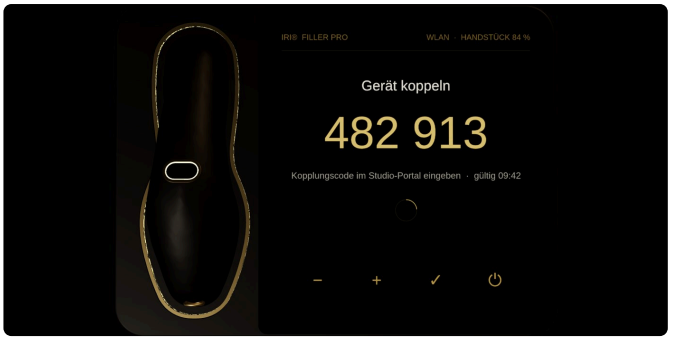
IRI® FILLER PRO — Docking Station v2

Design Brief · Rev B · 2026-08-19 · YAVU / IRI® · Confidential — covered by NDA/NNN EN + 中文

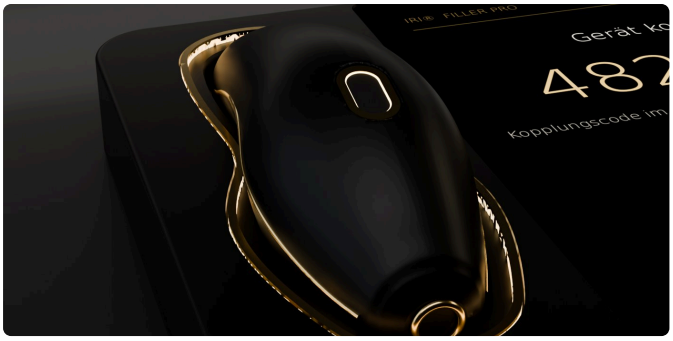


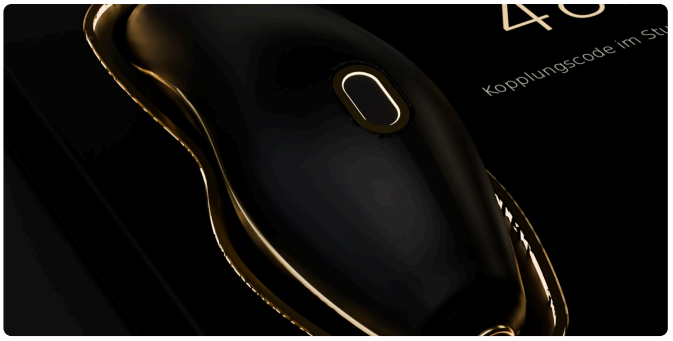
1 · What changes vs. the July CAD

Item	July CAD	Station v2
Outer size (W×D×H)	234 × 304 × 120 mm	**306 × 230 × 40 mm** (height −67 %)
Handpiece cradle	diagonal pocket	**same pocket geometry 1:1** (rotated 135° in plan, handpiece runs front→back); handpiece fits unchanged
Display	none	**9.7″ 4:3 IPS** (2048×1536), active 196 × 147 mm, under one black glass 203.5 × 225 × 2 mm running to 2.5 mm from the outer edge (no visible frame)
Controls	—	4 capacitive dead-front symbols in the front glass band: dose −, dose +, confirm, standby (invisible when off)
Body	2-shell plastic	CNC aluminium, black anodised silk-matte; parting line 6 mm above base with **gold hairline** (separate plated ring); no visible screws (assembly from below, screws under silicone foot ring)
Cradle rim	plain	**Gold ring inset** (2.4 mm wide, separate CNC part, 0.6 mm shadow gap, 0.3 mm proud) with warm 2700–3000 K light guide underneath = “light line”
Charging / data	—	4 gold-plated pogo pins in the cradle floor at the handpiece tail (charging + data), magnetic seat optional
Branding	—	one Ø 11 mm gold Y-emblem inlay on the front face; no other logos
Radio	—	**RF window = the display glass**; Wi-Fi antenna (ESP32-S3) sits under the glass margin — no separate window in the aluminium
Rear	—	USB-C (service / OTA in dock) + DC-in

1 · 与 7 月 CAD 相比的变化

项目	7 月 CAD	底座 v2
外形尺寸（宽×深×高）	234 × 304 × 120 mm	**306 × 230 × 40 mm**（高度降低 67 %）
手柄凹槽	斜置凹槽	**凹槽几何 1:1 保留**（俯视旋转 135°，手柄前后放置）；手柄无需改动即可放入
显示屏	无	**9.7 英寸 4:3 IPS**（2048×1536），有效区 196 × 147 mm，位于一整块 203.5 × 225 × 2 mm 黑色玻璃之下，玻璃延伸至距外边缘 2.5 mm（无可见边框）
操作	—	前部玻璃带内 4 个电容式隐藏触控符号：剂量 −、剂量 +、确认、待机（关机时不可见）
机身	双壳塑料	CNC 铝合金，黑色哑光阳极氧化；分型线位于底面上方 6 mm，配**金色发丝线**（独立镀金环）；外观无可见螺丝（自底部装配，螺丝隐藏于硅胶脚圈下）
凹槽边缘	普通	**嵌入式金环**（宽 2.4 mm，独立 CNC 件，0.6 mm 阴影缝，高出 0.3 mm），下方为 2700–3000 K 暖光导光条 = “光线”
充电 / 数据	—	凹槽底部（手柄尾端）4 个镀金弹簧针（充电 + 数据），可选磁吸定位
品牌标识	—	正面一个 Ø 11 mm 金色 Y 徽标镶嵌；无其他标识
无线	—	**射频窗口 = 显示玻璃**；Wi-Fi 天线（ESP32-S3）位于玻璃边缘之下 — 铝壳无需单独开窗
背面	—	USB-C（维护 / 底座内 OTA）+ DC 电源输入





2 · Handpiece — shell, trigger, seam, chambers

Trigger on top. The release button moves from the side to the top of the head (index-finger position, approx. 55 mm behind the nozzle centre, recessed into the shell): elongated pill 24 × 15 mm, gold ring (separate plated part, 0.6 mm shadow gap), black soft-touch pad, warm-gold light ring underneath that is invisible until the device is armed. The side-button and screw openings in the July CAD are removed: the outer shell is a closed, screwless skin (halves joined at the seam by adhesive/snap, any screws only under the tail cap / pogo plate). **Gold seam line** (Ø 1.8 mm plated wire, recessed 0.2 mm, warm light gap underneath) runs along both sides from nozzle ring to tail. **Nozzle ring in gold** (Ø 12.4 mm). **Two dosing chambers, one thread:** the proven 0.3 ml chamber for filler (unchanged, no syringe) and a chamber for thin formulations with a screw-on 5 ml syringe — same screw interface, visually and electrically coded. The outer skin is supplied as a clean lofted surface (handpiece_loft.step) — envelope, mechanism and chamber interface otherwise as in the July CAD.

3 · CMF (binding, see YAVU Design Family)

Aluminium body	6061/6063 CNC, black anodised type II, silk-matte, Ra ≤ 0.8 µm; sample must not read glossy or grey
Gold parts	brass or aluminium CNC, 24 k gold ≥ 2.5 µm over nickel barrier; polished (ring, emblem, pogo caps) or satin (hairline). No painted or printed gold.
Glass	2 mm chemically strengthened, black rear print with clear display window and 4 icon apertures, AF coating; sits 0.6 mm below the aluminium edge
Light	2700–3000 K only; light guides under gold ring and trigger ring; no visible LED dots, no blue/white
Foot	black silicone ring 8 mm wide, 1 mm proud, in a groove

4 · Electronics envelope

Dock: ESP32-S3 (or display SoC per HAL v0.6), display driver, pogo charging, Wi-Fi under glass, USB-C service port, DC-in. Cavity under glass 6 mm + body 10 mm below cradle floor. Firmware and cloud remain YAVU scope (device client + /hal only, as agreed).

5 · Files

2 · 手柄 — 外壳、触发键、缝线、药仓

触发键移至顶部。释放按键从侧面移到头部顶面（食指位置，距喷嘴中心约 55 mm，嵌入外壳）：长圆形 24 × 15 mm，金环（独立镀金件，0.6 mm 阴影缝），黑色软触按键面，下方暖金色光环，设备未就绪时不可见。7 月 CAD 中的侧键与螺丝开孔取消：外壳为封闭、无螺丝的外皮（两半壳在分型线处胶接/卡扣，如需螺丝仅可位于尾盖 / 弹簧针板之下）。**金色缝线**（Ø 1.8 mm 镀金线，下沉 0.2 mm，下方暖光缝）沿两侧从喷嘴环延伸至尾部。**喷嘴金环**（Ø 12.4 mm）。**两种药仓，同一螺纹：**经过验证的 0.3 ml 填充剂药仓（不变，无注射器）和用于稀薄配方、可旋上 5 ml 注射器的药仓 — 相同螺纹接口，视觉与电气编码区分。外壳以干净的放样曲面提供（handpiece_loft.step）— 外形、机构与药仓接口其余部分与 7 月 CAD 一致。

3 · CMF（强制要求，见 YAVU 设计家族文件）

铝合金机身	6061/6063 CNC，黑色二类阳极氧化，丝哑光，Ra ≤ 0.8 µm；样品不得呈现光泽或灰色
金色部件	黄铜或铝 CNC，镍打底 + 24 K 镀金 ≥ 2.5 µm；抛光（金环、徽标、弹簧针帽）或缎面（发丝线）。不接受喷涂或印刷金色。
玻璃	2 mm 化学强化，背面黑色印刷，留显示窗和 4 个图标透光区，AF 镀膜；低于铝边 0.6 mm
灯光	仅 2700–3000 K；金环与触发环下方导光；无可见 LED 点，无蓝/白光
底脚	黑色硅胶环，宽 8 mm，凸出 1 mm，嵌入凹槽

4 · 电子空间

底座：ESP32-S3（或按 HAL v0.6 的显示 SoC）、显示驱动、弹簧针充电、玻璃下 Wi-Fi、USB-C 维护口、DC 输入。玻璃下腔体 6 mm，凹槽底部下方机身 10 mm。固件与云端仍由 YAVU 负责（贵司仅负责设备端客户端 + /hal，如已约定）。

5 · 文件

IRI_Filler_Pro_Station_v2.step（7 个零件）· handpiece_loft.step（干净外壳曲面）· station_body_black.stl / gold_*.stl / display_glass.stl · IRI_Filler_Pro_Station_v2_3D.html（交互式查看器）· Render_01…07.png · pocket_neg_rot.step（凹槽负型）。请将底座作为附加项列入尚未答复的分项报价（1 / 10 / 50 / 100 件，无 MOQ，无模具），并告知凹槽下方 10 mm 壁厚或 9.7 英寸 4:3 模组是否需要调整。无螺丝手柄外皮以 STL/网格提供（handpiece_smooth.stl），请据此在 SolidWorks 中重建壳体内部结构。

IRI_Filler_Pro_Station_v2.step (7 parts) · handpiece_loft.step (clean outer skin) · station_body_black.stl / gold_*.stl / display_glass.stl · IRI_Filler_Pro_Station_v2_3D.html (interactive viewer) · Render_01…07.png · pocket_neg_rot.step (cradle negative). Please quote the station as an add-on line to the open itemised offer (1 / 10 / 50 / 100 pcs, no MOQ, no moulds) and tell us if the 10 mm wall under the cradle or the 9.7″ 4:3 module needs adjustment. The screwless handpiece skin is supplied as STL/mesh (handpiece_smooth.stl); please rebuild the shell internals in SolidWorks accordingly.