This page is mainly introduced the Q345q C Datasheet, including chemical information,mechanical properties, physical properties, mechanical properties, heat treatment, and Micro structure, etc. It also contains the use of Q345q C,such as it is commonly used in bars, sheet,plates, steel coils, steel pipes,forged and other materials application.

Datasheet for Steel Grades Structure Steel Q345q C

Q345q C Standard Number:		
ITEM	Standard Number	Descriptions

Q345q C Chemical composition(mass fraction)(wt.%)									
Chemical			Min.(%)			Max.(%)			
C	Si	Mn	P	S	Cr	Ni	Mo	V	Ta
≤0.20	≤0.60	1.00□1.60	≤0.035	≤0.035					
W	N	Cu	Co	Pb	B	Nb	Al	Ti	Other

Mechanics performance

Steel thickness/mm: more than 16
The yield point | σ s frequency/MPa: 345
Tensile depth | σ b frequency/MPa: 510
Elongation | δ 5 frequency / (%) : 21
Impact absorption power AKV/J | testing temperature / ℃ : 0
Impact absorption power AKV/J | longitudinal frequency/J | : 34
Impact absorption power AKV/J | time frequency/J | : 34
180 ° of cold bending test | d-apex diameter, a-the following steel thickness thickness when/mm | than 16: d = 2 a
180 ° of cold bending test | d-apex diameter, a-the following steel thickness thickness when/mm | > 16: d = 3 a

Q345q C Physical Properties		
Tensile strength	115-234	σb/MPa
Yield Strength	23	σ 0.2 ≥/MPa
Elongation	65	δ5≥ (%)
ψ	-	ψ≥ (%)
Akv	-	Akv≥/J
HBS	123-321	-
HRC	30	-

Q345q C Mechanical Properties		
Tensile strength	231-231	σb/MPa
Yield Strength	154	σ 0.2 ≥/MPa
Elongation	56	δ5≥(%)
ψ	-	ψ≥(%)
Akv	-	Akv≥/J
HBS	235-268	-
HRC	30	-

Q345q C Heat Treatment Regime				
Annealing	**Quenching**	**Tempering**	**Normalizing**	**Q & T**
√	√	√	√	√

Q345q C Range of products				
Product type	Products	Dimension	Processes	Deliver Status
Plates / Sheets	Plates / Sheets	0.08-200mm(T)*W*L	Forging, hot rolling and cold rolling	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Steel Bar	Round Bar, Flat Bar, Square Bar	Φ8-1200mm*L	Forging, hot rolling and cold rolling, Cast	Black, Rough Turning, Shot Blasting,
Coil / Strip	Steel Coil /Steel Strip	0.03-16.0x1200mm	Cold-Rolled & Hot-Rolled	Annealed, Solution and Aging, Q+T, ACID-WASHED, Shot Blasting
Pipes / Tubes	Seamless Pipes/Tubes, Welded Pipes/Tubes	OD:6-219mm x WT:0.5-20.0mm	Hot extrusion, Cold Drawn, Welded	Annealed, Solution and Aging, Q+T, ACID-WASHED

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