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Structure theorems for constant mean curvature surfaces bounded by a planar curve.
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The authors prove that a compact, connected, embedded, constant mean curvature surface in $\mathbb{R}^3$ whose boundary is a circle must be part of a sphere, under the additional hypothesis that along the boundary circle the surface meet the plane of the circle transversely. The proof relies on the plane-reflection technique of A. D. Alexandrov and on the force-balancing identity which holds for pieces of constant mean curvature surfaces.

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Alexandrov reflection; force-balancing identity

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