



# ZIRCA-SIL 18

## Process development as pretreatment before painting

Product	Replacement for Ironphosphate	Replacement for Zincphosphate	Process to replace Zincphosphate in Electrolac	"sealer" after phosphate
Zirca-Sil 18	X	X	X	

Product	Based on	Used on	Application
Zirca-Sil 18	Zr	Multimetal (steel, Al, Mg, Zn)	Dip Spray

### Parameters and advatages.



- Roomtemp (18 – 30 degrees)
- No sludge
- Process adapted for iron, steel, aluminium and zinc
- Simpel neutralization in waste water treatment

## Zirca-Sil™ 18

### Coating and Operational Comparisons

Characteristic	Iron Phosphate	Zinc Phosphate	Zirca-Sil™ 18
1. pH	4.5 - 5.5	1.5 - 3.5	4.5 - 5.2
2. Composition	Iron oxide/ phosphate	Phosphate of Zn, Fe, Mn, Ni	Nanostructured particles, Zr based
3. Coating weight (mg/ft <sup>2</sup> )	20 - 80	100 - 350	5 - 20
4. Temperature (°C)	40-60	45-60	Ambient
5. Conditioning step	No	Yes	No
6. Sludge	Moderate	High	Very minimal, if any
7. Accelerator impact	Increase CW	Decrease CW	N/A
8. Post treatment	Very important	Optional	Not necessary/Optional
9. Corrosion protection	Worse than Zn <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>	Standard for High Quality	> FePO <sub>4</sub> => Zn <sub>3</sub> (PO <sub>4</sub> ) <sub>2</sub>

### Line layout

