

DO YOU KNOW...?

SPHEROIDAL CAST IRON VS STEEL CASTING KVN:



Properties of spheroidal cast iron body

- » Material name EN-GJS-400-18-LT
- » Standard EN1563
- » Yield strength Rp 0,2%, min. 240 Mpa
- » Tensile strength 400 MPa
- » Impact test min 12 J at -20°C
- » Elongation min.18%
- » Temperature range -10 to 350°C
- » Medium resistance to steam (water steam): practically resistant, loss in weight less than 2,4 g/m2/day
- » Medium resistance to nitrogen: practically resistant, loss in weight less than 2,4 g/m2/day
- » Medium resistance to heat transfer oils: practically resistant, loss in weight less than 2,4 g/m2/day

Properties of steel casting body KVN:

- » Material name GP240GH
- » Standard EN10213
- » Yield strength Rp 0,2%, min. 240 Mpa
- » Tensile strength 420 to 600 MPa
- » Impact test min 27 J at +20°C
- » Elongation min.22%
- » Temperature range -10 to 400°C
- » Medium resistance to steam (water steam): practically resistant, loss in weight less than 2,4 g/m2/day
- » Medium resistance to nitrogen: practically resistant, loss in weight less than 2,4 g/m2/day
- » Medium resistance to heat transfer oils: practically resistant, loss in weight less than 2,4 g/m2/day

Comparison:

- » Only 50°C temperature difference of the maximum permissible temperature in the P/T diagrams
- » Same media resistance to steam, nitrogen and heat transfer oils
- » Same yield strength value
- » Nearly the same mechanical properties
- » Spheroidal cast iron KVN is lower in price compared to steel cast KVN

Conclusion:

- » Due to the similar mechanical and chemical properties, the cheaper spheroidal cast iron KVN could be also used for many similar process conditions as the KVN with steel casted body

