2026 SPIRITS BOTTLE SIZES & EXPORT DIMENSIONS CHART

Shandong Jingbo Group Co., Ltd. • https://www.sdjbglass.com/liquor-bottle-sizes-chart-dimensions-guide/

Verified Engineering Benchmarks for Whiskey, Tequila, Vodka, Gin & Rum Distilleries (ISO9001 / TTB Compliant)

1. Standard Spirits Bottle Volumes, Imperial Ounces & 40HQ Export Yields

Nominal Size	Trade Name	US fl oz	1.5oz Pours	Typical Empty Wt	Default Carton	40HQ Yield (Approx)
50 ml	Miniature / Nip	1.69 oz	1.1 pours	90g - 115g	100 pcs/ctn	160,000 - 180,000
100 ml	Quarter Pint	3.38 oz	2.3 pours	145g - 180g	48 pcs/ctn	110,000 - 130,000
200 ml	Half Pint / Flask	6.76 oz	4.5 pours	210g - 260g	24 pcs/ctn	68,000 - 78,000
375 ml	Half Bottle / Demi	12.68 oz	8.5 pours	340g - 460g	24 pcs/ctn	42,000 - 52,000
500 ml	EU / Craft Medium	16.91 oz	11.3 pours	420g - 580g	12 or 24/ctn	32,000 - 40,000
700 ml	EU / Export Standard	23.67 oz	15.8 pours	520g - 800g	12 pcs/ctn	21,000 - 29,500
750 ml	US Standard Fifth	25.36 oz	16.9 pours	550g - 950g	12 pcs/ctn	18,000 - 28,800
1,000 ml	Liter / Bar Rail	33.81 oz	22.5 pours	650g - 920g	12 pcs/ctn	16,500 - 21,600
1,500 ml	Magnum Spirits	50.72 oz	33.8 pours	1,050g - 1,450g	6 pcs/ctn	10,800 - 13,200
1,750 ml	Half-Gallon Handle	59.17 oz	39.4 pours	1,150g - 1,600g	6 pcs/ctn	9,600 - 12,000

2. Mandatory Distillery Headspace & Expansion Calculation

- Thermal Headspace Margin: High-proof spirits expand significantly during ocean container crossings (+45°C summer roof heat). Always specify a Brimful Capacity 4.5% to 5.5% above nominal fill (e.g., 785ml brimful for a 750ml bottle).
- Label Billboard Tolerance: Flat or true-cylindrical label zones require <= 0.35mm concavity deviation to prevent bubbles and flagging on 120–300 BPM rotary pressure-sensitive label applicators.
- Heavy Base Stability Rule: Bottles with solid bases >= 18mm require multi-port bottom baffle vortex cooling plus 8-zone 550°C continuous annealing to maintain ASTM C148 residual stress below 22 nm/cm.
- Reference Standards: U.S. TTB 27 CFR § 5.203 Standards of Fill (includes 700ml & 750ml legal US market sale).

Reference Source & Free Distribution Allowed With Link Attribution:

GPI NECK FINISH TOLERANCES & GLASS QC BENCHMARKS

Bar-Top Cork Sizing, ROPP Screw Caps & Physical Stress Standards — Shandong Jingbo Glass

3. Standard Bar-Top Neck Bores & Matched Closure Sizing

Finish Code	Glass Bore ID	Max Ovality	Matched Shank OD	Ideal Spirits Application
18.5mm Bar-Top	18.5 +/- 0.25 mm	<= 0.30 mm	19.5 mm Natural / TPE	375ml / 500ml Craft Gin & Vodka
19.5mm Bar-Top	19.5 +/- 0.25 mm	<= 0.30 mm	20.5 mm Natural / TPE	700ml EU Spirits, Tequila, Spiced Rum
21.5mm Heavy Bar	21.5 +/- 0.30 mm	<= 0.35 mm	22.5 - 23.0 mm Shank	750ml Heavy Base Bourbon & Decanters
31.5x24mm ROPP	Standard Thread	GPI Spec	Pilfer-Proof Aluminum	50ml Miniatures, Liqueurs, High-Speed Line
GPI 33-400 / 28-400	Continuous Thread	GPI Spec	CT Metal / Phenolic Cap	Classic Travel Flasks & Commercial Handles

4. Glass Optical Purity & Export Quality Assurance Targets

Inspection Parameter	Test Method	Jingbo Target Specification	Operational Purpose
Super-Extra Flint Iron	XRF Chemical Analysis	Fe2O3 <= 0.015% (92.4% Trans.)	Eliminates green edge tint in thick bases
Residual Annealing Stress	ASTM C148 Polariscope	< 22 nm/cm (Grade A)	Prevents spontaneous shelf or rail burst
Thermal Shock Resistance	ASTM C149 Immersion	Delta T >= 42°C - 45°C	Survives hot sanitize wash & cold fill
Internal Hydro Burst	ASTM C147 Hydraulic	>= 1.4 MPa (203 psi)	Safe mechanical strength for 300 BPM lines
Vertical Top Load	Compression Tester	>= 3,500 Newtons	Supports high-speed cork ram insertion
Decoration Ink Adhesion	ASTM D3359 Cross-Hatch	Class 4B - 5B (580°C Cure)	Zero peeling inside 72h ice buckets

Custom Mold Tooling & Free 3D CAD Evaluation

- Pilot Cavity Sampling Mold: 15-day CNC turnaround ($950 - $1,400 standard bottles | $3,200+ decanters).
- Production MOQ: 5,000 - 6,000 pcs (Open Stock) | 10,000 - 20,000 pcs (Custom Embossed Private Moulds).
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