

## Material-Datasheet

### Saarstahl - C15

Material-No.:

1.0401

Former brand name:

International steel grades:

**BS:** 080A15, 080M15  
**AFNOR:** AF37C12, XC18  
**SAE:** 1015, 1016, 1017

**Material group:**

Bright steels according to DIN EN 10277

Chemical Composition: (Typical analysis in %)	C	Si	Mn	P	S
	0,12 0,18	<0,40	0,30 0,60	0,045	0,045

**Application:**

Bright steels for general technical applications

**Hot forming and  
heat treatment:**

**Mechanical  
Properties:**

Rolled and peeled (+SH)

Thickness d [mm]	>= 5 - 10	> 10 - 16	> 16 - 40	> 40 - 63	>63 - 100
Hardness [HB]	-	-	98 - 178	98 - 178	98 - 178
Tensile strength $R_m$ [N/mm <sup>2</sup> ]	-	-	330 - 600	330 - 600	330 - 600

Cold drawn (+C)

Thickness d [mm]	>= 5 - 10	> 10 - 16	> 16 - 40	> 40 - 63	>63 - 100
Proof stress $R_{0,2}$ [N/mm <sup>2</sup> ]	min. 380	min. 340	min. 280	min. 240	min. 215
Tensile strength $R_m$ [N/mm <sup>2</sup> ]	500 - 800	480 - 780	430 - 730	380 - 670	340 - 600
Fracture elongation $A_5$ [%]	min. 7	min. 8	min. 9	min. 11	min. 12