

The following guidelines will help guide the choice of which fill to use as a function of total suspended solids, biological control, oil & grease content and whether waterborne fibers are present. For specific projects please contact Brentwood's cooling tower sales department for recommendations.

- **Use CF-1200 when:**
 - TSS < 1 PPM (<50 PPM where bacterial activity is very low)
 - Make-up from potable or filtered water sources
 - Water treatment using oxidizing biocides & scale inhibitors
 - Low cycles of concentration
 - Minimal airborne dust
 - No potential for oil or grease contamination
- **Use CF-1900 when:**
 - TSS < 25 PPM (<100 PPM where bacterial activity is very low)
 - Make-up from uncontaminated sources
 - Water treatment using oxidizing biocides & scale inhibitors
 - Low cycles of concentration
 - Minimal airborne dust
 - No potential for oil or grease contamination
- **Use OF-21ma when:**
 - TSS < 50 PPM (<200 PPM where bacterial activity is very low)
 - Make-up from uncontaminated sources
 - Good biological & scale control
- **Use VF-19Plus when:**
 - Low cycles of concentration
 - Minimal airborne dust
 - Minimal oils or grease (no more than 1 ppm)
- **Use VF-3800 when:**
 - TSS >100 ppm but <500 ppm (<200 ppm if oil or grease, or poor biological control)
 - Make-up from surface waters
 - Good biological control
 - Oils or grease in system up to 5 ppm
- **Use TURBOsplash PAC when:**
 - TSS > 500 ppm and no upper limit (1000 ppm limit if oil or grease or no biological control)
 - Make-up from surface waters
 - Poor biological or scale control
 - Oils or grease up to 25 ppm

Summary Table

	CF-1200	CF-1900	OF-21ma	VF-19Plus	VF-3800	TURBO-Splash
Allowed TSS w/good microbial control (ppm):	<50	<100	<200	<500	No Limit	No Limit
Allowed TSS w/poor microbial control (ppm):	<1	<25	<50	<200	<1000	No Limit
Allowed oil & grease concentration (ppm)	None	None	<1	<5	<25	<500
Allowed fibers in Water	None	None	None	None	None	Some

'Good' biological control means oxidizing biocide supplied continuously with bactericidal residuals maintained, with total aerobic bacteria (TAB) maximum plate counts **not exceeding 100,000 cfu/ml** with minimal slime formation on heat transfer surfaces. 'Poor' microbiological control implies little or no microbiological control or control subject to severe disruption, with **average TAB plate counts consistently over 100,000 cfu/ml**. Other potential fouling risk factors must be considered also, such as water-borne cross-contamination with process fluids containing ammonia compounds, sugars or other nutrients. Other airborne contaminants should be considered also, such as fine dust, dirt & debris. **Circulating water must be free of fibers for any fill except TURBOsplash.** For additional help on specific projects please contact Brentwood's Sales Department.