

# SAF HOUSINGS - THE MATERIAL DIFFERENCE



European Metric and American Standard Industrial Power Transmission Products

P.T. International offers three material choices for SAF housings: Cast Iron, Ductile Iron and Cast Steel.



## A KEY DIFFERENTIATOR = TENSILE STRENGTH

Tensile Strength is a measurement of how strong a material is based on how much load it can take under tension.

TENSILE STRENGTH		
MATERIAL	MPa*	RELATIVE PRICE
Cast Iron	250	\$1.00
Ductile Iron	450	\$1.40
Cast Steel	450	\$2.00 - \$2.50

\*Mpa = megapascals, minimum

## STRENGTHS & WEAKNESSES OF EACH MATERIAL

MATERIAL	STRENGTHS	WEAKNESSES
Cast Iron	Most Common, Lowest Production Cost	Lower Tensile Strength, More Brittle In Shock Loads, Susceptible to Brittle Failure at Lower Temps (Under 30F)
Ductile Iron	High Fracture Toughness, High Fatigue Strength, Less Brittle at Lower Temps*	Slightly Higher Expansion Coefficient vs. Cast Iron, Lower Machinability vs. Cast Iron
Cast Steel	More Impact Resistant, More Weldable than Iron, Less Brittle at Cold Temperatures	Highest Price Point, Less Machinability Compared to Iron

\*Ductile Iron is 'standard' material in Canada.

Contact your local PTI Sales Rep for application assistance: [www.ptintl.com/representatives](http://www.ptintl.com/representatives)



PTI Corporate Headquarters Charlotte, NC - USA  
24/7 Inside Sales: 704-588-1091 Toll-Free: 800-763-4434  
[ptiinfo@ptintl.com](mailto:ptiinfo@ptintl.com)

[www.ptintl.com](http://www.ptintl.com)