

# Pressure band filtration

# Phosphating filters from Obelin

The phosphating of metals produces a reaction sludge that must be continuously removed from the process bath.

Oberlin filters achieve the most optimal filtration results with filter finenesses of up to 1 µm. The filter with high filtration pressures works fully automatically even when an optimally dried filter cake is discharged.

During the phosphating of aluminum, cryolite sludge is produced. Cryolite Sludge flakes are very fine and bind a lot of liquid. Especially for this application, Oberlin offers a fully automatic filter with cake compressor and 1 µm reusable filter medium.





# ECHNICALINFORMATION



#### Project dependent

The choice of phosphating filter is entirely project dependent.

This means that this type of filter offers a wide range of flexible solutions, and the shown example and data are therefore not a one fits all unit.

Furthermore, the shown unit is a Oberlin phosphating fitration unit since this is our preferred solution due to efficiency, stability and flexibility.

The filter is an alternative til the chamber filter press.

## The highest bath purity

The filter provides the highest bath purity:

- Quality improvement of the phosphate coating
- Reduction of sludge carryover
- Increase in quality of subsequent KTL
- Longer service life of the rinsing baths
- Less energy required to heat the bathroom
- Reduction of the cleaning effort
- Reduction of acid washes

#### The driest filter cake

Your benefits from the dryest filter cake:

- Reduction of disposal costs
- Reduced cleaning effort
- Reduced chemical requirements
- Lower running costs

### DATA for Oberlin filter unit – example:

Chemicals	Zinc phosphate solution, PH approx. 2-3, nitrite accelerated
Bath content	m³10
Bath temperature	°Capprox. 55
Surface throughput	m <sup>2</sup> /h, steel, sprayer220
Incidental FK amount	kg/h<2.0
Bath tank design	Pointed cone bottom with suction in the cone tip, 4 funnels
Plant operation	layers3-layers
Bath level to +/- 0m filter	m<3
Distance filter - basin	mapprox. 5
Filter type	OPF06MLP-A4-E
Execution	Fully automatic with leakage container (manual emptying), silicone-free
Filter surface	m <sup>2</sup>
Filtrate performance	m <sup>3</sup> /h6
Filtrate return	The filter outlet can be pressurized up to 0.3 bar
Final filtrate pressure (depending on the compressed	barup to 3 air supply pressure)



#### **HIGHLIGHTS**

- Increases surface quality
- Reduces chemical and disposal costs
- Low maintenance

