
PVNK K-2 / SVPC K-2 · AN EVOLUTIONARY LIFT SOLUTION

The Evolution of Oil Recovery

Submersible Vibratory Pumping Complex — production where existing artificial-lift methods reach their technical or economic limit.

The Path to SVPC K-2

03 Industry Context · 2026

04 Existing Lift Methods

05 Natural Flow

06 Six Artificial-Lift Methods

07 Lift Dynamics, 1975 – 2015

08 **The Problem: Depleted Wells**

09 **The Solution: SVPC K-2**

10 Physical Principle

11 System Components

12 Seven Advantages

13 Four Application Areas

14 **Comparative Matrix**

15 Economics & Market

16 Contacts

Why the world needs a new way to lift oil

Modern oil production has hit three structural limits that existing technologies do not close.

- **Depletion of "easy" reservoirs** — natural flow and conventional lift recover ever smaller volumes at rising cost per barrel.
- **Shift toward heavy and viscous oils** — heavy-oil provinces are growing faster than the rest, with a persistent gap in cost-effective lift technology.
- **Remote, un-built fields** — reservoirs that classical lift methods cannot reach economically or logistically.

DEPLETED STOCK

Global base of idle wells

A large share of the world's well stock is depleted or marginal. Many wells are shut-in because no existing lift method makes them economic.

HEAVY OIL

A growing segment of global production

High-viscosity reservoirs in aggressive environments — a segment where ESP and SRP reach their technical limit.

Seven oil-production methods perfected over a century – and the wall each one hits.

Natural flow

Native reservoir energy. Declines as the field ages.

SRP (sucker rod)

Beam pump with surface unit. Shallow, vertical wells only.

ESP

Electric submersible pump. Needs power on site, dislikes solids.

Gas Lift

Gas injection into the annulus. Requires compressors and a gas line.

HJP (jet pump)

Hydraulic jet pump. Needs a surface power-fluid system.

PCP (progressing cavity)

Good for viscous oil, but limited by depth and abrasive wear.

Plunger Lift

Gas-condensate dewatering. Narrow application.

The industry's baseline

Lift powered by reservoir energy itself — no pumps, no drives. The cheapest method on the planet, and the most exhaustible.

- **Energy source:** native reservoir pressure
- **Applicability:** only fresh, undepleted reservoirs
- **Lifecycle:** sharp decline as reservoir pressure falls
- **Constraint:** the share of fields on natural flow shrinks every year

REFERENCE POINT

Why we start with natural flow

Natural flow is the industry's economic ideal: zero opex, zero downhole equipment. Every artificial-lift method is an attempt to recreate its economics once reservoir pressure can no longer carry the column. Among them, SVPC K-2 sits closest to natural-flow economics.

Six classical methods and where they end

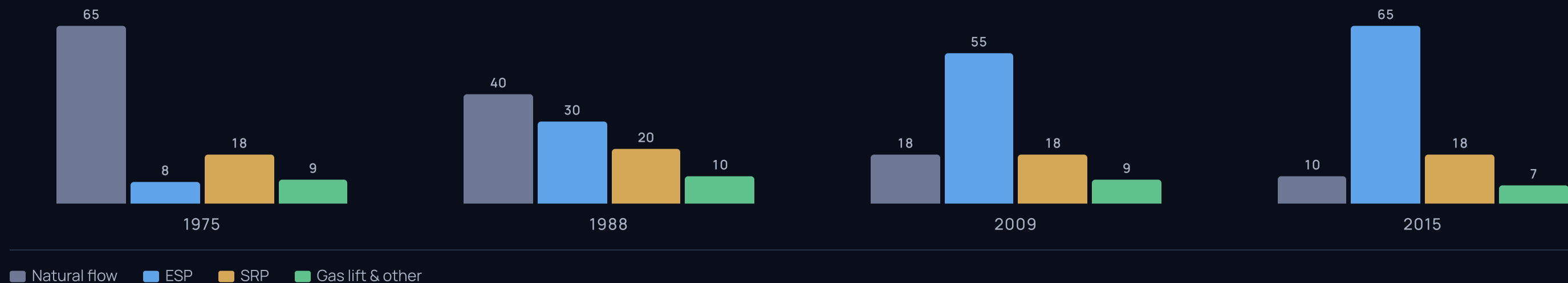
METHOD	PRINCIPLE	WHERE IT WORKS	WHERE IT STALLS
SRP	Sucker rod	Shallow, vertical wells	Deviated wells, heavy oil, large beam-unit footprint
ESP	Centrifugal	Mid-to-deep wells, low viscosity	Heavy oil, solids, no production without on-site power
Gas Lift	Gas injection	High GOR wells	Requires a compressor station and gas supply
HJP	Hydraulic jet	Flexibility across rate ranges	Surface power-fluid plant — heavy capex on site
PCP	Positive displacement	Heavy oil at moderate depths	Depth, abrasion, elastomer life
Plunger Lift	Gas-condensate	Liquid removal from gas wells	Narrow use case, not a primary lift method

Each of the six solves part of the puzzle. None of them addresses depleted wells with heavy oil on un-built fields all at once.

How global artificial lift has evolved

Across four decades, the structure of artificial lift has been completely rewritten.

- The **natural-flow share** shrank — every new major field stays on natural flow only briefly.
- **ESP** rose from a niche method to the dominant one, alongside a growing dependence on power and surface infrastructure.
- **SRP and gas lift** kept their niche but do not address the new tasks — depleted stock, heavy oil, remote fields.



Indicative shares of global mechanical lift, by year. Trend per Center Group Company data.

Depleted wells — a major unsolved problem in oil

A large share of the world's well stock barely flows or sits shut-in. No existing artificial-lift method can produce these wells: each runs into its own wall — viscosity, depth, lack of power, lack of infrastructure.

Depleted stock

Idle wells across the world — candidates for re-activation by SVPC K-2.

Greenfield sites

Fields without infrastructure or power, where existing methods cannot be installed economically.

Heavy oil

High-viscosity reservoirs in aggressive environments, where ESP and SRP fail.

SVPC K₋₂ — an **evolutionary breakthrough** in oil recovery

A genuinely new artificial-lift method that produces oil **where every existing technology reaches its technical or economic limit** — without tubing, without surface build-out, without electrification, at any depth, in aggressive environments, on heavy viscous oil.

VIBRATORY LIFT PRINCIPLE

TUBING-FREE

NO ELECTRIFICATION

WIRELINE DEPLOYMENT

ANY DEPTH

HEAVY OIL READY

— **The wireline unit is standard equipment**, available across every oil-and-gas region. No specialised rig fleet needed.

— **Deployment as a routine wireline operation** — mobility instead of surface build-out.

1 Wireline unit (PKS / PKN type) at surface

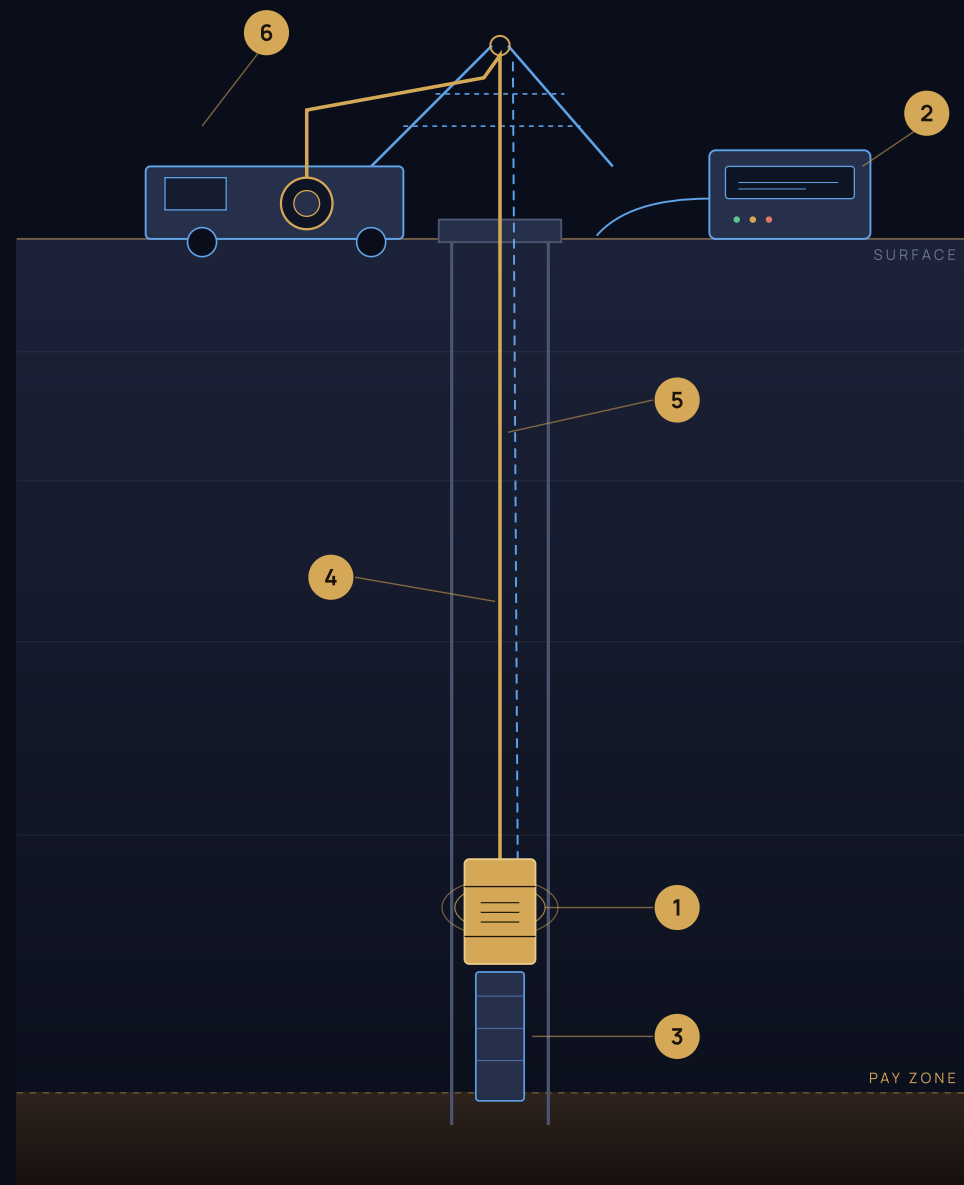
2 Load-bearing cable / wireline (replaces tubing string)

3 Armored ECG cable — power and control

4 Submersible vibratory pumping station

5 Specialised downhole pipe assembly

6 Liquid lifted by vibratory impulse



1 Submersible vibratory pumping stations
The heart of the system – they realise the vibratory lift principle.

2 Surface control unit for the pumping station
Monitoring and regulation of the pump operating modes.

3 Specialised downhole pipe assembly
Various diameters and lengths – fit to any wellbore geometry.

4 Armored load-bearing power-and-control cable

Seven advantages of SVPC K-2

1

Any well depth

No fluid-column ceiling – works where centrifugal and rod systems give up.

2

Tubing-free

Removes the largest single piece of well infrastructure and its capex.

3

No surface production equipment

Production from greenfield sites with no pre-built wellhead infrastructure.

4

Off-grid, off-infrastructure

Independence from external power and surface utilities.

5

Re-activation & recovery upside

Brings shut-in wells back online and unlocks marginal fields with significant remaining-recovery potential.

6

Lower cost than any peer

SVPC K-2 is cheaper to acquire than any equivalent artificial-lift solution.

7

Simple to operate, environmentally clean

Minimal crew, reliable in operation, environmentally clean for the surrounding environment.

Four use cases

I

Well clusters with complex reservoir conditions

High viscosity, deviated wellbores, solids, aggressive formation water – any combination of complications.

II

Entire fields without infrastructure

Production at minimum capex, without wellhead or external surface build-out.

III

Shut-in fields

Ready-to-restart assets where ESP and SRP are economically meaningless.

IV

Individual wells

Where production by every other method is impossible. Targeted use on the toughest cases.

Seven requirements — one method that closes them all

METHOD	ANY DEPTH	TUBING-FREE	NO INFRA	HEAVY OIL	DEVIATED	RE-ACTIVATION	COST
Natural flow	—	—	—	—	—	—	low
SRP	—	—	—	—	—	—	low
ESP	yes	—	—	—	mid	—	high
Gas Lift	yes	—	—	—	yes	—	high
HJP	mid	—	—	—	yes	—	mid
PCP	mid	—	—	yes	—	—	mid
Plunger Lift	—	—	—	—	—	—	mid
SVPC K-2	yes	yes	yes	yes	yes	yes	low

SVPC K-2 is the only method that closes all seven requirements at once.

Where the technology hits hardest

- **Global depleted-well stock** — a vast base of idle or sub-economic wells across the world's mature provinces.
- **Heavy-oil provinces** — a growing share of global production with a persistent technology gap on cost-effective lift.
- **Remote, un-built fields** — assets without power or surface infrastructure that classical methods cannot reach economically.
- **Independent operators and mid-sized producers** — for whom ESP and SRP are out of reach, capital-wise or technically.

CAPEX

Materially lower than the industry standard

No tubing, no surface build-out, no electrification — three line items removed. Wells become economic where ESP cannot even be installed.

SPEED TO PRODUCTION

Standard wireline operation

Running SVPC K-2 uses an off-the-shelf wireline unit — no surface build-out, no specialised rig fleet.

MARKET POSITION

Open niche

In the target segments SVPC K-2 has no direct peer. Early market capture builds a durable technology advantage.

Aslan Kaa

CENTER GROUP COMPANY · THE EVOLUTION OF OIL RECOVERY

PHONE

+7 (969) 795-55-55

+7 (925) 203-77-77

EMAIL

aslankaa@yandex.ru

WEB

www.aslankaa.com

TELEGRAM

[@aslan_kaa](https://www.instagram.com/aslan_kaa)

INSTAGRAM

[@aslan_kaa](https://www.instagram.com/aslan_kaa)

X (TWITTER)

[@aslanoff](https://twitter.com/aslanoff)

OPEN TO PARTNERSHIPS, LICENSING, AND PILOT DEPLOYMENTS