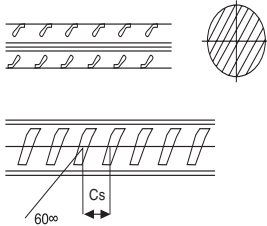


# NERVÜRLÜ BETONARME ÇELİK ÇUBUKLARI

## STEEL MATERIAL

TS 708 - 1985 la

DIN 488 - 1980 Bst 47/50 RU



## YUVARLAK BETONARME ÇELİK ÇUBUĞUNUN

1 m (birim metre)

## AĞIRLIĞININ PRATİK HESAPLANMASI

1 METRE İNŞAAT DEMİRİ

AĞIRLIK FORMÜLÜ :  $0.00617 \times d^2$

d = Demir çapı mm olarak

Örnek:

8 mm demir için  $0.00617 \times 8^2 = 0.395 \text{ kg/m}$

12mm demir için  $0.00617 \times 12^2 = 0.888 \text{ kg/m}$

Standart Çaplar	G (Kg/m)	F (cm <sup>2</sup> )	W (m <sup>3</sup> )	U (cm <sup>2</sup> /m)
10	0.617	0.785	0.098	314
12	0.888	1.130	0.170	377
14	1.210	1.540	0.269	440
16	1.580	2.010	0.402	503
18	2.000	2.540	0.573	565
20	2.470	3.140	0.785	628
22	2.980	3.800	1.050	691
24	3.550	4.520	1.360	754
25	3.850	4.910	1.530	785
26	4.170	5.310	1.730	817
28	4.830	6.160	2.160	880
30	5.550	7.070	2.650	942
32	6.310	8.040	3.220	1010

## TOR ÇELİKTEN DÜZE - DÜZDEN TOR ÇELİĞE

$$\begin{aligned} \text{s düz} &= 0.70 \times \text{s tor} & \frac{\text{s tor}}{\text{s düz}} &= \frac{1900}{1400} = 1.36 & \frac{\text{s düz}}{\text{stor}} &= \frac{1400}{1900} = 0.70 \\ \text{s tor} &= 1.36 \times \text{s düz} \end{aligned}$$

Düzden Toru

$$\text{Ø}12 \rightarrow 1.13 \text{ cm}^2 \rightarrow 1.13 \times 0.70 = 0.79 \rightarrow \text{Ø}10$$

$$\text{Ø}14 \rightarrow 1.54 \text{ cm}^2 \rightarrow 1.54 \times 0.70 = 1.08 \rightarrow \text{Ø}12$$

$$\text{Ø}16 \rightarrow 2.01 \text{ cm}^2 \rightarrow 2.01 \times 0.70 = 1.41 \rightarrow \text{Ø}14$$

$$\text{Ø}18 \rightarrow 2.54 \text{ cm}^2 \rightarrow 2.54 \times 0.70 = 1.78 \rightarrow \text{Ø}16$$

Tordan Düze

$$\text{Ø}8 \rightarrow 0.50 \text{ cm}^2 \rightarrow 0.50 \times 1.36 = 0.68 \rightarrow \text{Ø}10$$

$$\text{Ø}10 \rightarrow 0.79 \text{ cm}^2 \rightarrow 0.79 \times 1.36 = 1.07 \rightarrow \text{Ø}12$$

$$\text{Ø}12 \rightarrow 1.13 \text{ cm}^2 \rightarrow 1.13 \times 1.36 = 1.54 \rightarrow \text{Ø}14$$

$$\text{Ø}14 \rightarrow 1.54 \text{ cm}^2 \rightarrow 1.54 \times 1.36 = 2.09 \rightarrow \text{Ø}16$$