S(oil) Management
Session Questions and Answers

Q: My process uses both traditional splitting oils and water-soluble coolant. What should I use?

A: It's not always an either/or, a lot of processes have both. If you have products that your process uses a splitting-type material, absolutely you should take advantage of that coalescer or that skimming process, that will help. It won't necessarily separate those emulsified materials, but it's going to be a big step towards improving and extending that process. If you haven't made the investment in that ultrafiltration type of system, that would take care of both. It depends on what your mix is. If it's 90% water-soluble coolants that might make since, but if its only 10% absolutely use the coalescer skimmer approach.

Q: Can I reuse the recovered oil?

A: That an interesting question because you're separating that off and capturing the material that may look like oil. Some people may have tried that in general, like changing the oil in your car. You don't normally want to reuse that material. You could try but in general that's not a recommended behavior.

Q: How should I dispose of the waste?

A: If you can't reuse the material then the next question is how you dispose of it. The great thing about either of these strategies is you're having a 90+ reduction in the volume of the waste. The cleaning agents in those processes, at least with our materials, don't by nature make that waste hazardous. Depending on what you're machining or what you're doing you may want to have that analyzed just to make sure the oils themselves are fine. Then you would need to work with your local waste disposal company to make sure that those are being disposed of properly. The management strategies that we're talking about today shrink that waste volume and the cleaning agents general themselves don't make that any more hazardous.

Q: Are there temperature limitations on the different types of oil skimmers (works best at room temperature or with slight heat)?

A: Great question. Typically, if you let things cool down to room temperature, you get better separating. It's hard to make blanket statements, but my experience in the separation normally happens a little better at ambient temperature.

Q: Can all types of oil skimmers be used for polar and non-polar oils?

A: The more polar it is the more water-liking it will have. If it's a non-polar type material the more hydrophobic it will be. Those tend to split out a little better. The things that are more hydrophobic will adhere to that belt or that skimmer a little bit better. You might see a little bit but again, what you're looking for is if it's an oil splitting material. Generally, it helps cling to that belt or coalescer better than the

emulsifying-type material. There can be a little bit of a difference with the polarity of the materials.