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ABSTRACT

The worldwide production of semiconductor grade polysilicon for electronic application has reached nowadays the amount of 10,000 T/y.

The material is produced universally by CVD of extremely purified (chloro)silanes reacting with hydrogen.

A modern plant will be described operating under conditions which are optimized for energy saving and ecological purposes (closed-loop operation).

Other CVD applications in use for electronic materials are described, namely polysilicon deposition on wafer back, for gettering purposes, and epitaxial layer deposition on wafer front.

Last one accounts for an annual production of more than 450 MSQI (million square inches).