

Module 1: Material Grade & Specification Checklist

Item	Requirements & Standards	Supplier to Fill In / Confirm	Remarks
Material Type	<input type="checkbox"/> Zinc Alloy <input type="checkbox"/> Aircraft Aluminum <input type="checkbox"/> Carbon Steel D-ring (Welded / Stamped) <input type="checkbox"/> Others: _____		
Material Grade	Zinc Alloy: ZDC2 Aircraft Aluminum: 6061-T6 / 7075-T6 Carbon Steel: Q235 / 45# Steel		Welding or stamping process inspection report is required for carbon steel parts
Wire Diameter	Small dogs ($\leq 10\text{kg}$): $\geq 3\text{mm}$ Medium dogs (10-25kg): $\geq 3.5\text{mm}$ Large dogs ($\geq 25\text{kg}$): $\geq 4\text{mm}$ Heavy-duty models: $\geq 5\text{mm}$ recommended		Measured with vernier caliper
Wall Thickness Standard	Uniform thickness with no thin edges; minimum wall thickness $\geq 1.2\text{mm}$. No dents or cracks on welds of carbon steel D-rings.		Welds of carbon steel parts shall be inspected with priority
Surface Finish	Electroplating / Anodizing (Aluminum & Zinc Alloy). Anti-rust electroplating / spray coating for carbon steel. No burrs, bubbles or exposed base material.		No visible pits or pores when inspected with a flashlight at an oblique angle
Tensile Strength	Zinc Alloy: $\geq 250\text{ MPa}$ Aircraft Aluminum: $\geq 310\text{ MPa}$ Carbon Steel: $\geq 375\text{ MPa}$ (up to 600 MPa for 5mm gauge)		Material report plus welding / stamping process data shall be attached

Module 2: Acceptance Standard for D-ring Connection Structure & Stitching

Workmanship

Part 1: Connection Structure

Structure Type	Applicable Dog Size	Stitching Requirements	Supplier Confirmation
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Structure Type	Applicable Dog Size	Stitching Requirements	Supplier Confirmation
Type A: Outer Wrap with Single Bartack	Small dogs (≤10kg)	Webbing outer wrap + single X bartack	
Type B: Internal Figure-8 Double Wrap	Medium dogs (10-25kg)	Double-sided full wrap with double-layer stitching	
Type C: One-Piece Folded Lock Stitch	Large dogs / Pull-prone dogs (≥25kg)	Lock all overlaps with box bartacks; fold the middle webbing to form a sealed figure-8 loop	

Part 2: Bartack Stitching Standard

Stitching Type	Recommended Application	Acceptance Criteria	Actual Test Result
Single X Bartack	Small dogs / Low load use	1.5cm cross zigzag stitch; tensile strength ≥30kg	
Dual Parallel Bartack	Medium dogs / Daily walking	Two parallel stitches with 0.8-1cm spacing; tensile strength ≥60kg	
Box + Inner Cross + Top Reinforced Bartack	Large dogs / Premium products	Complete rectangular frame with X reinforcement at four corners; tensile strength ≥100kg / 150kg	

Module 3: Key Verification Points for 3 Mandatory Certificates & Reports

Document Name	Core Verification Content	Provided or Not	Remarks
Full Assembly Tensile Test Report	Combined test for D-ring + webbing + stitching. Comply with ASTM D751 / GB/T 3903.35. Breaking load value must be clearly marked.		Test report for single metal D-ring is not acceptable
Cyclic Pull Test	No slippage or damage after 500		Detailed test data shall be

Document Name	Core Verification Content	Provided or Not	Remarks
Record	pull cycles under 50kg load. Premium products shall retain over 70% of original tensile strength after 1000 cycles.		attached
Batch Sampling & Destructive Test Record	Conduct destructive test on 1 randomly selected sample per 500 finished units. Retain samples and test reports.		Ensure consistent quality between pre-production samples and mass-produced goods

Module 4: Mass Production Batch Quality Control Record

Order No.: _____ Product Model: _____ Inspection Date: _____ Sampling Quantity: _____

Batch No.	Sampling Quantity	Material Inspection Result	Structure / Stitching Inspection	Tensile Test Result	Pass / Fail	Problem Description	Corrective Action
1							
2							
3							
4							
5							

Quality Conclusion: Pass Pending Rectification Fail Inspector Signature: _____

Supplier Representative Signature: _____