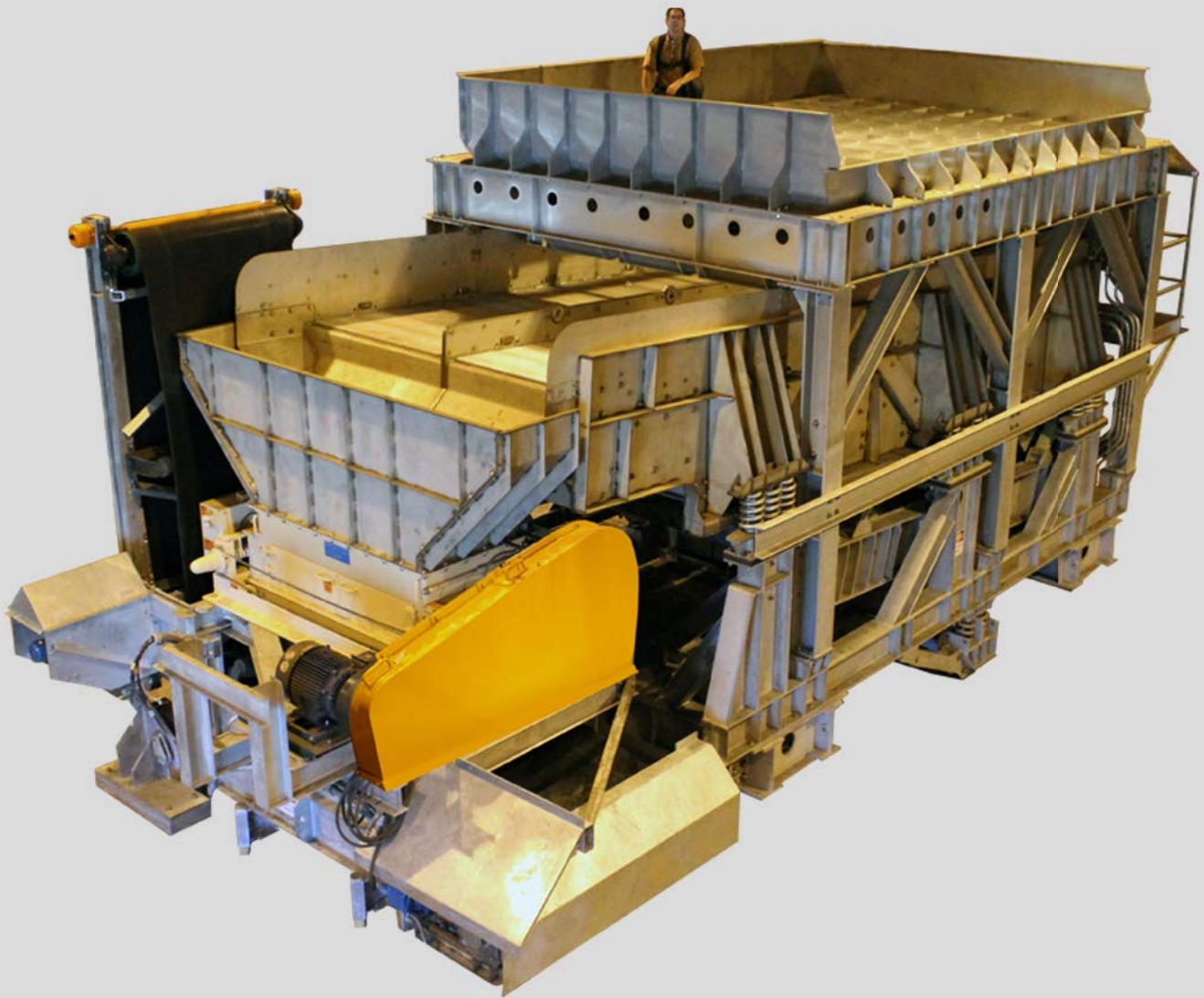


PETROLEUM COKE DE-WATERING

Automated Coke Handling / Processing Solutions from Drum to Coke Yard



- ✓ Exclusive Petcoke De-watering technology.
- ✓ Designed for sponge, shot, or needle coke.
- ✓ Stationary, track mounted or rail mounted systems.
- ✓ Produces dry, conveyable, stackable solids.

Unique Vibratory Equipment Technology For Continuous, Unattended De-watering of Petroleum Coke

General Kinematics refinery-proven petroleum coke de-watering technology is designed for continuous, unattended de-watering with little to no maintenance. It produces dry, stackable and conveyable solids in an efficient system that is not affected by the amount of water in the solids.

Fits Most Coking Systems & Applications

The General Kinematics de-watering process removes water from petroleum coke before conveying to the coke yard, barn or dome. It delivers unequalled de-watering performance for stationary, track mounted, or rail mounted systems, and will efficiently de-water shot, sponge, or needle coke. Equally important, our unique vibratory process is designed to fit most coking systems, including:

- ✓ Clamshell overhead loading next to pit
- ✓ Front-end loading on pads or next to pit
- ✓ Feed from under-the-drum crushers
- ✓ Hydro sluiceway systems

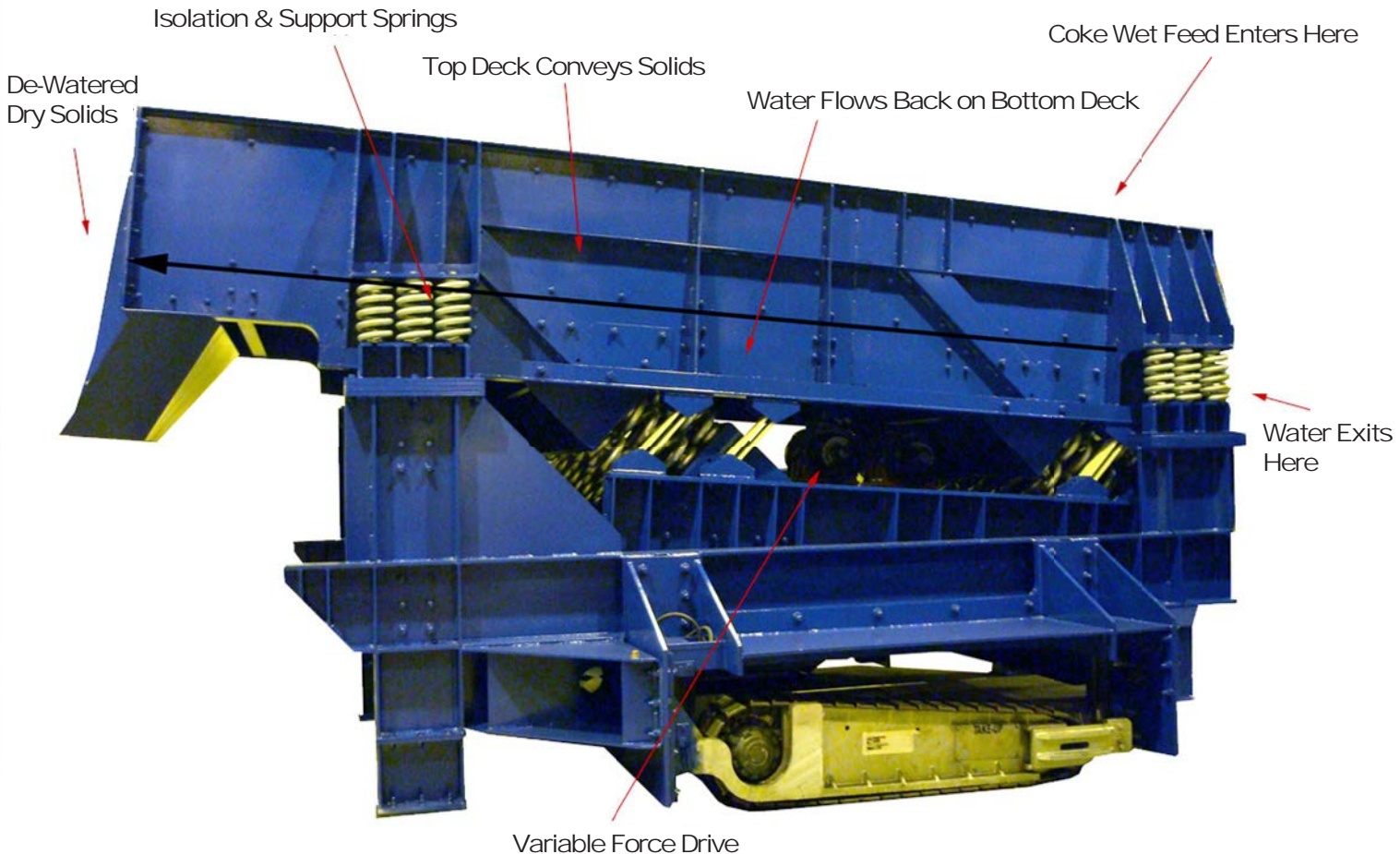
System Design Features

Our patented, non-plugging, de-watering deck produces dry, conveyable petroleum coke and includes these important performance and operating features:

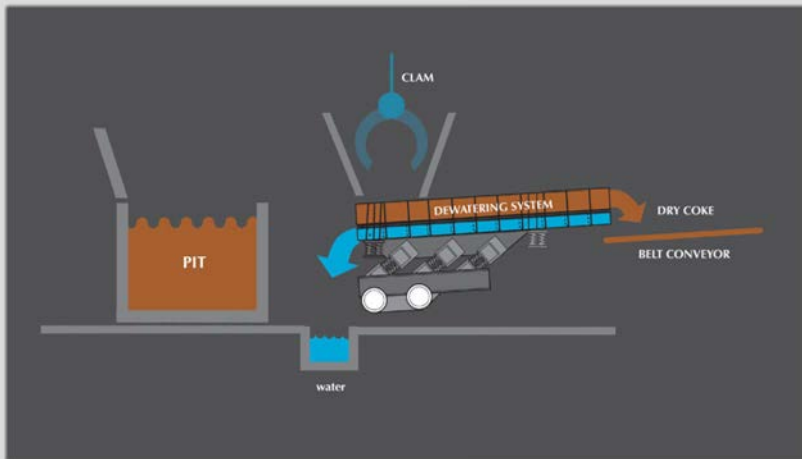
- ✓ Designed for all types of Pet Coke
- ✓ Non-plugging design works without screens
- ✓ Solids from 350 to 800 TPH or higher on request
- ✓ Water rates to 5,000 GPM or higher
- ✓ Handles fines and "super" fines
- ✓ Accepts pieces up to 5' diameter
- ✓ Energy saving two-mass vibratory drive system
- ✓ Heavy-duty stainless steel construction for tough refinery service

How GK Vibratory Equipment Works

Our Pet Coke de-watering units utilize the principle of two-mass, natural frequency, sub-resonant magnification. What this means is a small exciting force acts upon a coil spring amplification system to alternately store and release energy and move material with a shuffling motion. This drive system is proven in thousands of process and bulk material applications, and is now applicable to Pet Coke de-watering via our unique and patented deck design.



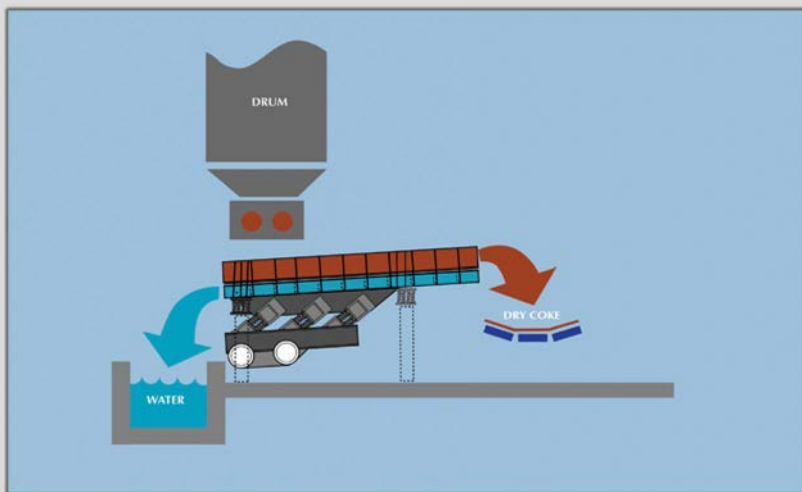
General Kinematics Petroleum Coke De-Watering System Examples



Pit Side Arrangement

The GK Pet Coke system minimizes bridge crane use. Simply position the bridge over the pit and utilize the trolley to move material back and forth to the GK unit. An overhead clamshell bucket can be used to dump wet Pet Coke into a hopper with grid above the General Kinematics de-watering unit.

Separated water flows into a sluiceway or back into the pit for recycling. Dry coke is deposited onto a belt conveyor for storage or loading. Double or triple stacking in the pit is eliminated as well as "flush back" on conveyor belts. The GK de-watering technology enables dumping of inundated clamshell loads directly onto our de-watering conveyor.



Under Drum Arrangement

The coking drum discharges through a special double roll crusher to the General Kinematics vibratory de-watering unit. Water is returned to the sluiceway as dry coke is transferred on to a belt conveyor to storage.



Hydro Sluiceway Arrangement

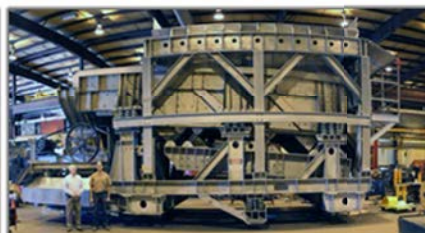
Rail mounted double roll crusher deposits material into a sluiceway which transfers water and coke into a sump. Material is then sent via slurry pump to the General Kinematics de-watering system. Water is returned to the sluiceway, and dry coke is transferred on to a belt conveyor to storage.



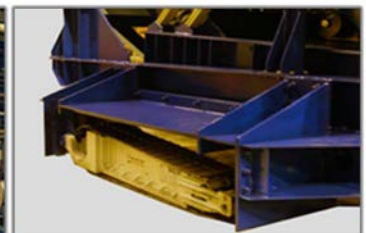
GK Patented De-Watering Deck



Dump Hopper with Grid



Completely integrated De-Watering Systems



Various Mobile Carriage Options

Who we are

General Kinematics is the premier manufacturer of vibrating equipment for the processing of bulk materials. From vibratory feeders to entire process systems, GK can create the solution you require to process even the most difficult materials.

What we do

No company in the field of vibratory equipment has consistently produced more innovative equipment ideas and problem solving application techniques than General Kinematics. For more than five decades we've maintained a solid reputation for design leadership – with exclusive vibratory drive systems, simplified spring reactor systems, and the most rugged and reliable construction available. Thousands of application tailored technical advancements have made General Kinematics' vibratory feeders and equipment excel in the most difficult environments.

Why buy from GK

When facing the decision of purchasing capital equipment, a lot is on the line. Will the equipment work as promised? Will the equipment be reliable? Will it be a maintenance nightmare? What if it doesn't work? General Kinematics has proven through one successful installation to the next that our solutions reduce your risk of buying while helping to improve your process and increase profit to your bottom line.

GK Highlights

- Extensive install base: 40,000+ installations in 35 countries.
- 24/7/365 customer service and support, with the ability to have a GK service representative on-site anywhere in the world in under 22 hours.
- Available same day shipping on all off the shelf, in-stock components.
- Industry leadership in innovation... 4 times the patents than the next leading vibratory equipment manufacturer.
- General Kinematics has the largest install base of vibratory foundry equipment in the world.
- All U.S. and many leading European automotive manufacturers choose General Kinematics vibratory equipment to solve their vibratory process solution needs.
- 100% Process Guarantee: GK has never walked away from a customer with a problem and is committed to getting your process up and running.
- General Kinematics is recognized by the editor of the leading recycling trade journal as providing the best recycling system solution to the C&D industry.
- 150 power plants in the US trust GK vibrating feeders to keep their coal flowing.
- General Kinematics is the only heavy-duty vibratory equipment company certified in ISO:9001.

General Kinematics partners with our customers to provide vibratory equipment that improves their throughput, increases their profitability, and reduces maintenance costs. The employees of GK genuinely want our customers to be successful in their businesses, and will do all they can to provide you with equipment and solutions to do so.

