

Title (en)  
Ligth structural steel and its application

Title (de)  
Leichtbaustahl und seine Verwendung

Title (fr)  
Acier pour des éléments de construction et son application

Publication  
**EP 0889144 A1 19990107 (DE)**

Application  
**EP 98109813 A 19980529**

Priority  
DE 19727759 A 19970701

Abstract (en)  
The invention relates to a high-quality, cold-formable, ultra-resistant austenitic light constructional steel having particularly good deep-draw qualities, with a tensile strength of up to 1,100 MPa in addition to TRIP and TWIP qualities. The invention also relates to the use of said steel in body work components reinforcing structural components, cryogen containers and piping.

Abstract (de)  
Die Erfindung betrifft einen gut kaltumformbaren, insbesondere gut tiefziehfähigen, ultrahochfesten austenitischen Leichtbaustahl mit einer Zugfestigkeit bis 1100 MPa und mit TRIP- und TWIP-Eigenschaften sowie seine Verwendung für Karosserieblechteile, versteifende Strukturkomponenten und Cryogen-Behälter und Rohrleitungen. Der Stahl hat die chemische Zusammensetzung (in Masse-%): 1 bis 6% Si, 1 bis 8% Al mit  $(Al + Si) \leq 12\%$ , 10 bis 30% Mn, Rest Eisen, einschließlich üblicher Stahlbegleitelemente.

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IPC 8 full level  
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CPC (source: EP US)  
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Citation (search report)

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