## **Struts HDI elements**

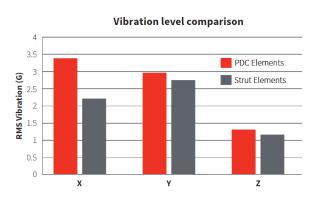
High-density impreg (HDI) components designed to overcome the most challenging drilling environments

We apply continuous material technology development in our Struts<sup>™</sup> high-density impregnated cutting elements, designed to overcome the challenges of harsh rock drilling.

Struts elements combine the toughness of carbide with the hardness of diamond to provide a flexible element that's tough yet wear resistant. They can be incorporated into steel and matrix drill-bit designs, enhancing drill-bit durability, stability, and impact resistance.

Struts elements come in two forms, either as a secondary cutting element or as an impact arrestor. An optimally placed secondary cutting element applies vibration-reducing characteristics, enabling bit stability and enhanced durability. When struts are placed as an impact arrestor, they can reduce impact overload damages to the primary cutting structure.

Our Struts technology, in combination with our additional advanced bit features, can decrease drilling time and costs, reduce trips needed to change bit types, and overcome the limitations of conventional bit designs in hard and unpredictable rock environments.



## Delivering efficiency in your drilling operations

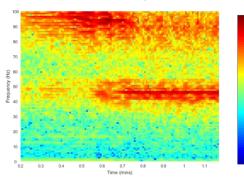
ReedHycalog | NOY Wellbore Technologies

ReedHycalog has drilled some of the longest and fastest intervals in wells around the world utilizing Struts HDI elements. From drilling 50% farther and 20% faster in West Texas to 67% higher ROP with a single bit run in New Zealand, we're positioned to equip you with the most advanced drilling technologies for your application.

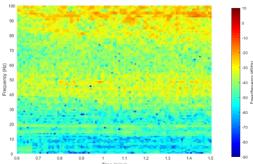


## Spectrogram images

PDC as a secondary element



Struts HDI as secondary element



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