

TECHNICAL DATA SHEET — PERFECT BINDING WIRE

High-Tensile Dead-Soft Annealed Mild Steel Construction Binding Wire

PERFECT CRAFT (PVT.) LTD.

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ISO 9001:2015 Quality Management System

1. PRODUCT IDENTIFICATION & CLASSIFICATION

Product Brand	Perfect Binding Wire
Manufacturer	Perfect Craft (Pvt.) Ltd. (SITE Area, Karachi, Pakistan)
Product Classification	Black Annealed Mild Steel Rebar Tying Wire
Raw Material Billet	Low carbon prime imported mild steel wire rod (SAE 1006 / 1008 equivalent)
Heat Treatment	Continuous inert-atmosphere furnace annealing for uniform dead-soft elongation
Primary Target Applications	Reinforced cement concrete (RCC) construction rebar tying, column cages, beam stirrups, slab meshes, formwork, and packaging.
Key Operational Features	Zero snapping during manual tie twister tightening, uniform ductility, clean rust-inhibited surface.

3. ALL-WELD METAL PROPERTIES (NOMINAL / TYPICAL VALUES)

Typical Chemical Composition (%)

Carbon (C)	≤ 0.08%
Manganese (Mn)	0.25 – 0.45%
Silicon (Si)	≤ 0.05%
Sulfur (S)	≤ 0.025%
Phosphorus (P)	≤ 0.025%

Typical Mechanical Properties

Tensile Strength	300 – 400 MPa (approx. 43,500 – 58,000 psi)
Elongation at Break	≥ 15% (dead-soft ductile tie property)
Torsion / Bending Cycles	≥ 30 reverse bends without micro-fissuring
Surface Condition	Light protective oil coat, scale-free black annealed finish

4. STANDARD COMMERCIAL PACKAGING SPECIFICATIONS

19 Gauge (approx. 1.00 mm)	Recommended for heavy column footings, raft foundations, and large diameter rebar tying (#6 to #10 bars). Standard coils 5 kg / 10 kg / 25 kg / 50 kg bundles.
20 Gauge (approx. 0.90 mm)	Recommended for floor slab meshes, beam links, stirrup ties, and high-speed tying (#3 to #5 bars). Standard coils 5 kg / 10 kg / 25 kg bundles.
Bundle Packaging	Wrapped in heavy-duty plastic film and hessian gunny cloth for moisture protection during transit.

5. STORAGE, HANDLING & REDRYING INSTRUCTIONS

Store coils in covered, dry warehouses elevated above concrete floors. Avoid direct exposure to rainfall or damp ground before concrete casting. When tying on job sites, use standard manual or semi-automatic wire tie hooks for consistent tensioning without over-twisting.

Important QA Note: Data published in this Technical Data Sheet represents typical laboratory production results and complies with AWS A5.1 / JIS Z 3211 guidelines under ISO 9001:2015 quality surveillance. For critical project specifications, request an official batch Certificate of Conformity (COC) from the Karachi sales desk. Revision: TDS-2026-REV1 · Effective Date: October 2026.