HILLFOOT
METALS | SUPPLY CHAIN | INNOVATION

MATERIAL DATASHEET

Title:

665M17

Material Grade: **665M17**
Material Condition(s): **Untreated / Normalised**
Surface Finish: **As rolled**

Associated Standard: **BS970**

Description:

A medium alloy nickel-molybdenum case-hardening steel which may be carburised and hardened to produce a hard wear resistant case and developing a core strength of 770N/mm.
It has good impact properties, very good resistance to stock and freedom from temper brittleness

Typical applications: **gears, shafts, pinions, tappets, valve rockers, collets, track pins, steering balls and worms, transmission components, breech mechanisms and small arms parts**

1. STEELMAKING

	C	Si	Mn	S	P	Cr*	Ni	Mo
Min	0.14	0.10	0.35				1.50	0.20
Max	0.20	0.35	0.75	0.040	0.035	0.30	2.00	0.30

(* denotes residual element)

2. TYPICAL MECHANICAL PROPERTIES

Test type		Tensile and hardness test (at room temperature)						Impact test (KV)
		Yield (Re)	0.2 % proof	UTS (Rm)	Elong (A)	R of A (Z)	Hardness	Room Temp
Unit		*N/mm2*	*N/mm2*	*N/mm2*	*%*	*%*	*HB*	J
Normalised	Min							
	Max						207	
Q+T capability test on 19mm sample	Min			770	12			35
	Max							