1. **Question** A recent development I'm tracking is that Creative acquired an RMCL PVDC machine at about one-tenth of its original price and plan to spend roughly ₹5–6 crore on maintenance and revamp to make it production-ready. The machine capacity is **12,000 MTPA**.

   Answer Based on my experience, that approach can work: when I was at ACG we bought a paper coating machine and successfully converted it into a gravure printing machine. The age of the machine doesn't necessarily prevent restoration — ours was about **20–25 years old** and, with proper overhaul, it ran well. Mechanical wear is usually limited (most heavy wear comes from drives and electrical components), and restoration is straightforward if the critical parts are serviceable.

2. One uncertainty is whether the acquired machine is a **1+2 station** or **1+3 station** configuration — that matters for throughput and economics. Recently we purchased a **1+2 station machine** for about **₹4 crore**, which gave us **200–250 MT/month** capacity (≈2,400−3,000 MT). A more advanced machine (1+3 station) with **300–400 MT/month** capacity typically costs **₹6–7 crore**. Adding another station on an existing line doesn't raise costs proportionally — the extra block/station(gravure + dryer) costs roughly **₹1–1.5 crore**, because it's similar to the second block in a 2-station line.
3. Operational mechanics matter: in a **2-station** setup, to make **60 gsm** you need **three passes** of ~20 gsm each; in a **3-station** setup you can achieve 60 gsm in **two passes**. As a thumb rule, in a single 8-hour shift (480 minutes) on a 2-station (block) machine we can run **~18 passes** and finish about **6 final rolls** — each roll weighing roughly **700–750 kg** at a standard width of 1200–1300 mm — which comes to about **4 tonnes** of finished product. By contrast, a 3-station line in the same shift can complete around **9 rolls**, totalling **6.3–6.5 tonnes**. These are practical field figures rather than theoretical maximums.
4. On procurement and suppliers: most Indian converters buy machines from **Suddha (Gujarat)**; they supply complete converting lines (alu foil printing, laminating, coating, slitting, rewinding, inspection) that are well suited to pharma and flexible packaging. Other suppliers include DWD (Nashik) — their quotations are usually higher — and imported lines like **Polytype (Italy)**, which cost around **₹30–35 crore** and can do **~800 tonnes**.
5. I know people who worked on such projects: one colleague who joined RMCL when they set up a plant in Rudrapur told me about RMCL
6. There are machine design differences that affect uptime. Some high-end machines have **automatic indexing systems** that allow continuous running without the usual 3-minute stoppage after every pass. That difference explains why some plants report near-zero downtime and achieve very high annual capacities (theoretical 1,000-tonne ranges) — while many Indian machines incur short stops between passes. Gravure coating technology is largely the same across manufacturers; gravure rolls (which determine print quality) are sourced from different specialists (for example, Shilp or Stovack).
7. If we look at realistic running time, **three shifts** (3 × 8 hrs) give **1,440 minutes per day**. If downtime is minimal (say 1–2 hours per day) the machine will produce well; by contrast, many plants see much higher downtime — 20–25% (about 288–360 minutes)

— which drastically reduces output. So the restoration must focus on reliable indexing, drives, and utilities to minimize downtime. There is no problem to revamp.

8. Even if an additional **12,000 MTPA** of capacity enters the market, I don't expect a damaging oversupply because demand remains strong — major players still carry sizeable open orders. For example, **ACG** typically has a **100–150 T** backlog, **Bilcare** carries about **100 T** of open orders per month, and we regularly have **50–100 T** outstanding. Industry forecasts I've seen project roughly **130% growth in PVDC demand by 2028**, which supports absorption of new lines.
9. In a well-run plant, **utilisation of around 90%** is achievable. Practically, if the nameplate capacity is **100 T**, you can reliably produce **about 90 T** without fail. Pushing consistently beyond that level becomes difficult: increased changeovers, more customer-specific customisations, and the proliferation of small lots (even **15–30 kg** special orders) all reduce effective throughput. Customers often demand very small micro-lots — for instance, two 15 kg rolls — which further complicates scheduling and reduces overall line efficiency.
10. A real example from my experience: we rescued a machine from a Daman factory that had been rusting for nearly **20 years**. After restoration, we commissioned it and ramped it to **350 T/month** capacity; the entire restart took about **four months**. That's why I believe revamps can work — but only when backed by disciplined commissioning, spare parts, and realistic planning for the inevitable impact of changeovers and micro-lot orders.
11. Practically speaking, I see no technical reason the RMCL machine can't be revamped and run well — **revamp timelines of 2–2.5 months** are reasonable if spares and skilled manpower are available. However, additional costs beyond the machine overhaul must be budgeted: **cranes for roll handling, forklifts, loading/unloading accessories, utilities** (boiler for gravure, cooling tower and chiller), and proper manpower (typical rosters: **3 operators, 1 supervisor, 1–2 helpers**). Chillers are not very expensive, but these peripheral costs add up. To put it in perspective, if a comparable new machine costs around **₹4 crore**, and you manage to acquire an older one for **₹1 crore** and spend another **₹50 lakh** on setup, you essentially achieve **full 300–350 T/month capacity** at just **₹1.5 crore** total investment.
12. **Question:** With that kind of cost advantage, the question naturally arises—at what price should you sell your product? Earlier, with a ₹4 crore investment, the selling price would have been in the range of **₹280–300 per kg**. But with the reduced capital cost, you can afford to price more aggressively. If you also manufacture your own **PVC**, you could comfortably price your **PVDC film** at around **₹270 per kg**, gaining market share while still maintaining profitability. We don't make our own PVC we take from HRC

    Answer: If your machine is well-functioning and your product is already proven in the market, my opinion is that you **don't need to reduce prices aggressively**. Instead, it's better to **wait a few months** and let the business stabilize, especially since you are already established in the **CFB (consumer-facing blister) market**

13. If you don't have an initial customer base, the way we approached it at Universe was to run the line intermittently — produce **~30 T** and then wait to finish orders later, rather than run at low utilization and incur full fixed costs. Teams often plan for 20 working days a month and then ramp to 24×7 when orders allow. That's a realistic way to manage cash flow while building a client list.

14. Market context: current monthly sales are still around **7,000–8,000 MT/month**. Large players' approximate capacities and outputs I know: **ACG ~900–1,000 T**, **Bilcare + Caprihans combined ~600 T**, our combined supply ~500 T, **ICM ~300–350 T**, plus players like Yash Packaging, Finechem, Savariya and others across Indore and elsewhere. Historically, back in 2006 when I was at ACG, coating production was smaller (ACG ~150 T, Bilcare 50–100 T, Caprihans 100–150 T); the market has grown steadily with new entrants.
15. In pharma there calculations runs in advance, they will give next months order u today, they run in advance, Pharma company is closed in public holidays, in advance they will take raw material and keep
16. Whether you produce **50 tons or 500 tons**, the **basic cost per unit remains largely the same**, but as volume increases, your **effective cost drops across the board** due to economies of scale. Over the last few years, overall **market capacity has been steadily increasing**. For example, **ACG** installed a **Polytrap machine** in the last two years, expanding their production from **500 T to 900–1000 T**. **Bilcare** and **Caprihans** maintain around **300 T**, while newer players like **Rajat, Pidyea, ICM, Savariya, and Shree Vishnu** each have capacities of **250–300 T**.
17. PVC manufacturers are present in India as well, such as **AVI in Daman**. However, the PVC supplier for **ACG** sometimes faces shortages, prompting them to import from China to meet production requirements. According to my experience, **sourcing PVC externally often makes more sense**, as these machines are highly sensitive and can experience significant problems when PVC quality fluctuates.
18. Setting up **calendering** costs around **₹25–30 crore**, with a lead time of **6–8 months**. Calendering is not just an engineering task; it is more of an **art**, requiring a skilled operator to manage fine-tuning, quality, color and shade matching, and multiple other parameters. Producing PVC in-house costs about **₹80–90/kg**, compared to **₹130/kg** if sourced externally.
19. In my opinion, in the **initial phase**, the focus should be on **setting up and understanding the business**. If you source PVC externally, you get a **readymade finished product**, but it still requires **setup for PVDC coating**. Minor issues may arise initially, but these can be **quickly resolved**.
20. During the machine commissioning phase, it's important to **ensure the film is drying properly** and **meeting quality parameters**, including the required **GSM**. Operators should avoid putting undue pressure on the machine to force higher output. It is better to run **smaller coating batches multiple times** rather than trying to push one large batch beyond the machine's optimal capacity

21. A few practical, operational learnings and recommendations from my experience:
22. • **If you decide to buy a used machine, start with external PVC and finished inputs.** Taking PVC from trusted suppliers gives you a readymade product to begin coating.
    • **Do not rush to push maximum GSM or speed until drying and gravure capacity are proven.** For example, doing 40 gsm in one pass is possible, but you must verify drying, crystallization and thermoforming behaviour over time. Some chemicals and formulations have practical GSM limits.
    • **Test the film thoroughly during commissioning:** confirm the drying zone performance, check per-pass GSM pick up, ensure the gravure cell capacity is adequate, and avoid "milking" the machine beyond reliable settings.

- **Plan for storage and use timelines:** customers may use material after days, weeks or even months; stability and long-term behavior matter.

23. In short: yes — refurbishing a low-cost, used PVDC line can be a viable strategy if the company budgets properly for **revamp capex, peripheral equipment, utilities, skilled manpower, and raw-material advances**. Be conservative in commercial assumptions, focus first on making the line mechanically and electrically robust to minimize downtime, validate formulations carefully (especially for high-speed customers), and secure a raw material buying plan so your pricing and margins are sustainable.