

## Sterilizer Selection Guide by Medical Specialty

| Specialty                             | Typical reusable instruments                                           | Low-temp items                                                                 | Recommended PurETO/<br>Eiligplaz method                       | Indicative sterilizer size                                                                |
|---------------------------------------|------------------------------------------------------------------------|--------------------------------------------------------------------------------|---------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| <b>General / Laparoscopic surgeon</b> | Scalpel handles, forceps, scissors, clamps, retractors, needle holders | Laparoscopes (rigid), camera heads, light cables, trocars, insufflation tubing | Plasma (rigid scopes/cameras); ETO if long tubing/cloth packs | <b>Medium</b> ~50–150 L — multiple scope+cable sets per list                              |
| <b>Neurosurgeon</b>                   | Micro-forceps, rongeurs, dissectors                                    | Neuro-endoscopes, bipolar cables, powered drills/motors (battery), optics      | Plasma (drills, scopes, cameras); ETO for fine long lumens    | <b>Small–Medium</b> ~60–135 L — low volume, bulky battery motors set the floor            |
| <b>Neurologist</b>                    | Reflex hammer (non-critical)                                           | Reusable EMG/EEG needle electrodes                                             | Plasma or ETO (electrode sets)                                | <b>Small benchtop</b> ~30–60 L — tiny loads                                               |
| <b>Cardiologist (EP/Cath)</b>         | — (most catheters single-use)                                          | Reusable EP catheters, TEE probe accessories                                   | ETO (long lumens); TEE probe body usually HLD                 | <b>Small–Medium</b> ~60–135 L — long catheters coil into the tray                         |
| <b>Cardiac surgeon</b>                | Sternal saws, bypass cannulas, vascular clamps                         | Fiber-optic headlights, sensors, powered tools                                 | Plasma or ETO                                                 | <b>Medium</b> ~60–220 L — bulky metal goes to steam; low-temp share moderate              |
| <b>Orthopedic surgeon</b>             | Drills, reamers, saws, broaches, implant trays (steam)                 | Battery drivers/motors, arthroscopes, light cables, cameras                    | Plasma (battery drivers/motors); ETO for sealed electronics   | <b>Large</b> ~50–220 L — big motors + high case turnover; biggest footprint               |
| <b>ENT surgeon</b>                    | Micro-ear instruments, nasal specula                                   | Rigid nasendoscopes, sinus scopes, micro-drills, flexible laryngoscopes        | Plasma (rigid); ETO (flexible scopes)                         | <b>Small–Medium</b> ~60–135 L — compact scopes, moderate count                            |
| <b>Ophthalmologist</b>                | Fine forceps, cannulas, speculum (steam)                               | Fiber-optic probes, vitrectomy handpieces                                      | Plasma (verify IOL/material compat.); ETO case-specific       | <b>Small–Medium</b> ~60–135 L — small items but high-volume eye hospitals run many cycles |
| <b>Urologist</b>                      | Resectoscope metal parts                                               | Flexible ureteroscopes/cystoscopes, lithotripsy probes, long lumens            | ETO (long flexible lumens); rigid cystoscope → Plasma         | <b>Medium</b> ~60–150 L — long flexible scopes need coiling room                          |
| <b>Gynecologist / Obs</b>             | Specula, D&C sets (steam)                                              | Hysteroscopes, laparoscopes, camera/cables                                     | Plasma or ETO                                                 | <b>Medium</b> ~50–150 L — scope + camera sets per list                                    |

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|-----------------------------------|---------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|
| <b>Gastroenterologist</b>         | —                                           | Flexible gastroscopes / colonoscopes (very long lumens)                                                               | ETO for terminal sterilization (routinely HLD via AER) — plasma unsuitable                      | <b>Medium–Large</b> ~135–220 L — ~1.6 m scopes coiled; busy units run high volume    |
| <b>Pulmonologist</b>              | Rigid bronchoscope                          | Flexible bronchoscopes                                                                                                | ETO (flexible); Plasma (rigid)                                                                  | <b>Small–Medium</b> ~60–135 L — fewer scopes than GI                                 |
| <b>Dentist / Oral surgeon</b>     | Mirrors, probes, forceps, elevators (steam) | Fiber-optic / electric handpieces, implant motors, intraoral cameras                                                  | Plasma (electronics/fiber-optic)                                                                | <b>Small benchtop</b> ~30–60 L — small items, frequent short cycles                  |
| <b>Anesthesiologist</b>           | Metal laryngoscope blades (steam)           | Fiber-optic video-laryngoscope blades, reusable LMAs, circuits                                                        | Plasma (video blades); ETO (LMAs, cloth-packed circuits)                                        | <b>Medium</b> ~100–150 L — breathing circuits are bulky, cloth-packed → ETO          |
| <b>Plastic / Vascular surgeon</b> | Fine instruments, vascular clamps (steam)   | Liposuction cannulas (lumens), Doppler probes, electrosurgical/laser handpieces                                       | ETO (cannula lumens); Plasma (handpieces)                                                       | <b>Small–Medium</b> ~60–135 L — moderate low-temp load                               |
| <b>Dermatologist</b>              | Minor surgery sets, punches (steam)         | Electrosurgery cables/tips, fiber-optic devices                                                                       | Plasma or ETO                                                                                   | <b>Small benchtop</b> ~30–60 L — minimal low-temp volume                             |
| <b>Robotic surgical system</b>    | Robotic arm adapters, trocars, cannulas     | Articulated wristed instruments (EndoWrist), robotic endoscopes/cameras, light cables — delicate optics & electronics | Plasma (fast cycles, no residue; preserves optics/electronics/coatings); ETO for complex lumens | <b>Medium–Large</b> ~135–220 L — long articulated instruments + high-volume programs |

***Note: This guide is a general recommendation for qualified professionals and is for informational use only. Confirm the final method and equipment against each device's Instructions for Use (IFU) and applicable standards before use***