Hardening of the rope groove not only increases sheave life but greatly increases rope life. Ordinary soft cast or fabricated sheaves quickly develop corrugations that cause extreme abrasion and rapid wire rope destruction. Hardening of the rope groove, especially by McKEES ROCKS FORGINGS exclusive DEEP HARD-ENED™ process will extend rope life many times over that experienced with soft castings or fabrications.



This "soft" cast sheave has developed severe corrugation which causes rapid wire rope destruction.



This heat treated forged sheave shows a polished groove condition even after delivering many times the service life of a soft sheave.

Grain Flow Boosts Sheave Performance:



Castina

The random grain structure coupled with no grain flow results in significantly lower directional strength. Characteristic defects in castings, porosity, inclusions and segregation also contribute to decreased performance compared to forgings.

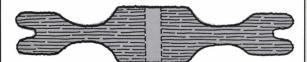


Plate Fabrication

Sheaves cut from plate or fabricated from plate and rings show undirectional grain flow. Here, changes in contour interrupt grain flow lines and expose grain ends making sheaves more susceptible to fatigue and stress corrosion. Characteristic laminations in plate can also lead to separation.



Upset Forging

Grain flow orientation in an upset forged sheave puts maximum strength where it does the most good. As a result, the fiber structure gives maximum directional strength in a sheave application, far surpassing performance of both cast and plate fabrication.

McKEES ROCKS FORGINGS is the Only American Producer of Single Piece Forged Sheaves in diameters up to 52 inch. Don't be fooled by suppliers attempting to provide castings or fabrications. McKEES ROCKS FORGINGS Sheaves Guarantee the Highest Degree of Safety. Together with the Longest Sheave and Wire Rope Life!

