

FERRODEC® 56speed

Decoating High Speed and
Tooling Steels



Coating

- TiN
- TiCN
- AlTiN
- TiSiN

Substrates

- HSS
- High Speed steels
- Edelstahl
- PM Stahl

Description

FERRODEC®56 SPEED is a powdered product for the cost efficient, rapid and safe-operable decoating of High Speed tools and components of all other kinds of steel.

FERRODEC®56 SPEED provides high decoating ratios up to 4µm/h and is universally applicable for all Ti and Al based PVD/CVD coatings, so also for AlTiN with a PLC lubricant layer.

Low dosages of 50g/liter solution are already sufficient for complete decoating at 70-80°C; the dosage individually can be adjusted to any decoating job. For this reason FERRODEC®56 SPEED is also most suitable for cleaning up PVD racks and fixturings. As only a final concentration of 3% Hydrogen Peroxide Solution is required all bathes set up with FERRODEC®56 SPEED are of high stability and do not require any kind of cooling.

FERRODEC®56 SPEED is available in 10kg – buckets.

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Features

Due to special composition of FERRODEC®56 SPEED micro bubbles are created in the moment of combination with Hydrogen Peroxide solution which increases predominately the accesssivity of decoating medium throughout gaps and cratches and ease for this the mechanical flake-off of already partially dissolved coating residues.

This effect is of high importance when decoating PVD racks with 100µm and more coatings left

For speeding up decoating reaction one also can use 50% Hydrogen Peroxide solutions. In all cases high stabilized qualities (as usually traded) are to be preferred.

For decoating CVD coatings doubling the concentration of FERRODEC®56 SPEED is recommended, so up to 200g/liter.

Capacities / costs

The high ratios resp. reaction speed allows decoating of up to 4 batches with 1 filling (2µm TiN); costs of a bath with 100 liter volume is between € 8 -10 for 1 batch.

	Chargen	Costs (€)
100 liter FERRODEC® 56	2	15 - 20
100 liter FERRODEC® 56	4	8 - 10

Set up

50 – 100g/ liter FERRODEC®56 SPEED are to be dissolved into water, thenafter 10 Vol.-% of 30-50% Hydrogen Peroxide are added; finally retained decoating solution is to be kept between 70 and 80°C and decoating can start up.

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Decoating

Cutting tools and components – free of fats and oils- are to be placed into so prepared solution and are to be covered with liquid completely. One should consider that filling level can drop slightly due to some evaporation losses which, however, can easily be compensated by adding further 30-50% Hydrogen Peroxide solution.

After decoating parts are to be taken out of bath and to be rinsed with City water; cooling holes are to be rinsed as well properly; finally drying by hot air should take place (80-120°C); surfaces are to be protected against corrosion by suitable anti-corrosion oils.

Durations

Related to a 2µm PVD coating and to optimal equipment conditions the overall duration are usually for TiN 0,3-0,5h, for TiCN and TiAlN 0,5-1h and for AlTiN 0,75-1,5h.

Durations can be reduced remarkably by increasing bath temperature to 95°C; however, life spn of bath can be effected by doing this.

Working safety

Decoating with FERRODEC®56 SPEED allows a real safe operation with always reproducable results if operation takes place in accordance to recommendations as given in application data sheet.

Due to national Government rules all heatable bathes are to be fitted with sufficient exhausting systems; this is also valid in case of using FERRODEC®56.

For all operations with or at bathes filled with FERRODEC®56 SPEED adequate protection is to be weared (eye protection, skirts, gloves).

Environmentals

After suitable neutralisation and respecting local environmental rules waisted quantities can be sewaged in canalization or put into waistes of alkaline cleaners.