

Miki Pulley

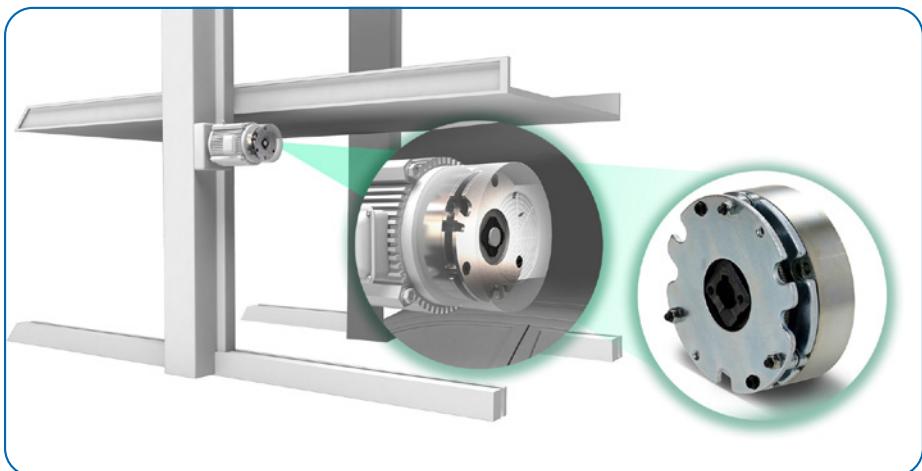
BXL BRAKES DESIGNED FOR CHALLENGING ELEVATOR AND LIFT APPLICATIONS

Miki Pulley announces introduction of its spring actuated BXL Brakes designed for the challenging requirements of elevator and lift applications. Designed exclusively for dynamic braking, these brakes are designed for constant elevator usage where long service life with high wear resistance is required.

BXL Brakes feature minimal torque fluctuation, even when stopped from maximum rpm. This ensures a smooth elevator and lift stop without any jarring motion. Also important, these are very quiet operating brakes. Excessive braking noise is minimized by the brake's flat spring design strategically located on the brake's rotor hub.

Additional features include a light-weight component, space saving design configuration, long service life, stable and reliable braking power. Easily installed, these Miki Pulley BXL Brakes require no maintenance.

Miki Pulley BXL Brake specification range:



- Brake torque: 1.475 ft/lb. to 16.226ft/lb. (2 Nm-22 Nm)
- Brake outer diameter: 3.268" to 76.221" (83 mm to 158 mm)
- Ambient Temperature: 14°F~104°F; (-10°C~40°C)

Additional applications include robotic systems, printing presses, food and paper processing systems, packaging

equipment, textile manufacturing systems and many servo & stepper motor driven systems plus many more.

For more information:

Miki Pulley US
Phone: (800) 533-1731
www.mikipulley-us.com

Voith

DELIVERS ELECTRIC SCHNEIDER PROPELLER TO SHIPPING COMPANY

Voith will deliver eight electric Voith Schneider Propellers (eVSP) to the Norwegian shipping company Østensjø, thus enabling resource-saving and energy-efficient operation of the four offshore wind supply vessels. The four

ships will be built in Spain and are already equipped for the application of CO₂-neutral hydrogen technology. Among the advantages of the new eVSP are, in particular, the high efficiency and reduction of complexity, as the

permanent-magnet synchronous motor is already integrated in the propeller.

Furthermore, the best possible maneuvering performance is a decisive factor for use in the offshore wind industry. Accurate dynamic positioning (DP) even under harsh environmental conditions, very fast starting and leaving of the wind turbines, and a safe and quick transfer in the offshore wind farm are critical factors for smooth operation.

Comparative calculations have shown that a VSP-driven ship can maneuver safely at significantly higher wave heights, thus offering the operator an economic advantage. Due to the very fast and accurate thrust adjustment, the VSP can reduce the rolling motions of the ship by up to 70 percent, both when the ship is moving and when it is stationary at the wind turbine.

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The electric Voith Schneider Propellers are also characterized by very high efficiency and are optimally integrated into the ship's design. In model tests with ducted screw propellers, an average advantage of 15 percent for the eVSP was measured with regard to power requirements in transit. The electric version of the VSP is also characterized by lower fuel consumption in dynamic positioning, because it acts very quickly against disturbing wind, wave and flow forces.

Resource-saving new development

The eVSP is a new development of the Voith technology group. With this new type of gearless propeller, the permanent-magnet synchronous motor is directly integrated into the VSP. The drive system combines the technology of the VSP with more than a decade of electrical know-how of the Voith Inline Thruster (VIT).

The advantages of the eVSP are easy to recognize: An increase in efficiency due to the elimination of gears and the reduction of bearing points, as well as a very high motor efficiency, also in the partial load range, which is particularly relevant in the offshore sector. In addition, no separate electric motor is required and shaft lines are also eliminated.

For more information:

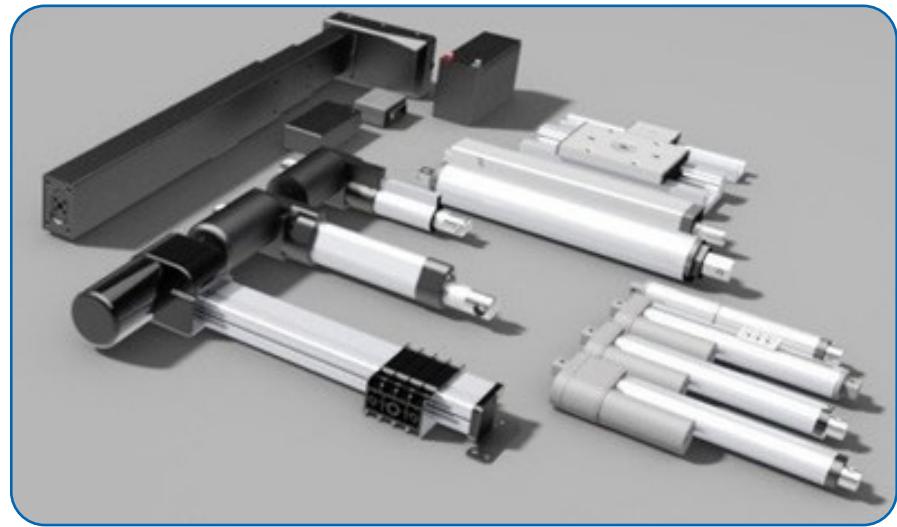
Voith
Phone: (717) 792-7095
www.voith.com

Firgelli Automations

OFFERS SMART CONTROLLER FOR LINEAR ACTUATORS

Firgelli Automations recently introduced its new Smart Synchronous Controller for linear actuators. Feedback Linear Actuators are used extensively in industry for applications where precise motion control is required. Firgelli has been manufacturing Feedback Linear Actuators for

"We've been coming up with innovative solutions to linear movement problems since 2002, but the Smart Controller takes Firgelli's passion for precision and adds a next-level control to it," says Firgelli CEO and founder Robbie Dickson. "Over the years, we've noticed that the uses of



year and its most recent new model named "The Bullet Series" got its name from the unique inner expansion rod apparatus, which resembles a bullet being pushed out of the barrel of a gun.

The Bullet Series features sleek looks and versatility, with some "calibers" of the actuator series offering high-tech options like a built-in hall effect sensor for feedback, which allows for position and speed control. However a Smart Control box had until now yet to be developed, because Firgelli wanted the Smart Controller to have the ability to accept multiple feedback options, and all work within one Controller.

our products occasionally put them in products where synchronization is required, so we wanted to make a high-performance Smart Controller that offers the flexibility to accept different sensor inputs such as Hall effect, Optical and potentiometer inputs."

For more information:

Firgelli Automations
Phone: (866) 226-0465
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Heidenhain

ANNOUNCES LATEST RENCO ENCODER

Heidenhain is proud to announce the release of its next generation of Renco brand rotary encoders to the market. This new generation includes an upgraded R35i model and a successor to the RCML15 encoder with the R35iL low profile encoder. Both solutions are equipped with a new Opto-Asic that provides additional features and improved functionality to users.

The Renco R35i and R35iL encoders are ideal for use in brushless DC motors or stepper motor solutions. Their compact size combined with the high level of performance



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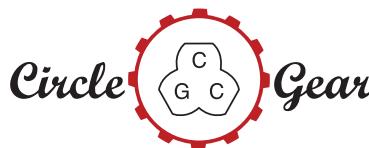
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and availability make these products the top choice for applications such as medical devices, warehouse robotics and laser scanning.

Both encoders now come with a brand-new Diagnostic and Field Programming (DFP) feature not before seen on incremental encoders of this type. This DFP functionality allows users to perform mounting checks, quick and simple diagnostic functions, and electronic commutation setting which can reduce mounting time of each encoder up to 10 minutes.

Additional features include an extended tolerance on mounting specifications, increased output frequency performance up to 1.83 MHz and reduced height down to 8.6 mm. All these improvements are specifically included to increase availability and ease of use of the encoder.

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Zero-Max

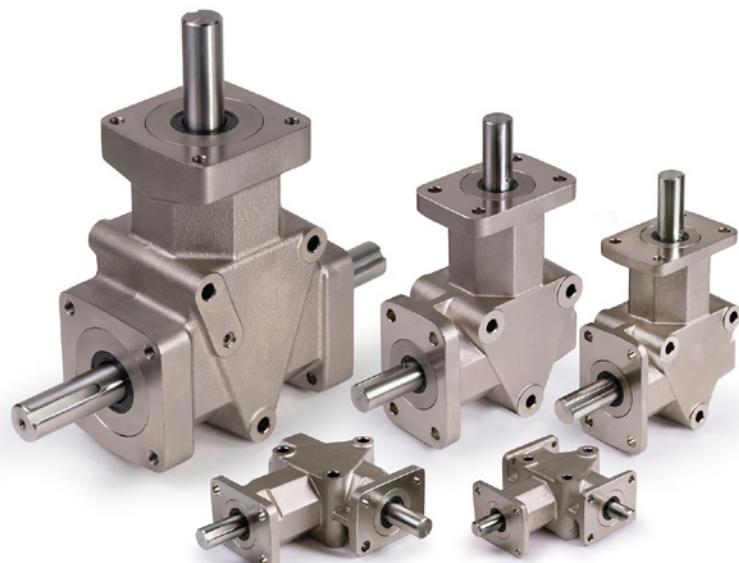
OFFERS IP65 RATED CROWN RIGHT ANGLE GEAR DRIVES

Tested and certified by an independent laboratory, the IP65 Rated models feature a nickel plated housing for corrosion protection and are now available in 1:1 and 2:1 ratios and 2-way, 3-way, and counter-rotating shaft configurations for reliable and quiet transmission of power. With a successful 60-year application history, Crown Gear Drives are a proven design that are now open to new application opportunities with this IP65 Rating.

Ideal for food processing and food

bevel gears and are lubricated for life with H1 Rated Food Grade Grease. Additional features include a sealed and tamper proof design, precision hardened and ground ball bearings, maintenance free operation, and grease lubrication to ensure optimum performance in temperature ranges from -20° C to +100° C (-4° F to +212° F). Wider operating temperature range available upon request.

Most important, these Crown Drives have a bright, clean, water-shedding



packaging applications, and harsh environments requiring frequent washdowns, these Crown Gear Drives feature Ingress Protection, sealing the Crown Gear against environmental concerns such as dust, dirt and water infiltration from water jets. They also feature nickel plated housings, corrosion-protected stainless-steel shafts and NBR covered shaft seals, adding more protection from washdown chemicals and process chemicals present in challenging applications.

Capable of speeds up to 2,000 rpm, IP65 Rated Crown Gear Drives feature heat treated AGMA Class 10 spiral

design that is free from bacteria traps.

Zero-Max Crown Gear Drives are available in many sizes and models for a wide range of horsepower, torque and shaft speed requirements. Featuring a low backlash design, these drives are available with 1:1 and 2:1 ratios and shaft diameters of 3/8, 1/2, 5/8, 3/4 and 1-inch. Stocked in Minneapolis, MN for fast shipment, modified and special designs are also available by quote.

For more information:

Zero-Max, Inc.
Phone: (800) 533-1731
www.zero-max.com

Gates

EXPANDS CARBON DRIVE PORTFOLIO

Building on a 40-year legacy of designing and manufacturing belt-drives as a lower-maintenance, rust-free, quieter and stronger alternative to chain drives for two-wheelers, Gates Carbon Drive is refreshing its overall product portfolio with new and expanded component lines, offering next-generation sprockets, belts and cranksets optimized for ebikes, entry-level commuter and extreme performance bicycles.

These new offerings add to Gates' portfolio of mobility solutions covering a wide variety of applications:

- idetrack (ST): For seasonal, recreational cyclists looking for their first belt-driven bike (new)
- Carbon Drive Network (CDN): for seasonal, recreational cyclists who commute occasionally
- Carbon Drive Commute (CDC): for cyclists who bike or e bike for many kinds of urban trips (new)



- Carbon Drive Xtreme (CDX): for cyclists who ride pavement or dirt year-round
- Carbon Drive Expedition (CDX:EXP): for cyclists up for toughest, grittiest pavement or dirt adventures (new)

For more information:

Gates Corporation
Phone: (303) 744-5800
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KEB America

INTRODUCES HIGH CAPACITY SPRING-SET LOAD BRAKES

KEB America has introduced their new High Capacity Load brake.

The brakes use a spring-set (power-off) design and are electrically released. The brakes are offered in graduated sizes up to 3,200 Nm (2,360 ft-lb).

"These brakes are ideal for critical lifting applications that require secondary braking. This includes cranes, hoists, and lifts," says KEB Marketing Manager, Jonathan Bullick.

The brakes feature a number of standard features including noise reduction, a manual bolt release mechanism, and an integrated mounting



flange. Brake options include a microswitch for engagement feedback, a manual hand release, and an IP54 rated cover. The brakes are manufactured at KEB America's facility outside Minneapolis, MN and are available for sale immediately.

For more information:

KEB America, Inc.
Phone: (952) 224-1400
www.kebamerica.com

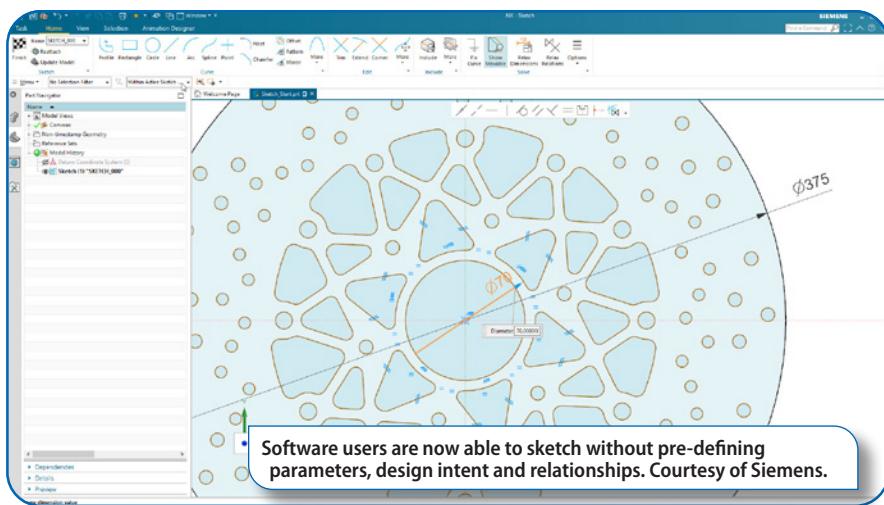
Siemens Digital Industries Software

ANNOUNCES NX SKETCH SOFTWARE TOOL FOR CAPTURING 2D CONCEPTS

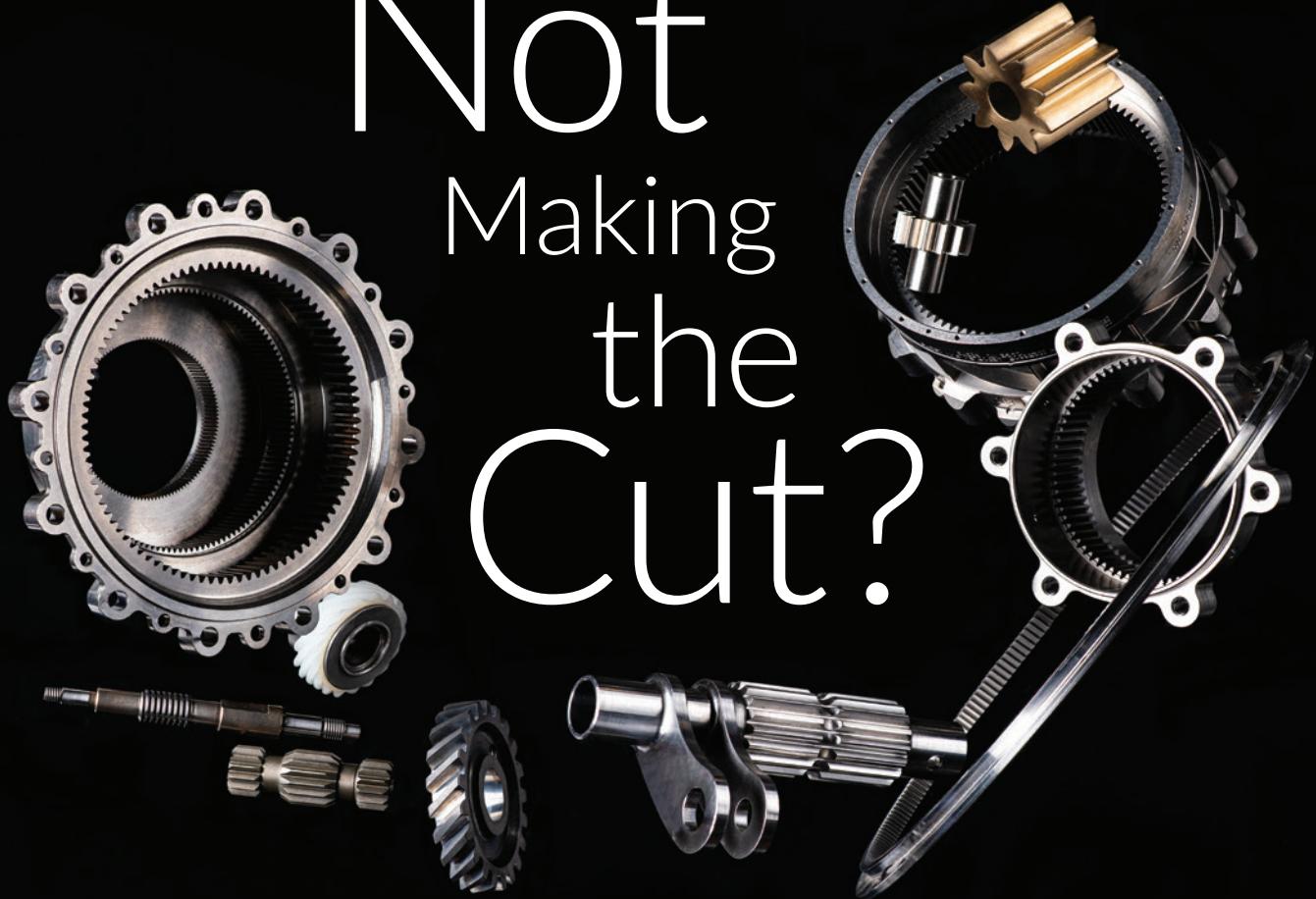
Siemens Digital Industries Software is announcing a new solution for capturing concepts in 2D. The new *NX Sketch* software tool revolutionizes sketching in CAD, which is an essential part of the design process. By changing the underlying technology, users are now able to sketch without pre-defining parameters, design intent and relationships. Using Artificial Intelligence (AI) to infer relationships on the fly, users can move away from a paper hand sketch and truly create concept designs within *NX* software. This technology offers significant flexibility in

concept design sketching, and makes it easy to work with imported data, allowing rapid design iteration on legacy data, and to work with tens of thousands of curves within a single sketch. With these latest enhancements to *NX*, Siemens' *Xcelerator* portfolio continues to bring together advanced technology, even within the core of modelling techniques, helping remove the traditional barriers users have experienced to dramatically improve productivity.

"The ability to make intelligent changes to 2D entities that one imports



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into the new sketcher is astounding," said Steve Samuels, CEO of Design Visionaries Inc.

Analysis has shown that in an average day or workflow, around 10% of a typical user's day is spent sketching. In addition, within current design environments most concept sketching is happening outside of the CAD software due to the level of rules and relationships that must be decided on and built into the sketch by the user up front. Often designers in concept design stage do not necessarily know what the final product may be, which requires a sketching environment that is flexible and can evolve with the design. NX offers the flexibility of 2D paper concept design within the 3D CAD environment, as the first in the industry to eliminate upfront constraints on the design. Instead of defining and

being limited by constraints such as size or relationships, NX can recognize tangents and other design relationships to adjust on the fly.

"Sketching is at the heart of CAD and is critical to capturing the intent of the digital twin," said Bob Haubrock, senior vice president, product engineering software at Siemens Digital Industries Software. "Even though this is an essential part of the process, sketching hasn't changed much in the last 40 years. Using technology and innovations from multiple past acquisitions, Siemens is able to take a fresh look at this crucial design step and modernize it in a way that will help our customers achieve significant gains in productivity and innovation."

For more information:
Siemens Digital Industries Software
Phone: (800) 498-5351
www.sw.siemens.com

H2W Technologies

OFFERS SINGLE AXIS LINEAR STEPPER MOTORS

H2W Technologies' single axis linear stepper motors are ideal for high-speed open loop positioning applications. They can perform at speeds of up to 80 in/sec [2 m/sec] and strokes of up to 68 in [1.7 m]. Linear stepper motors are capable of very precise position, velocity, and acceleration control when coupled with a micro-stepping drive and indexer.

The moving assembly called the "forcer" is supported by magnetically preloaded air bearings that are embedded in the active surface of the forcer, and on a single side of the platen to minimize the physical contact of bearings on the platen. The bearings are designed to support the customer's payload and to maintain the required 0.0005 in to 0.0010 in [12 to 25 micron] air gap between the platen and the forcer.

The step and direction signal comes from a micro-stepping drive (2 or 4 phase).

An indexer is required to send step and direction signals to the driver. For 2 phase motors, the full step is 0.010 in [250 microns] and for 4 phase motors the full step is 0.005 in [125 microns]. With micro-stepping, resolutions in the order of 0.5 to 1 micron are achievable.

The single axis linear stepper motor is a complete air bearing positioning system with the motor, the bearings, and the positioning system all built into one compact package. Integrating a linear encoder with the stepper motor allows for a hybrid, closed loop positioning system.

For more information:
H2W Technologies, Inc.
Phone: (888) 702-0540
www.h2wtech.com



Emerson Automation Solutions

MULTI-PLUG SYSTEMS OFFERS CABLE AND PIPE SEALING SOLUTION

The Nelson Firestop MPS Multi-Plug System by Emerson is a proven cable and pipe sealing solution, for use in commercial building, wall and floor penetrations, as well as in marine bulkhead and deck applications, offshore platforms and power stations. As convenient as it is cost-effective, it offers fast, simple installation that requires only common hand tools.

The Nelson Firestop MPS Multi-Plug System stops fire from spreading through pipe sleeves or case round openings where cables and pipes carry electricity, potable water, HVAC systems and Internet to the building or ship. To bring a structure back up to its original fire rating after a hole is cut into it, the system creates an airtight seal at the opening, preventing passage of fire, water, gas, sound and blast pressures by utilizing Tecron rubber modules that fit snuggly around the pass-through pipes and cables. This helps extend the time needed to safely evacuate a building or maritime vessel in the event of a fire, while also limiting property loss and water damage.

When installing the circular MPS Multi-Plug penetrator, the contractor is afforded the simplicity of a grid format for assigning cables. Each cable is placed between a pair of grooved insert blocks that fit into the MPS Multi-Plug penetrator in a modular fashion, with the grid allocating space in a series of squares. Bolts are tightened to compress the blocks against cables and pipes to establish a rigid seal. Interchangeability of the MPS block modules helps the contractor save time and achieve flexibility when firestopping multiple size cables and pipes within a single MPS Multi-Plug system.

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