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## HF<sub>6</sub>

## TIG/GTAW wire for tool steels

Product name	HF6
Classification EN ISO	14700: SFe4.
Material No.	1.3348
Classification AWS	A5.21: ~ERFe6.
Approvals	-
Applications	TIG/GTAW wire for the surfacing, repair or production of new high speed tools. Exhibits excellent wear resistance and resistance to softening at elevated temperatures. Weld deposits can only be ground. Typical applications will include: cutting tools, gouges, broaches, turning tools, drills.
Base materials	AISI: M7. UNS: T11307. 1.3348. Similar high speed tool steels. Surfacing wide range of mild, CMn, low alloy, engineering steels etc.
Typical analysis of wire, weight %	C: 1.00 Si: 0.30 Mn: 0.30 Cr: 4.00 Mo: 8.30 V: 1.90 W: 1.80
Typical heat treatment (1)	Soft annealed or tempered tools can be welded with appropriate precautions. After welding slow cool to ~80°C and then temper, or heat treat as required. For small repairs and surfacing of other low alloy steels it may be possible to relax the welding procedure requirements.  Preheat: ~500°C (possibly lower when surfacing low alloy steels).  PWHT: ~550°C (if required).
Mechanical properties of weld deposit (2)	Hardness: 630-740HV 590-690HB 57-62HRC
Other products	-

**Notes** (1) Application codes and project specifications should always be referred to for specific requirements.

(2) Actual mechanical properties will be dependent on specific welding procedure (including shielding gas, flux, PWHT etc) and should always be confirmed by approval of an appropriate welding procedure.