

Material Grade: **ST52-3**  
 Material Condition(s): **Untreated / Normalised**  
 Surface Finish: **As rolled**

Associated Standard: **DIN 17100**

Description:

Readily weldable low carbon manganese steel with good impact resistance (also in sub-zero temperatures).  
 This material is commonly supplied in the untreated or normalized condition.  
 Machinability of this material is similar to that of mild steel.

Typical applications: **Welded components for general engineering and construction**

Conditions: **no designation or +U - as rolled**  
**+N - normalised**

**1. STEELMAKING**

	<u>C*</u>	<u>Si</u>	<u>Mn</u>	<u>S</u>	<u>P</u>
Min					
Max	0.22	0.55	1.6	0.04	0.04

(\* differs with section thickness)

**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	0°C	-20°C
Variation	Sample dia	Unit	N/mm <sup>2</sup>	N/mm <sup>2</sup>	N/mm <sup>2</sup>	%	%	HB	J	J	J
ST52-3 + U	> 40 ≤ 63mm	Min	335		490	21			J	27	
		Max			630						
ST52-3 + N	> 40 ≤ 63mm	Min	335		490	21					27
		Max			630						