

## KÜTÜK DEMİR / BILLETS

Boyut Standartı *Dimension Standard*  
TS 9914 / TS 9016

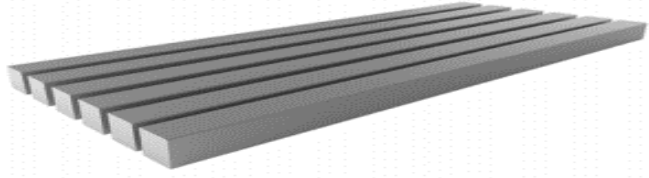
Boy Length  
4 to 14 meters

Kalite Standartı *Quality Standard*  
EN 10025 / TS 708

Ebatlar *Sizes*  
100, 120, 130, 150, 160, 200 Square  
meters

Mikroyapı Kontrolü Standartı *Microstructural Examination Standard*  
ISO 4967 / JIS G 0555

Müşteri Talebine Göre Özel Kaliteler  
*Specific qualities according to customer's request*



### BOYUTSAL TÖLERANSLAR VE SAPMALAR / DIMENSIONAL TOLERANCES AND VARIATIONS

ÖZELLİKLER (PROPERTIES)		100X100 (mm) Min - Max	120X120 (mm) Min - Max	130X130 (mm) Min - Max	150X150 (mm) Min - Max	160X160 (mm) Min - Max	200X200 (mm) Min - Max	ŞEKİL (FIGURE)
KESİT DEĞİŞİMİ (SECTION VARIATION) (mm)	A	99-101 ±3	118-121 ±3	128-131 ±3	148-150 ±3	158-160 ±3	203-206 ±3	
	B	99-100 ±3	120-121 ±3	129-130 ±3	148-151 ±3	158-161 ±3	203-207 ±3	
MAKAS DEFORMASYONU (SHEAR DEFORMATION) (mm)	C	42-46 max 50	64-69 max 75	84-90 max 100	90-94 max 100	90-94 max 105	95-101 max 109	
	D	13-16 max 20	16-20 max 25	23-24 max 30	29-31 max 35	29-33 max 35	33-36 max 38	
	E	81-84 min 80	94-100 min 90	106-108 min 100	121-123 min 120	131-134 min 130	161-164 min 160	
ALIN ÖLÇÜSÜ (SECTIONAL SIZE) (mm)	F	99-101 ±2	118-121 ±2	130-132 ±2	148-151 ±2	158-162 ±3	198-203 ±3	
	G	109-111 max 112	129-131 max 134	136-139 max 144	160-161 max 164	171-173 max 175	212-215 max 216	
DIAGONELLİK (RHOMBODITY) (mm)		132-138 max 7	159-166 max 8	174-182 max 10	199-207 max 10	215-224 max 10	275-283 max 10	
KÖŞE RADÜSÜ (CORNER RADIUS) (mm)		5-6 max 7	5-6 max 7	5-6 max 7	5-6 max 7	5-6 max 7	5-6 max 7	
BOY DEĞİŞİMİ (LENGTH VARIATION) (mm)		±40 ±100	±40 ±100	±40 ±100	±40 ±100	±40 ±100	±40 ±100	
AĞIRLIK (WEIGHT) (kg/m)	St37	74-75	109-110	131-132	171-172	204-206	309-311	Düşük Karbon (Low Carbon)
	Gr60	75-77	110-112	131-133	171-173	204-207	309-313	Yüksek Karbon (High Carbon)
	5SP	74-76	109-111	130-132	170-172	203-206	308-311	Düşük Manganez (Low Manganese)
	Gr60	75-77	110-112	131-133	171-173	204-207	309-313	Yüksek Manganez (High Manganese)
DOĞRULUK (STRAIGHTNESS) (mm/m)		±7 max 10	±7 max 10	±7 max 10	±7 max 10	±7 max 10	±7 max 10	
	12 M İÇİN DOĞRULUK (STRAIGHTNESS FOR 12 M) (mm)	±50 max 100	±50 max 100	±50 max 100	±50 max 100	±50 max 100	±50 max 100	
BURULMA (TWIST) (deg/m)		0,5° max 1°	0,5° max 1°	0,5° max 1°	0,5° max 1°	0,5° max 1°	0,5° max 1°	
KONVEKSİK (FACE BULGING) KONKAVLIK (DEPRESSION) (mm)		±1.5 max 2,5	±1.5 max 2,5	±1.5 max 2,5	±1.5 max 2,5	±1.5 max 2,5	±1.5 max 2,5	
OSİLYON İZLERİ (OSILATION MARKS) (mm)		±1 max 2	±1 max 2	±1 max 2	±1 max 2	±1 max 2	±1 max 2	