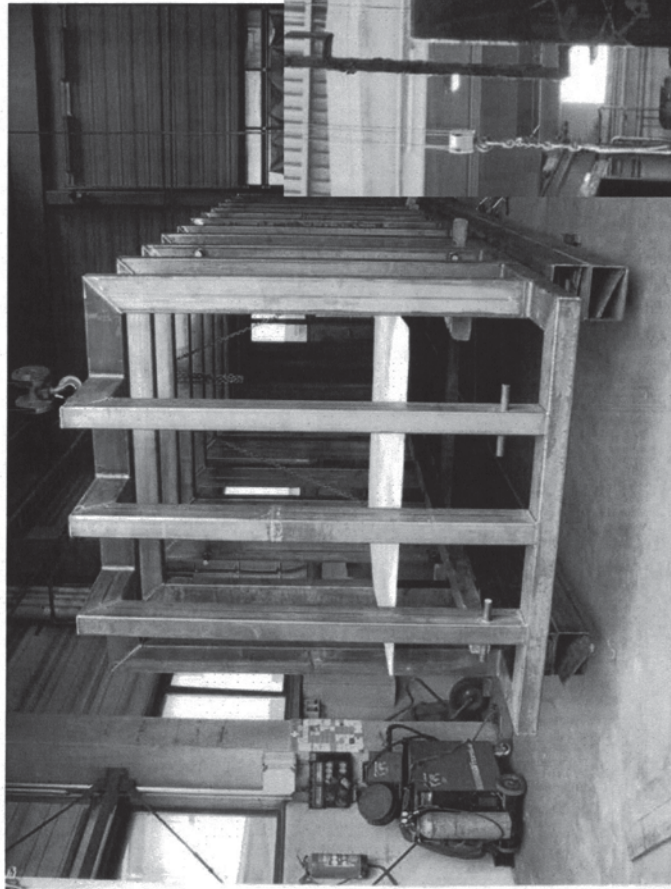


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Installation of bottom

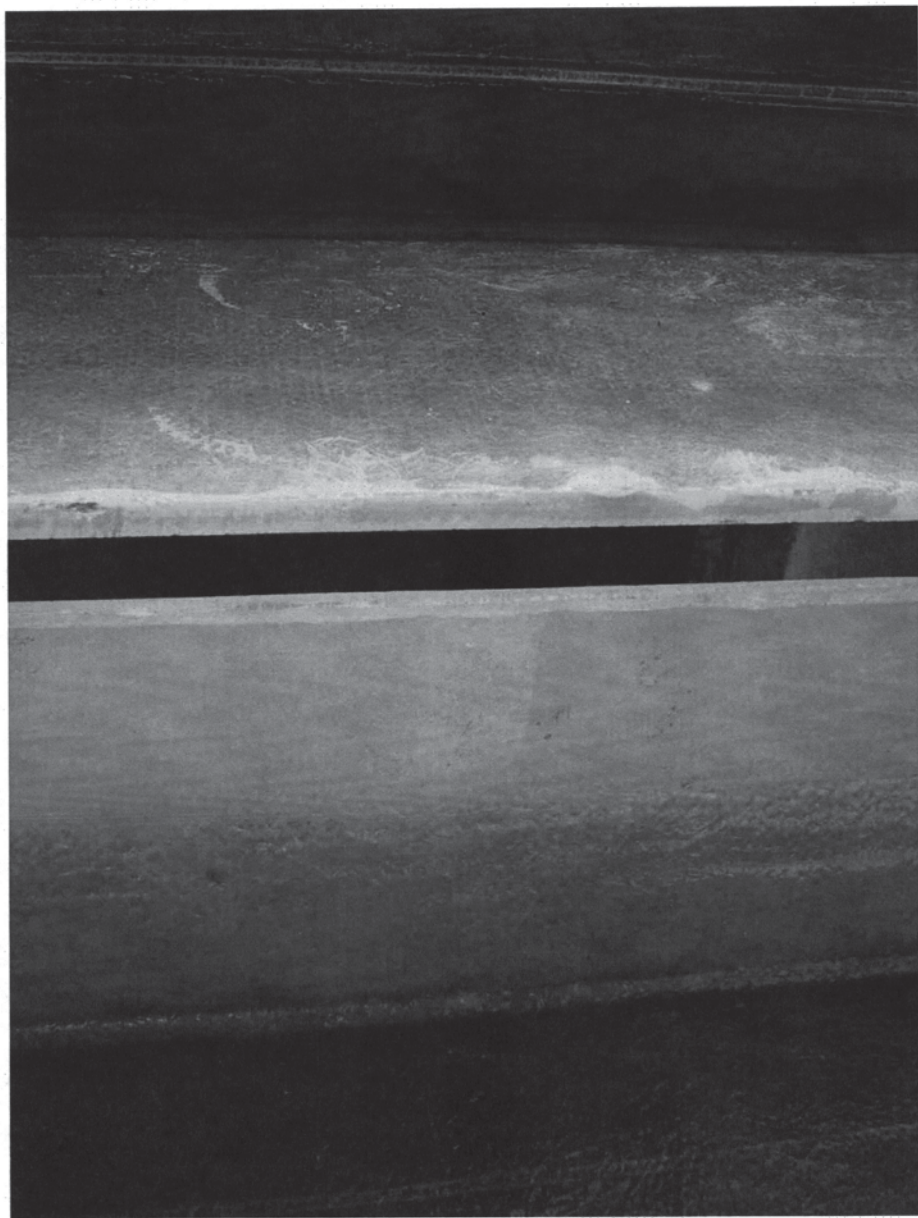


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connecting corners of tank walls:



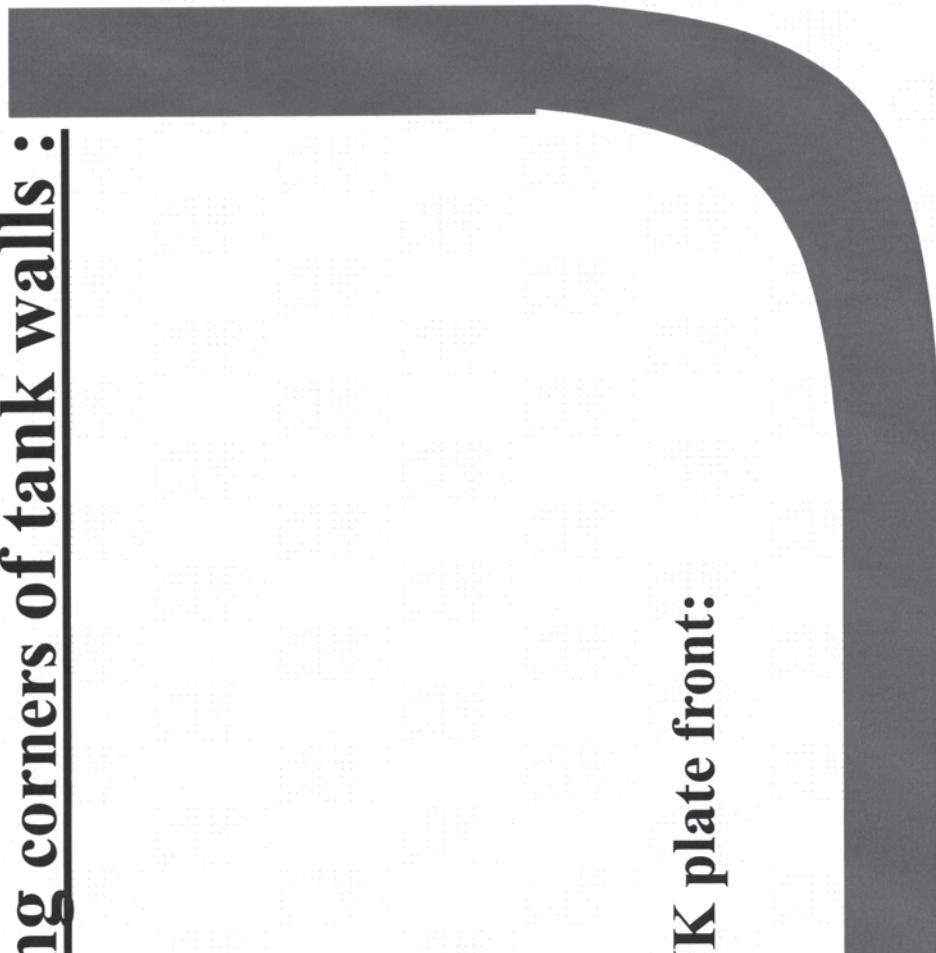
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connecting corners of tank walls :

**KVK plate
lateral:**



KVK plate front:



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connecting corners bottom-wall:

**KVK plate
lateral:**

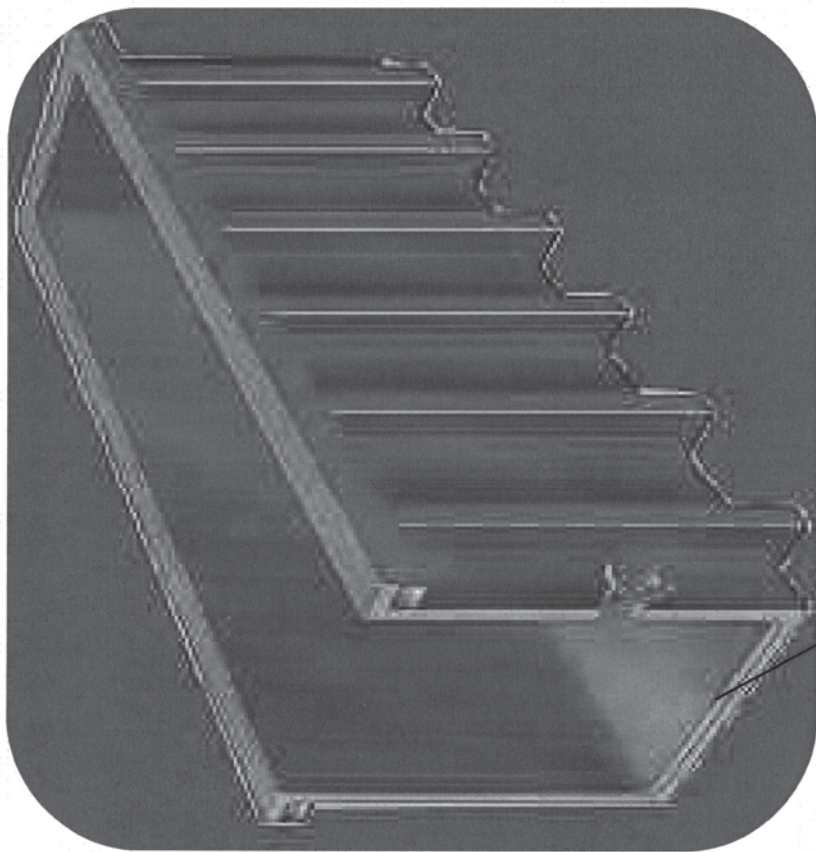
KVK plate bottom:



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wearing part bottom

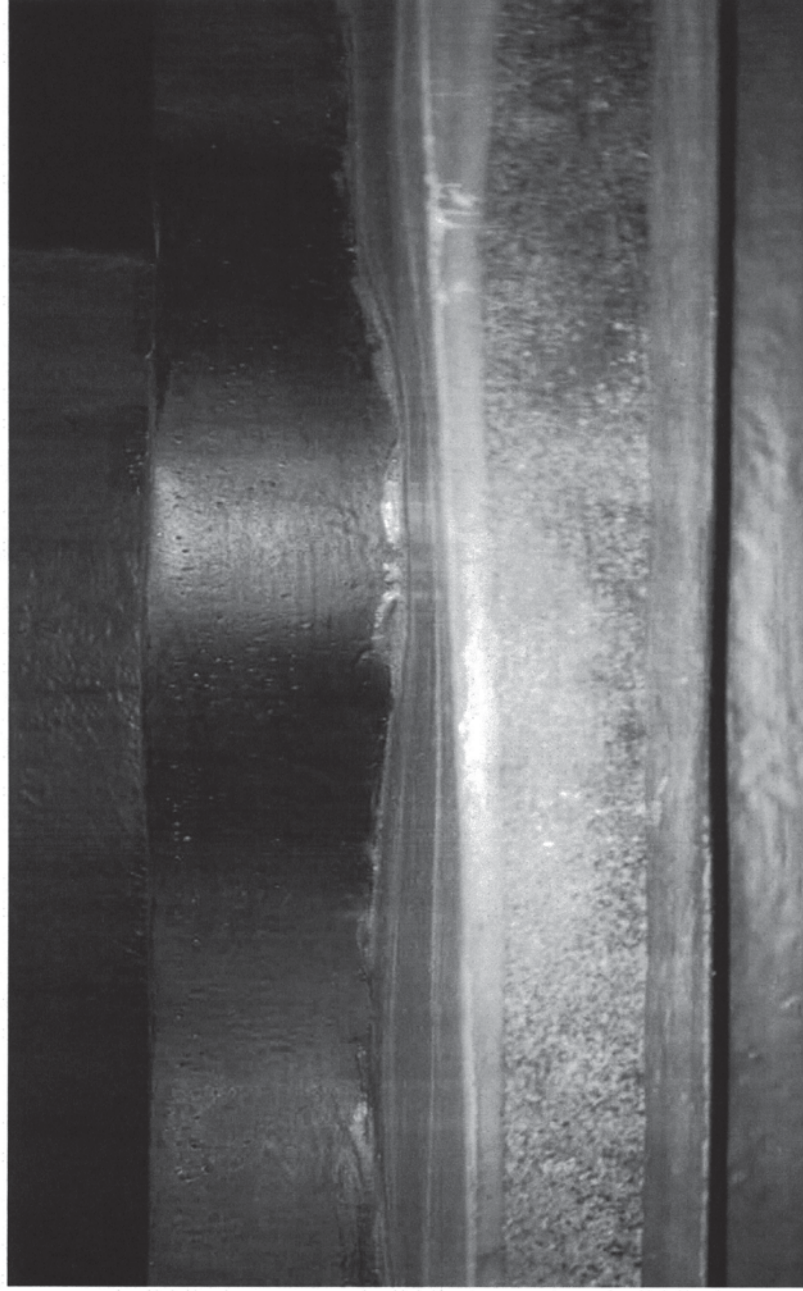


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80

wearing part bottom:



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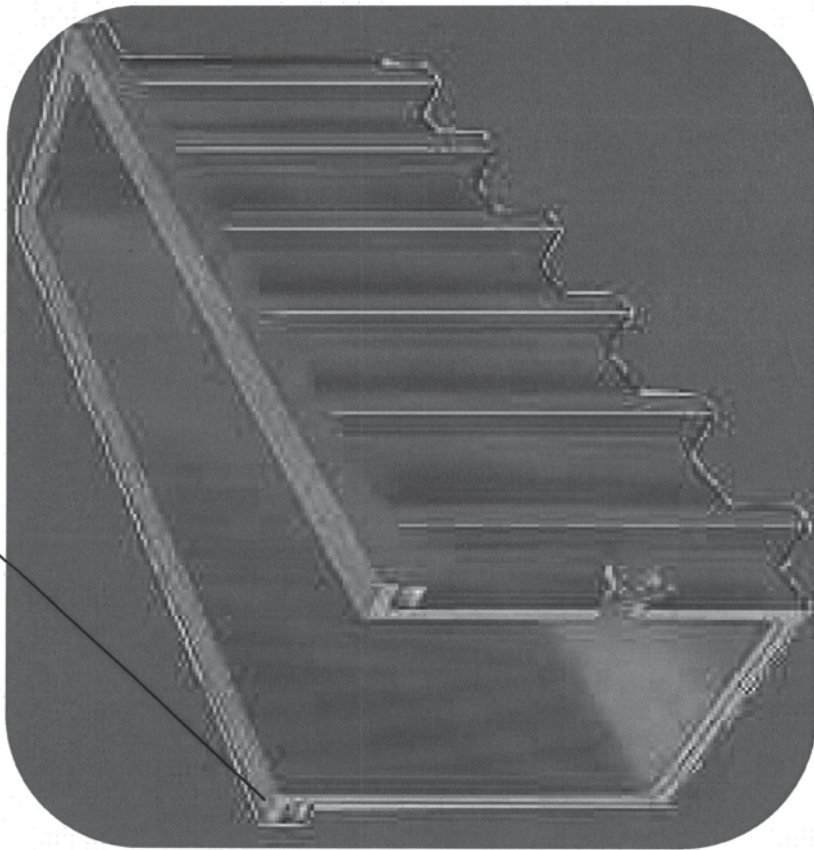


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wearing part rim

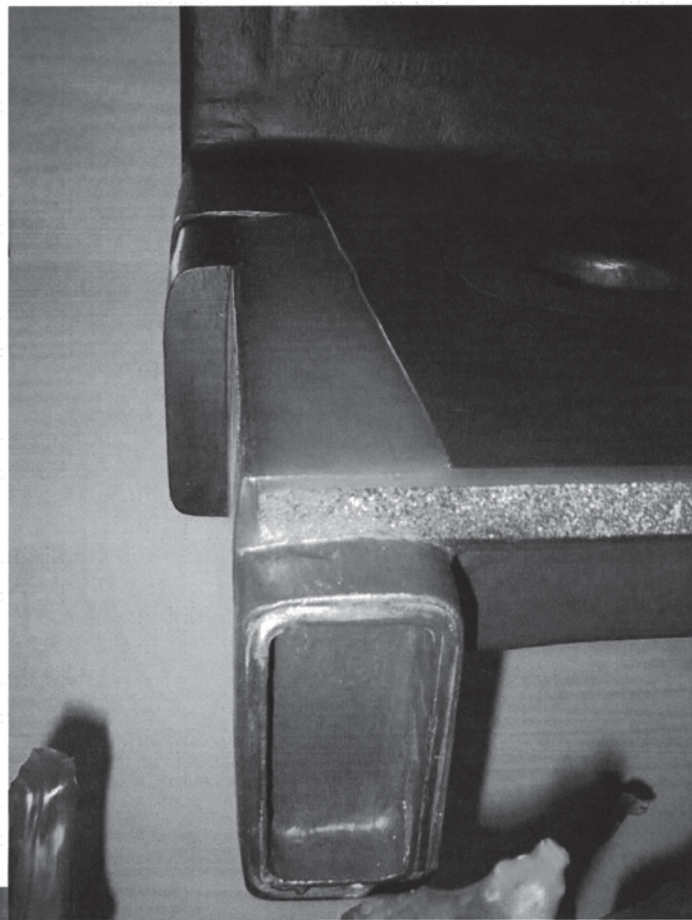


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tank rim - wearing part:



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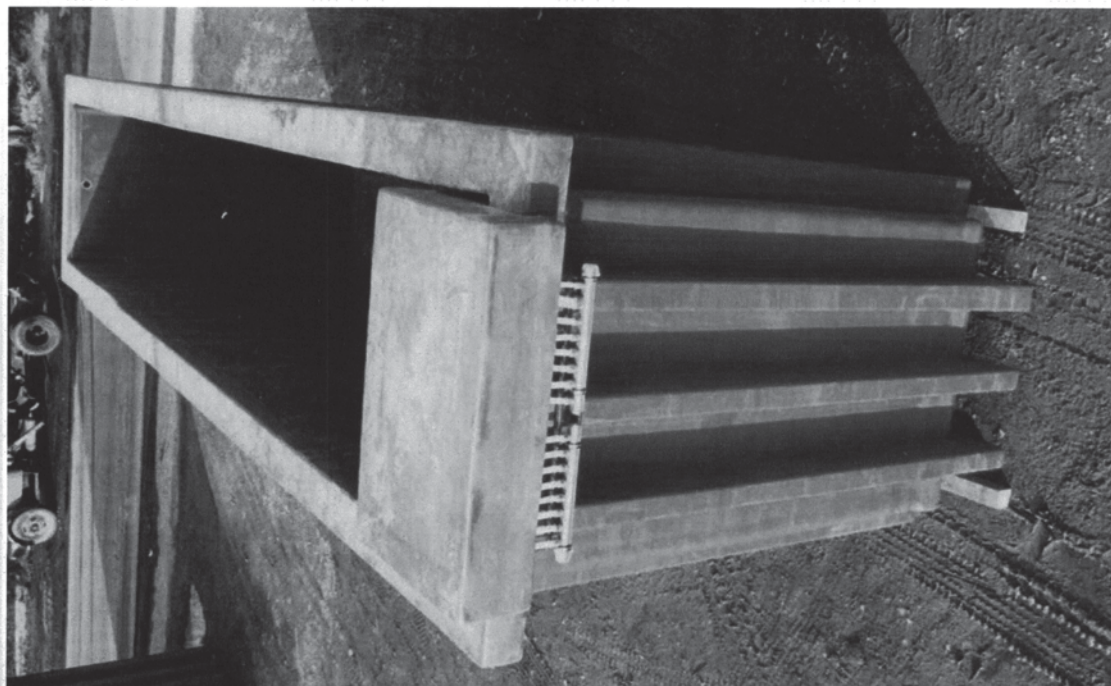
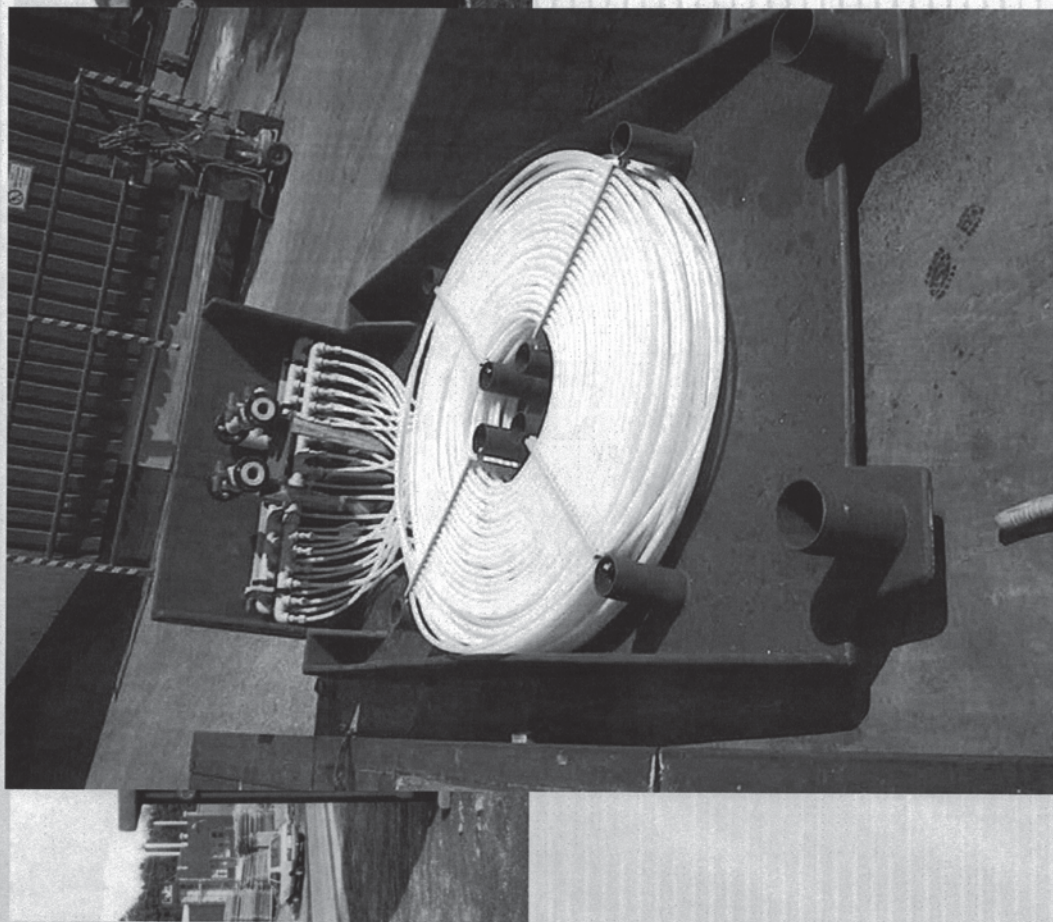
outside coating



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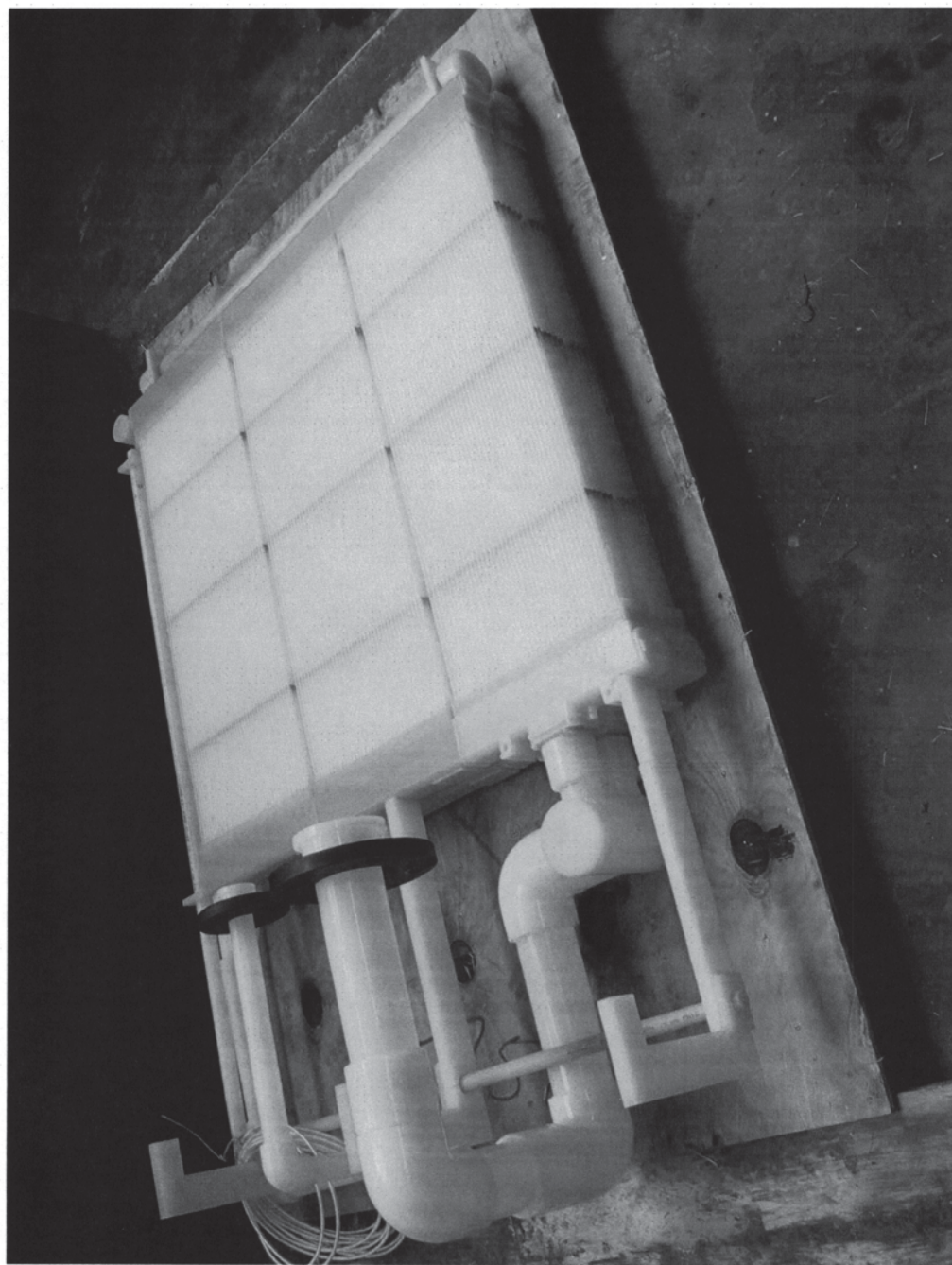
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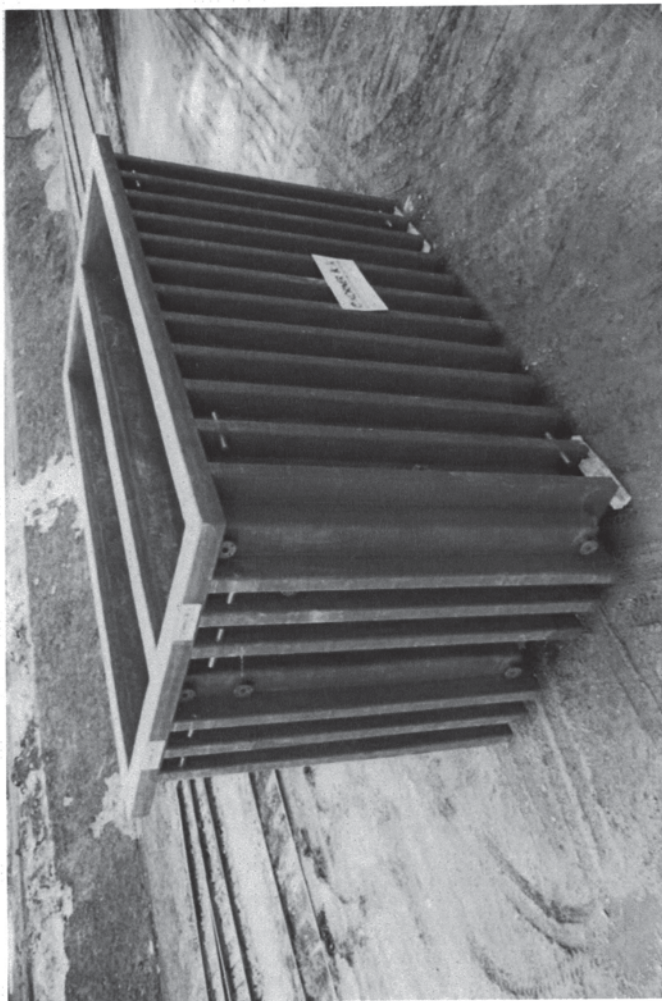
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double tanks:

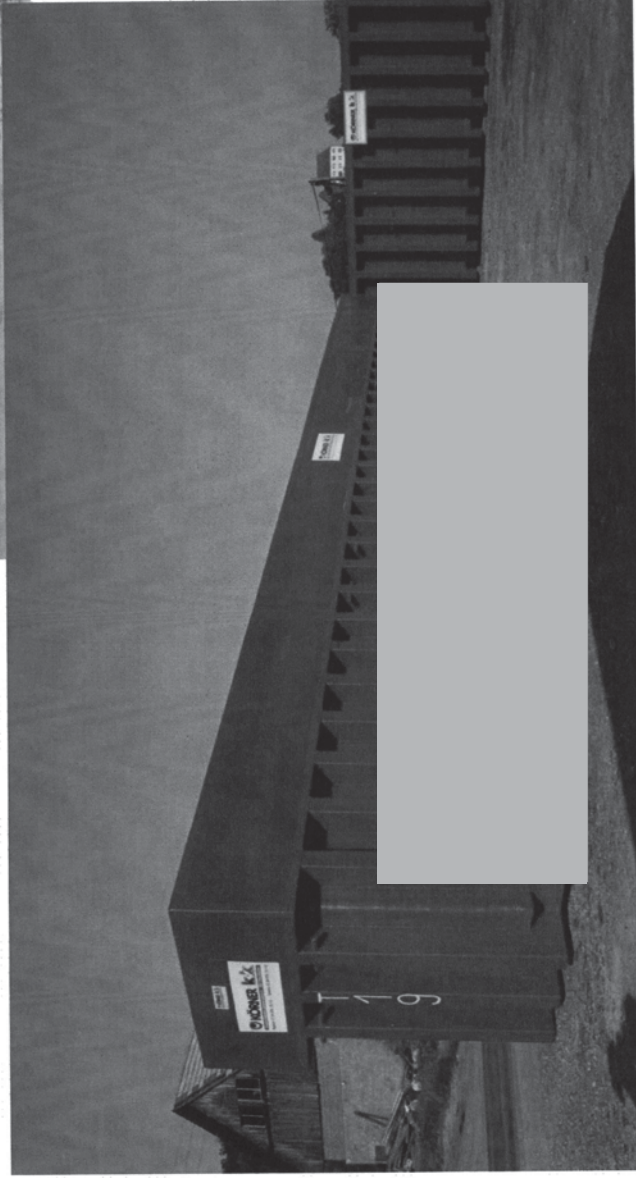


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all dimensions
are possible:



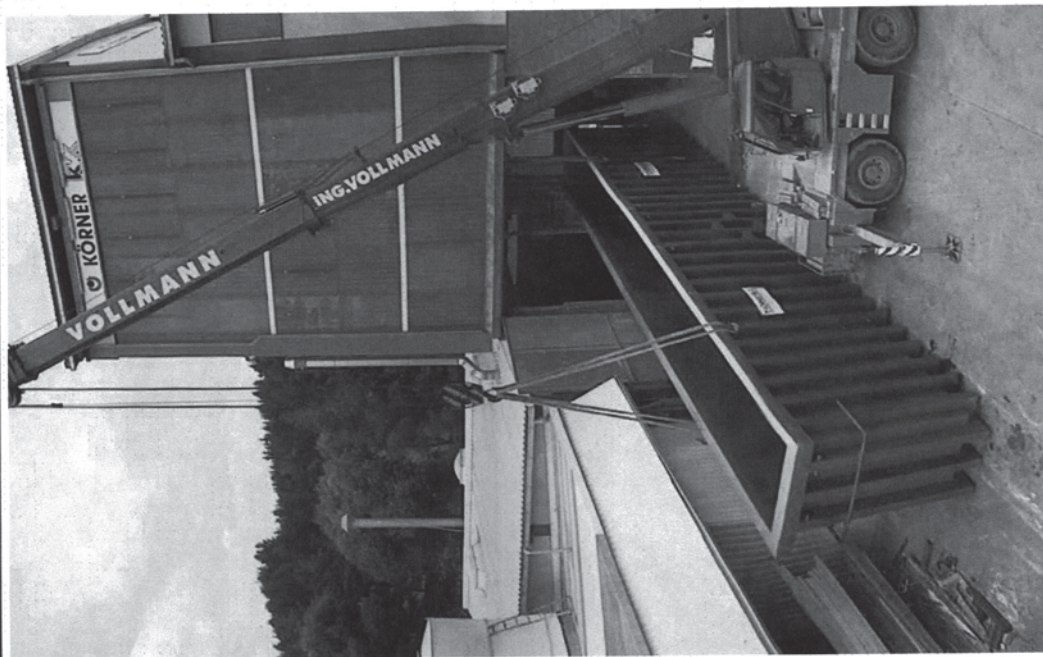
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advantages KVK tanks

- ⇒ resistant against all chemicals
- ⇒ resistant up to high temperatures
- ⇒ no inhibitors necessary
- ⇒ all dimensions possible
- ⇒ easy to repair



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KOERNER KVK[®]

advantages KVK tanks

- ⇒ **recycling possible**
- ⇒ **long lifetime (20 years)**
- ⇒ **no corrosion from outside**
- ⇒ **no corrosion at bath level**



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