UFS Corporation
330 North 400 East
Valparaiso, IN 46383-9704 USA
PH: 219-464-2027 FAX: 219-464-8646
www.ufsc.com
email: service@ufsc.com

Service Reference

Topic: Recommended Replacement Schedule, TECTRON™ Membrane Electrode Cells with PTAN™ & PTCA™ Series

The typical replacement schedule shown below is based upon previous experience for equipment operating no more than 50 amps/m^2 (5 amps/SF), 225 days per year and 8 to 12 hours per day.

Component, Noun Name	Replacement Frequency	Comment
Electrode (as the cathode), Stainless Steel	about 8 years	When used in anodic ED paint.
Electrode† (as an anode), Stainless Steel Schedule 40	1-3 years, or when more than 60% of the original mass has been lost.	When used in cathodic ED paint.
Electrode† (as an anode), Stainless Steel, Schedule 80	2-4 years, or when more than 60% of the original mass has been lost.	When used in cathodic ED paint.
Electrode† (as an anode only), precious metal-coated titanium, code PME	up to 2 - 3 years, or when coating failure occurs	Precious metal is coated over titanium. Titanium can decompose, like stainless steel alloys, under certain conditions. Do not use as a cathode.
Electrode† (as an anode only), precious metal-coated titanium, code PMB	up to 3 - 5 years, or when coating failure occurs	Premium precious metal is coated over titanium. Titanium can decompose, like stainless steel alloys, under certain conditions. Do not use as a cathode.
Membrane Shell	about 3 to 8 years	Replace if cut or otherwise damaged or has high resistance from internal/external fouling.
Clamp	about 4 years	Replace when there is significant surface rust on the clamps.
Cable Lead	about 4 years	Replace if contact resistance is greater than 0.2 Ω.
PVC Return Tubing	About 4 years	When dark and hard to see through or covered with ED paint
Splash Guard	About 4 years	When covered with a thick layer of ED paint.
Set Screw Lug	About 8 years	When no longer serviceable.
Flow Indicator/Valve	About 4 years	When it no longer readable or is covered with ED paint.

†Note – If you experience a high Anode Corrosion Factor attack from some contaminate, the lifetime can be severely shorten to a period in some cases of one or two months. Other factors can affect the lifetime of anodes: those placed in the front or closest to the ware can suffer from higher electric current draw; If a replacement ME cell is placed in amongst older ME Cells, then the newer ME Cell will take on load from the older ME Cells and wear out even faster than the original unit.

For more information, contact your Sales and Service Engineer or customer service at UFS Corporation.

Think and act in a safe manner. Always disconnect power and use a lockout before you work on the E-coat system, or any of the related subsystems. Observe any confined space conditions. Use the appropriate safety equipment & clothing for the task.
UFS Corporation … dedicated to providing quality, innovative solutions to the electrocoating industry.