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156-756 Seoul, South Korea. *Integral closure of graded integral domains.*

Let Γ be a torsion-free cancellative commutative monoid and let $R = \bigoplus_{\alpha \in \Gamma} R_{\alpha}$ be a commutative Γ -graded ring. We show that if R is a graded Noetherian domain, then its integral closure is a graded Krull domain. This is a graded analogue of the Mori-Nagata theorem. We also show that for a graded Strong Mori domain, its complete integral closure is a graded Krull domain but its integral closure is not necessarily a graded Krull domain. (Received September 27, 2005)