1062-35-276 **Stephen Kleene*** (skleene@gmail.com), 114 Clover Hills Drive, Rochester, NY 14618. Positive and Negative Existence Results for Mean Curvature Flow Self Shrinkers.

We present several negative results for existence of complete embedded self-shrinkers in the class of hypersurfaces of revolution. On the other hand, we present a construction of a complete embedded self shrinker with discrete rotational symmetries and high genus. (Received August 10, 2010)