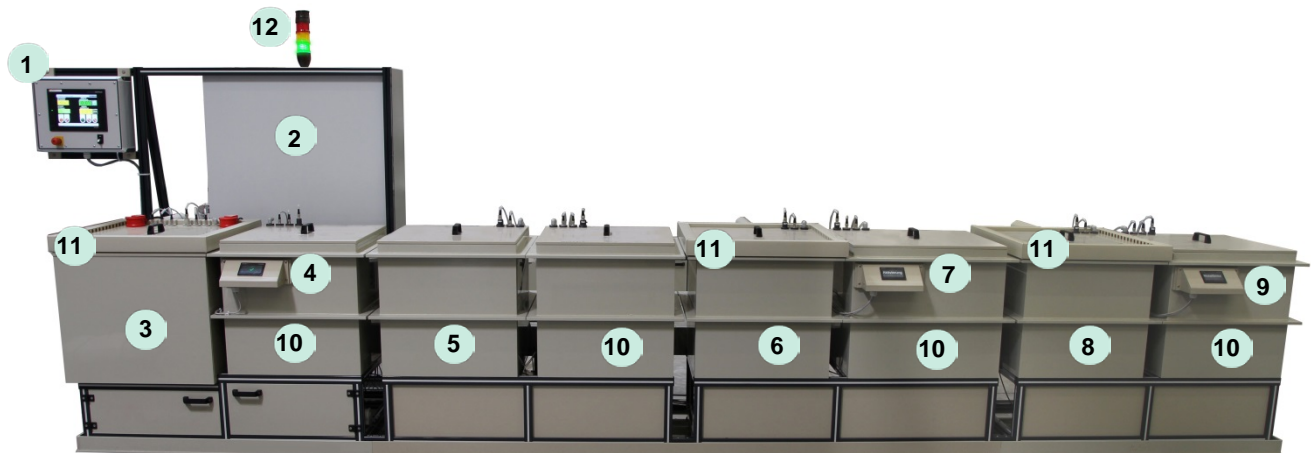# Pre-Treatment Plant VBA 4-353/453/D23

The pre-treatment plant serves to clean and prepare the steel blanks of grinding tools for the subsequent diamond or CBN electro-plating process.

Pre-treatment comprises a warm-process bath (degreasing), 3 cold-process baths (decapation, activation and Nickelstrike) as well as the intermediary rinsing baths. The parts – already fitted into the corresponding contact and holding fixtures – are transported from one bath to the next in the sequence of the single process steps.
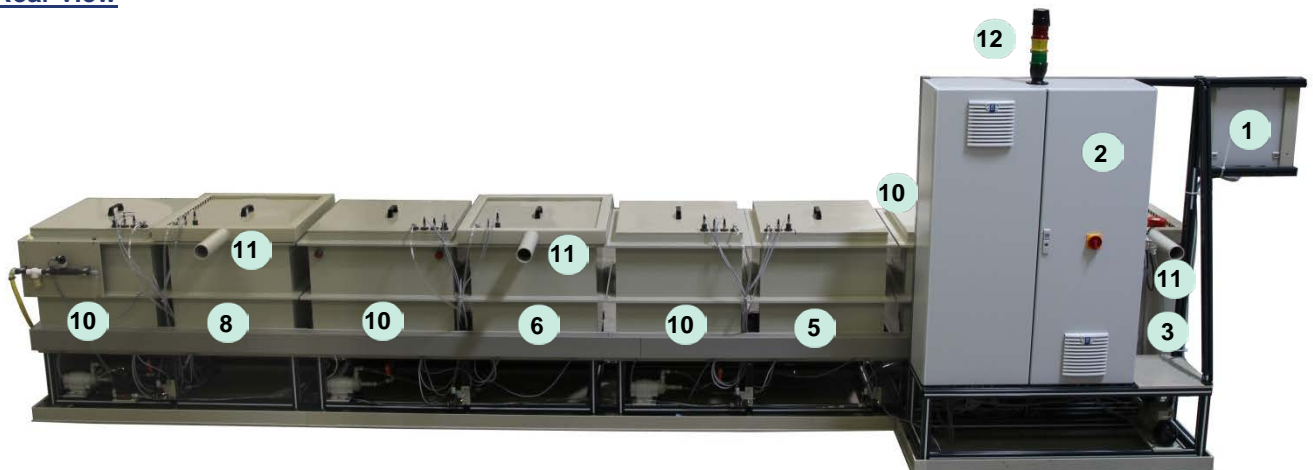
Programming and pre-set of the process and bath parameters is done by means of the Touch screen operator terminal. To control the individual process steps each process bath is fitted with a corresponding control panel.

Front view

1. Process-bath control PBS-845/001 including Touch screen operator terminal for process control and programming:
    - Temperature
    - Current
    - Voltage
    - Process time
    - Heating cycles
2. Electronics cabinet (Service access on rear side)
3. Warm-process bath (degreasing – anodisc/cathodic; polarity reversible)
4. Process control panel for degreasing
5. Cold-process bath (Decapation)
6. Cold-process bath (Activation)
7. Process control panel for activation
8. Cold-process bath (Nickelstrike)
9. Process control panel for Nickelstrike
10. Rinsing bath (4 pcs)
11. Rim exhaustion (3 pcs)
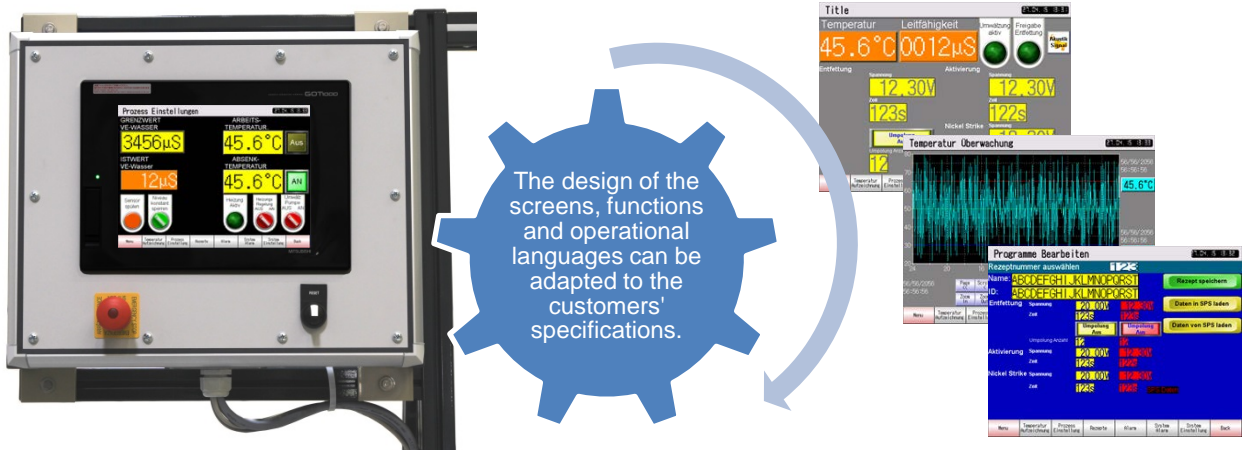12. Signal lamp

Rear view

Technical data:

- Bath volume: Process baths: appr. 180 l each; rinsing baths: appr. 180 l each
- Bath temperature: max. 60°C (degreasing bath); room temperature (all other baths)
- Dimensions (L x W x H): appr. 6100 x 708 x 1000 mm
- Power ratings: appr. 10 KVA, 3 x 400 V, 3 x 16 A, 50 Hz
- Warm-process bath, of PP, heat insulated,
- Cold-process and rinsing baths of PP
- Pipes of PP
- 1 centrifugal pump to circulate the degreasing bath
- Rim exhaustion for process baths (connection to fan, DN 76 mm)

Optional:

- Level stabilisation of process baths
- Flow-standing sink tecnology in the rinsing baths
- Expansion possible to a semi-automatic pre-treatment plant VBA 4-355/455/D45

The design of the screens, functions and operational languages can be adapted to the customers' specifications.

Pre-set and monitoring of the process and bath parameters by means of the Touch screen operator terminal (PBS-845/001 control)

Control panel for process control
(Example: degreasing)