

TECHNICAL REFERENCE · PRINT & KEEP

# Casters for Washdown & Sanitary Environments

One-page quick reference · Full engineering guide + live tools at the QR codes below

**Quick answer.** Washdown and sanitary casters require a 316 stainless steel rig, bearings sealed to IP69K, FDA 21 CFR 177 compliant wheel material, and 3-A or EHEDG hygienic geometry, plus USDA FSIS approval for meat and poultry plants and NSF registration for direct food-contact equipment. The spec must survive daily high-pressure cleaning with caustic chemistry at 60 to 85°C.

## Stainless Steel Rig Spec

| Grade             | Corrosion Resistance         | Cost Index | Washdown Fit              |
|-------------------|------------------------------|------------|---------------------------|
| 304 stainless     | Good, pits with chlorides    | 1.0x       | Light washdown only       |
| 316 stainless     | Excellent, handles chlorides | 1.5x       | Standard food/pharma      |
| 316L (low carbon) | Excellent, weld-stable       | 1.6x       | Welded rigs, pharma       |
| Duplex 2205       | Superior, high-chloride      | 2.2x       | Saltwater, heavy chloride |
| Zinc-plated steel | Poor in washdown             | 0.5x       | Not for washdown          |

## Wheel Material and FDA 21 CFR 177

| Wheel Material             | FDA 21 CFR 177 Status               | Washdown Temp Range | Common Use                |
|----------------------------|-------------------------------------|---------------------|---------------------------|
| FDA-compliant polyurethane | Certified                           | -20° to 180°F       | Standard food/dairy carts |
| Cast nylon food-grade      | Certified                           | -20° to 200°F       | Heavy load food service   |
| FDA stainless steel        | Certified                           | To 800°F            | Bakery oven racks         |
| High-temp FDA phenolic     | Limited certification               | To 300°F            | Steam sanitizer carts     |
| Standard urethane          | NOT certified                       | -20° to 180°F       | Non-food industrial       |
| Natural rubber             | NOT certified (bacterial harborage) | -10° to 180°F       | Avoid in washdown         |



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