

POLIGRAT-PRODUCTINFORMATION

POLINOX VA 100

Pickling Process for Stainless Steel

POLIGRAT
DEUTSCHLAND GMBH



Properties and Effect

POLINOX VA 100 is an innovative pickling process for almost all well established types of stainless steel. It is especially suitable for ferritic steel. Alloys with low Cr-concentration >10% can be pickled without attack of grain boundaries.

Discoloration, welding scale as well as thermal oxides are removed on all kind of stainless steel with minimum of 16% Cr. The process can be adjusted to avoid metal removal, so that mirror polished surfaces are not matted.

Environment

POLINOX VA 100 is environmental friendly. No NO_x gases are generated and many application can be operated with a process setup in a non toxic working range. POLINOX VA 100 does not contain any mineral acids. The pickling process can be operated in closed loop, waste water free mode. The removed metal can be separated as pure metal as far as possible and can be fed back for re-use in the stainless steel production

Economy

The high removal rate of scale while low metal dissolving, result in a efficient and economic operation of POLINOX VA 100. Waste disposal costs are significantly reduced if adequate close loop treatment methods are applied.

Application

POLINOX VA 100 is applied in immersion baths or as spray process. The process is a 2 step one. The work pieces are activated in a water dilution of POLINOX VA 100 SK. The consecutive pickling process is performed without intermediate rinsing in a water dilution of POLINOX VA 100 Sk and H₂O₂. The process is operated at room temperature.

POLINOX VA 100 and the rinse water of the process contain the dissolved metal and has to be treated according to the environmental rules.

The rinse water can be recycled in an special designed closed looped waste water system.

The landfill of waste sludge can be avoided following the rules of closed loop material flow law.



Supply

1. Liquid – as concentrate POLINOX VA 100 SK
Pack sizes:

- Single-use cans 30 kg (26 l)
- Barrel 220 kg (200 l)
- IBC 1100 kg (1.000 l)

2. Typical mixture for 100 l process bath

DI water	75 l
Hydrogen peroxide (35%)	15 l
POLINOX VA 100 SK	10 l

Your Advantage

- environmental pickling process
- no NO_x gases
- pickling without finish change
- rapid scale dissolving with minimum material removal
- suitable for ferrites and low Cr-stainless steel alloys