

MEASURING A COMPOUND BALANCED WEAVE BELT

EXAMPLE
CB-3-28-72-14

1. LENGTH AND WIDTH
2. HOW MANY RODS DOES IT TAKE TO DISCONNECT 3
3. MEASURE THE SPIRALS ACROSS THE WIDTH IN 12" (A) 28
4. MEASURE THE SPIRALS DOWN THE LENGTH IN 12" (B) 72
5. MEASURE THE CONNECTING ROD WIRE DIAMETER (C) 14
6. MEASURE THE SPIRAL WIRE DIAMETER (D) 14
7. MATCH DECIMAL SIZE IN INCHES TO WIRE GAUGE EQUIVALENT (E)

(E)

Tabular Data and Cross Sectional Properties for Wire Gauge					
Wire Gauge No.	Decimal Equiv. Size (in.)	Cross Sectional Area (sq.in.)	Moment of Inertia (in ⁴)	Weight of Steel Wire	
				(lb./ft.)	(ft./lb.)
4	.2253	.0399	1.26x10 ⁻⁴	.135	7.39
5	.2070	.0337	9.01x10 ⁻⁵	.114	8.75
6	.1920	.0290	6.67x10 ⁻⁵	.0983	10.2
7	.1770	.0246	4.82x10 ⁻⁵	.0836	12.0
8	.1620	.0206	3.38x10 ⁻⁵	.0700	14.3
9	.1483	.0173	2.37x10 ⁻⁵	.0587	17.1
10	.1350	.0143	1.63x10 ⁻⁵	.0486	20.6
11	.1205	.0114	1.03x10 ⁻⁵	.0387	25.8
12	.1055	.00874	6.08x10 ⁻⁶	.0297	33.7
13	.0915	.00658	3.44x10 ⁻⁶	.0223	44.8
14	.0800	.00503	2.01x10 ⁻⁶	.0171	58.6
15	.0720	.00407	1.32x10 ⁻⁶	.0138	72.3
16	.0625	.00307	7.49x10 ⁻⁷	.0104	96.0
17	.0540	.00229	4.17x10 ⁻⁷	.00778	129.
18	.0475	.00177	2.50x10 ⁻⁷	.00602	166.
19	.0410	.00132	1.39x10 ⁻⁷	.00448	223.
20	.0348	.000951	7.20x10 ⁻⁸	.00323	310.
21	.0317	.000789	4.96x10 ⁻⁸	.00268	373.
22	.0286	.000642	3.28x10 ⁻⁸	.00218	458.
23	.0258	.000523	2.17x10 ⁻⁸	.00178	563.
24	.0230	.000415	1.37x10 ⁻⁸	.00141	709.

