NEW CONSTANT MEAN CURVATURE SURFACES

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Abstract. We use the Dorfmeister–Pedit–Wu construction to present three new classes of immersed CMC cylinders, each of which includes surfaces with umbilics. The first class consists of cylinders with one end asymptotic to a Delaunay surface. The second class presents surfaces with a closed planar geodesic. In the third class each surface has a closed curve of points with a common tangent plane. An appendix, by the third author, describes the DPW potentials that appear to give CMC punctured spheres with k Delaunay ends (k-noids): the evidence is experimental at present. These can have both unduloidal and nodoidal ends.