Shale Shaker Selection — Field Guide

The shaker is sized by what it must process and what it must remove — in that order. Work through the five factors below before comparing brands.

Factor	What to check	Field note
1 · Flow capacity	Each shaker must handle its share of max circulating rate at the finest screen the program calls for — with 75–80% deck coverage, not 100%.	Undersized banks force coarser screens; the “capacity” you gain is solids you keep.
2 · Deck motion	Linear motion: strong, consistent conveyance — the general-purpose standard. Balanced-elliptical: gentler action, typically kinder to screens and drier discharge on sticky solids.	Match motion to the formation, not the brochure.
3 · G-force	Typical linear machines run ~6.5–7.5 G (G ≈ stroke × RPM² ÷ 70,400). More G is not automatically better — it trades screen life for conveyance.	Verify the delivered G, not the nameplate.
4 · Screen area & availability	More usable deck area = finer screening at the same flow. Confirm RP 13C-labelled panels are actually available in your region for that deck.	A great shaker with unobtainable screens is a bad shaker.
5 · The duty spectrum	Top-hole gumbo needs scalping capacity and aggressive conveyance; deep fine-solids sections need fine-screen stability. If one machine must do both, bias to flexibility.	Consider a scalper ahead of the primaries where gumbo is expected.

The acceptance test that matters

Whatever you buy or rent: at max flow, the bank must run the program’s finest screen with 75–80% coverage, no flooding, and API numbers recorded per panel. Put that sentence in the contract — it converts marketing into a measurable obligation.

Deep dives: scdrilltech.com/equipment/shale-shaker.html · /linear-vs-balanced-elliptical-shaker.html · /articles/shaker-screen-api-mesh-micron-chart.html