

# KRINNER



## KRINNER GROUND SCREWS CONSTRUCTION APPLICATIONS



The pioneer in sustainable foundation construction

# KRINNER APPLICATIONS

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KRINNER ground screws are an economical and sustainable solution for many construction applications. KRINNER, as the original designer and patent holder of ground screw technology, has extensive experience utilizing ground screw for commercial and residential applications.

Our management of all quality related processes, purpose-developed machinery and global manufacturing, distribution and installation support place us in a unique position to highlight foundation efficiencies within your construction projects.

## CONSTRUCTION

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KRINNER's expertise and product offerings represent real benefits to construction projects. The ground screws are compatible with a range of 6x6, 4x4 and U series brackets making for seamless integration. KRINNER is committed to offering everyone the experience of quicker, cleaner and smarter foundations for your next project.



# CONSTRUCTION APPLICATIONS

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FRAMED CONSTRUCTION



ACCESSORY DWELLING UNITS (TINY HOMES)



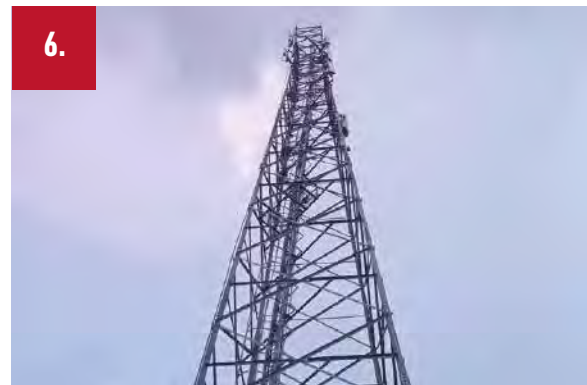
CARPARKS



SHEDS, DECKS AND FENCES



BRIDGES AND SIGNALS

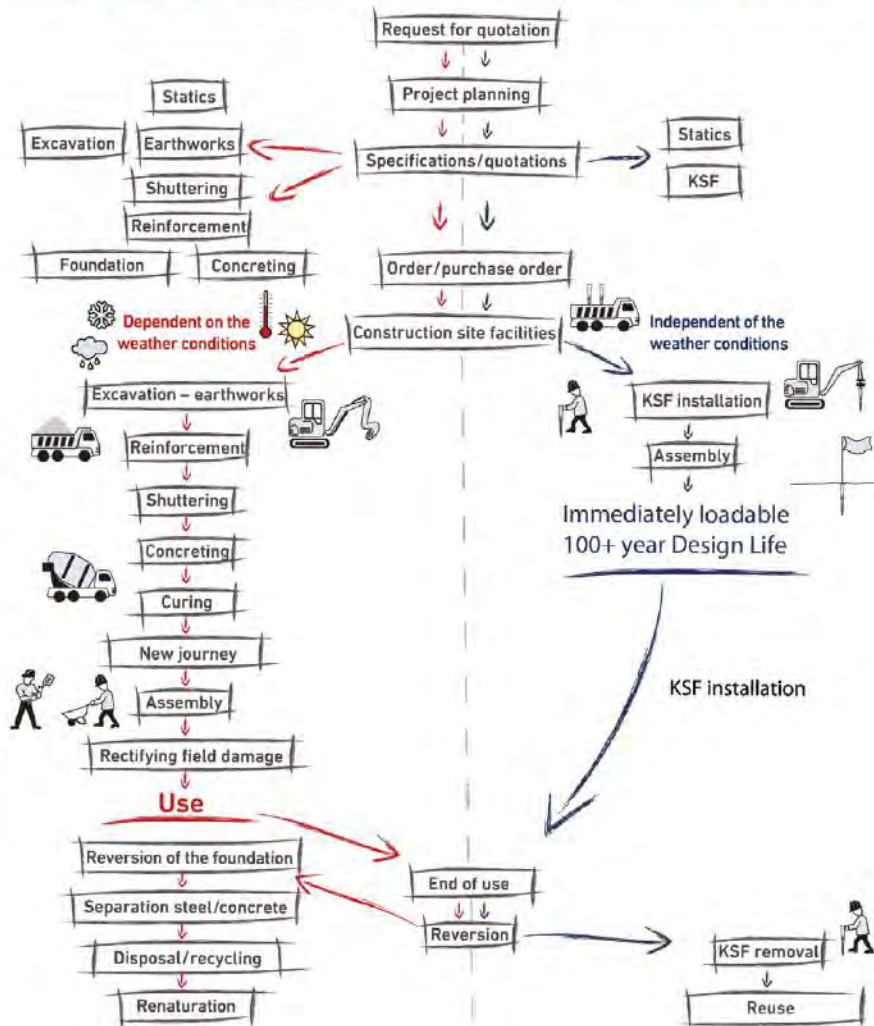


TELECOMMUNICATION TOWERS

# KRINNER SYSTEM ADVANTAGES

## Traditional Concrete Foundations

## KRINNER Ground screw system



## ADDITIONAL KRINNER ADVANTAGES

SPEED OF INSTALLATION

DOES NOT AFFECT THE DRAINAGE

IMMEDIATELY LOADABLE

REMOVABLE

# KRINNER GREEN INITIATIVE



## THE ADVANTAGES OF KRINNER SYSTEMS

With a KRINNER ground screw-based foundation, there are many advantages in comparison to a conventional concrete foundation that are sure to win you over. Our products have been designed to be extremely sustainable and they ensure a high level of efficiency and safety when it comes to installing your foundation.



### NO SOIL SEALING

Ground screws make it possible to build foundations without needing a soil sealing. This means that the soil ecosystem can remain undisturbed and that any rain water that falls on the construction site can trickle down into the soil beneath the structure.



### RETURN TO A GREEN SPACE

Ground screws can also be removed just as easily as they can be installed and therefore leave behind the same “green” space that was there before the construction work began. This makes our ground screws a particularly attractive option for temporary construction projects.



### BARELY ANY CROP DAMAGE

By using lightweight but high-performing ground screw drivers, crop damage and destruction of the area surrounding the construction site can be largely avoided.



### RECYCLABLE AND REUSABLE

Ground screws and superstructures, like steel trusses, can be recycled or, if not damaged, reused after the building has been dismantled.

# KRINNER GROUND SCREWS



# CONSTRUCTION PRODUCTS

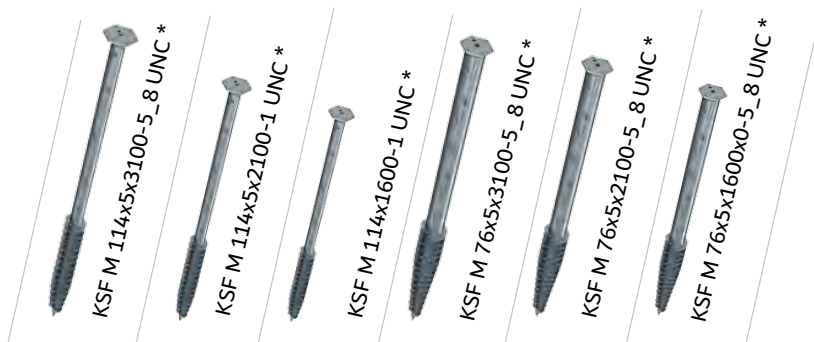
Our **ICC ES Evaluated KRINNER M- Series ground screws** for construction applications. Redesigned to meet the demands of the North American market, these screws offer enhanced durability and reliable performance in various conditions. Building upon superior quality, the M Series screws provide a strong alternative to traditional foundations for a wide range of construction projects.

## Key Features

- **Certified Quality:** ICC- ES Evaluated for IBC compliance and reliability
- **Increased Strength:** 5 mm thick walls for added durability
- **Enhanced Design:** 25 x 5 mm thicker helices for improved stability
- **Cold- Weather Protections:** Standard 750 mm helices for consistent frost resistance across frost zones

The KRINNER M Series ground screw deliver a number of benefits including faster installation, reduced labor requirements, and cost savings. The durable ground screw design enables effortless installation in challenging geotechnical conditions, provides immediate load-bearing capacity for enhanced project efficiency, and remains environmentally sustainable.

## M-SERIES ICC-ES Evaluated for construction applications



<b>Article number</b>	33060	33059	33058	24235	24236	24234
<b>Outer-Ø (mm)</b>	114	114	114	76	76	76
<b>Length (mm)</b>	3100	2100	1600	3100	2100	1600

\* ICC-ES Evaluated



# CONSTRUCTION PRODUCTS

Depending on local building regulations






## VA-SERIES

Extendable Ground Screws

The KRINNER VA- Series is designed for modern construction needs. Suitable for various geotechnical conditions, they ensure stability and durability in both challenging terrains and standard soil types. Krinner prioritizes quality and performance, leading the industry in innovative construction solutions.

## KSF VA 76

Extendable Ground Screws

KSF VA 76 x 5 x 2100 PT		NA-57652
KSF VA 76 x 5 x 1500 ET		NA-57653
KSF VA 76 x 5 x 1500 E		NA-57654
KSF VA 76 x 5 x 750 E		NA-57655
KSF VA 76-5_8 UNC		NA-57656

## KSF VA 114

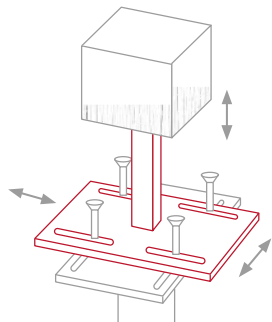
Extendable Ground Screws

KSF VA 114 x 6 x 2100 PT		NA-61142
KSF VA 114 x 6 x 1500 ET -		NA-61143
KSF VA 114 x 6 x 1500 E		NA-61144
KSF VA 114 x 6 x 750 E		NA-61145
KSF VA 114-1 UNC		NA-61146



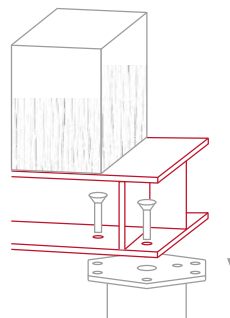
# FASTENING OPTIONS

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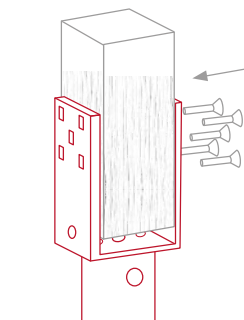
## POST ANCHORS

Precise connection thanks to variable axes and height adjustment



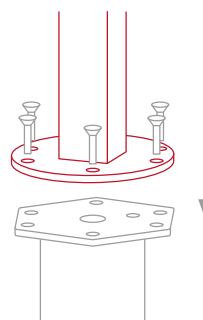
## WOODEN BEAM SUPPORT

Modular when used with flange plates and matched to the given loads in each case



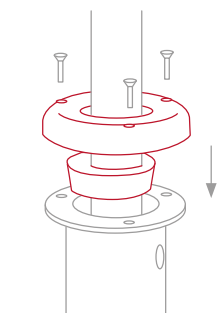
## U-SHAPED BRACKET

Simple attachment with axial and height adjustment for horizontal beams or vertical posts



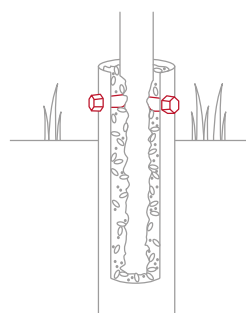
## FLANGE PLATES

Modular when used with flange plates, matched to the given loads in each case



## INNOVATIVE ECCENTER

Patented system for fine adjustment and vertical alignment for a resonance-free assembly



## THREADED SCREWS

Three or four threaded screws for a fast and simple assembly



# GROUND SCREW DRIVERS

## Additional equipment

KRINNER is a system provider for sustainable foundation construction, and therefore offers the right test and ground screw driver equipment for its ground screws engineered by KRINNER.



# MANUAL GROUND SCREW DRIVER

## KRE 20

Manual ground screw driver

### The classic among the manual screw drivers

- 120 Volt
- Approx. 3,500 Nm torque
- Compatible with all KRINNER ground screw attachments
- + Smart Cap



## KRE 25

Manual ground screw driver

### The KRINNER power machine

- 120 Volt
- Approx. 8,000 Nm torque
- Compatible with all KRINNER ground screw attachments
- + Smart Cap

# CATERPILLAR

## KRD 30

Self-driving caterpillar

### Lightweight with high capacity

- Approx. 8,000 Nm torque
- 2.4 m drill lift
- Only about 1m broad and 1.1 t transport weight
- Precisely-defined feed force



# ATTACHMENTS

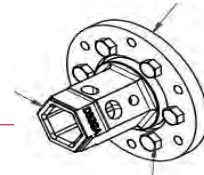
## The power solution

Adapters for Skidsteer and Mini Excavator Driver are offered in the following configurations:

- 3325 DTM76x2"Hex
- 3332 DTM76x2.5"Hex
- 3333 DTM76x3"Hex
- 3221 DTM114x2"Hex
- 3317 DTM114x2.5"Hex
- 3293 DTM114x3"Hex

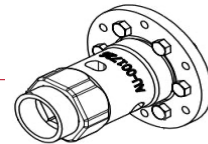
## DTM 2" hex

universal use for both 76 and 114 screws



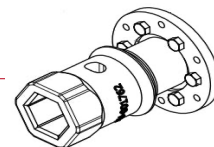
## DTM 2.5" hex

universal use for both 76 and 114 screws



## DTM 3" hex

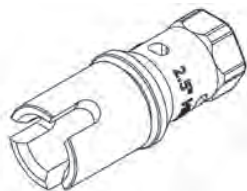
universal use for both 76 and 114 screws



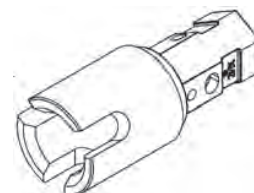
## DTG Hex Tool

universal use for both 76 and 114 screws

- DTG76x2"Hex
- DTG76x2.5"Hex
- DTG76x3"Hex



- DTG114x2"Hex
- DTG114x2.5"Hex
- DTG114x3"Hex



# ATTACHMENTS

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## **KRL** Hydraulic excavator attachment (drill attachment)

### Combining precision and strength

- Approx. 15,000 Nm torque option /  
Approx. 20,000 Nm torque option
- Quick change device
- For projects with larger foundations  
diameter up to 140 mm; wall thickness up to 6.3 mm)



## **KR P SYSTEM** Hydraulic excavator attachment

### The starter model for larger projects

- Equipped with a 15,000 Nm or 25,000 Nm Auger torque drive
- Equipment for horizontal attaching of KRINNER ground screws
- Use with KRINNER data recording management



# SUITABLE TEST EQUIPMENT

## Testing according to standards

KRINNER as a system provider of ground screws offers its own range of devices for performing tensile, compression and horizontal tests. KRINNER has suitable testing equipment for a variety of screws, conditions and requirements.



## TP 50

Tripod

### Tripod for tensile tests

- Maximum tensile force 50 kN
- Light weight of 24 kg
- Easy to transport
- Compatible with common crane scale



## TP 100

Tripod

### Tripod for tensile tests

- Maximum tensile force 100 kN
- Hydraulic tensile cylinder
- Delivery in transport box
- Compatible with common crane scale

## TT 100

Test traverse

### Test traverse for tensile, pressure and horizontal tests

- Suitable for static pressure, tension and horizontal tests
- Maximum tensile / compressive force 100 kN
- Compatible with all force transducers
- Distance between tested ground screw and counter bearings according to standards 1.5 m



## TT 200

Test traverse

### Test traverse for tensile, pressure and horizontal tests

- Suitable for static pressure, tension and horizontal tests
- Maximum tensile / compressive force 200 kN
- Compatible with all force transducers
- Distance between tested ground screw and counter bearings according to standards 2.5 m



