



## Unibraze H-13

**Specifications:** AISI H13 Werkstoff 1.2344  
EN10204 3.1 (Chemical Analysis) 2.2 (Mechanical Properties)

**Description:** Unibraze H13 is used for the welding of hot work tool steels with excellent hot tensile properties, high wear resistance and Heat checking resistance. Applications include, repair mandrels, punches, dies, cylinder crushers, screws, hammer, pneumatic hammers, etc. Base material specifications include X40CrMoV5-1 H13, BH13 SCPH 62, STD 62.

### **Welding Process:**

**Shielding Gas:** TIG = 100% Argon

**Polarity:** TIG = DC-

**Recommended preheat temperature:** 640°F - 700°F

**Recommend post weld temperature:** 1200°F

### **Typical Chemical Composition**

C	Si	Mn	P	S	Cu	Cr	Mo	V
.40	1.0	.40	<.020	<.020	<.25	5.20	1.40	1.0

*Cu includes Cu coating*

### **Typical Mechanical Properties**

Rm	Rs	Al% 5d	Kv +20°C	Kv -40 °C	Hardness	Hardness
(N/mm <sup>2</sup> )	(N/mm <sup>2</sup> )		J	J	HB	HRC
						54-60

*Mechanical properties may change by the heat of the material, shielding gas, parameters and other factors.*