

ABSTRACT. In his Math. Zeitschr. paper of 1956 A. Dold defined manifolds for the purpose of generating unoriented cobordism groups. In the present paper a complete piecewise linear and topological classification and partial smooth classification of manifolds homotopy equivalent to a Dold manifold have been done by determining: (1) the normal invariants of the Dold manifolds, (2) the surgery obstruction of a normal invariant and (3) the action of the Wall surgery obstruction groups on the diffeomorphism, piecewise linear and topological homeomorphism classes of homotopy Dold manifolds (to be made precise in the body of the paper).