

Properties and effect

POLINOX TB 100 is an innovative process for pickling and chemical deburring of titanium and titanium alloys. The pickling reliably removes scale and discolorations on welds and surfaces of titanium and titanium alloys. By pickling a metallic clean, satin finish surface is achieved with a uniformly silvery-bright surface finish.

Residues of molding sand or blasting material on the surface of titanium castings can be removed quickly and easily by pickling.

At the edges burrs are removed to achieve a burr and flake free surface even inside of hollow parts.

Parts produced by additive manufacturing can be cleaned from loose particles.

POLINOX TB 100 contains hydrogen peroxide, which avoids the generation of hydrogen in the process and prevents hydrogen embrittlement in the titanium workpieces. Even long process times (removal of the alpha-case-layer) no damage by hydrogen embrittlement have been observed.

Economy and environment

POLINOX TB 100 is environmental friendly, as there is no NO_x generated in the process. In many cases it can be used with a bath setting in the non-toxic range. Burrs and flitters can be removed quickly and reliably with **POLINOX TB 100**, making deburring a new and economical field of application **POLINOX TB 100**.

POLINOX TB 100 contains no nitric acid and it is therefore much more environmentally friendly than conventional immersion picklings.

Application

With process times of 10 to 15 seconds, workpieces are pickled before anodic coloring with **POLINOX TB 100** to ensure a uniform coloration of the surface.

POLINOX TB 100 can be used by immersion, sprinkling or through pumping. It works at room temperature.

POLINOX TB 100 and the rinsing water from the process are acidic and contain the dissolved metal. They have to be treated and disposed of according to the statutory laws and regulations.



Surface before and after pickling with **POLINOX TB 100**, removal 70 µm

Technical data

Specific weight/density:	1.00 to 1.10 g/ml
Application:	immersion
Process temperature:	+20 to + 30 °C
Process time:	2 bis 15 minutes

Supply

<u>Liquid concentrate:</u>	POLINOX TB 100 SK
▪ Single use canister	30 kg (26 l)
▪ Barrel	220 kg (200 l)
▪ IBC	1,100 kg (1,000 l)

Mixing for 100 l pickle ready to use:

Water	70 l
Hydrogen peroxide (35%)	20 l
POLINOX TB 100 SK	10 l

Your advantages

- environmentally friendly pickling
- surface metallic clean/satin finish
- reliable deburring and de-flaking
- fast oxide dissolution with low metal removal
- no hydrogen embrittlement