

# SUPERIOR MATERIALS MAKE SUPERIOR PRODUCTS



Martin makes both sintered and solid steel sprockets, however they do not indicate materials in their catalog. If you do receive a solid steel sprocket, Martin's catalog does not define the composition of the steel. Because of this, BlackStar sent a Martin solid steel sprocket to an independent test lab to determine the rating of the steel.

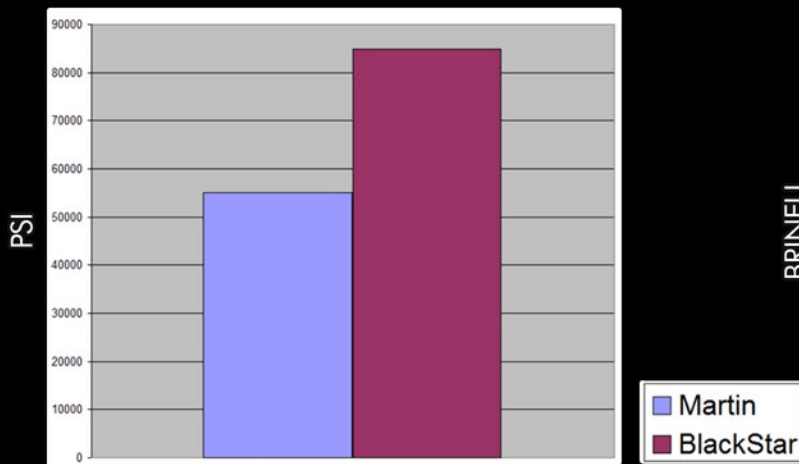
*Martin*

Sprockets are made of AISI 1025 steel  
1025 is a low-carbon steel  
Ultimate Tensile Strength = 55,100 psi  
Yield = 45,000 psi  
Hardness, Brinell = 111

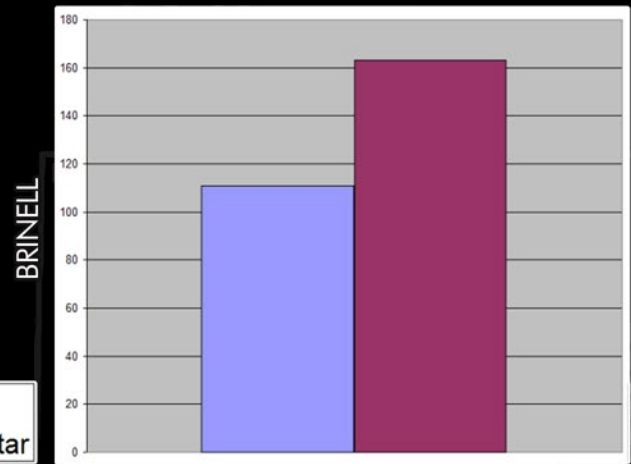


Sprockets are made of AISI 1045 steel  
1045 is a medium-carbon steel  
Ultimate Tensile Strength = 84,800 psi  
Yield = 65,300 psi  
Hardness, Brinell = 163

ULTIMATE TENSILE STRENGTH



HARDNESS



Even in their normal (unhardened) state, the hardness of 1045 (Brinell 163) far exceeds that of 1025 (Brinell 111). This is particularly important in larger sprockets that rarely come with hardened teeth. Even unhardened, 1045 will outlast unhardened 1025.