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### **ABOUT PILE CRITTER**



### COMPANY

Founded in 2022, PileCritter is a swiftly growing company in the European drilling market. Our team, though small, is rich in diversity and expertise, encompassing a range of roles from strategic leadership to market-specific business development. Fluent in multiple languages, our team is well-equipped to cater to various European markets. Together, our mission is rooted in delivering value through reliable, high-performance tools essential for construction and civil engineering.

At PileCritter, we're driven by a relentless dedication to our customers, aiming to be the cornerstone of Europe's drilling industry. Our vision encompasses not just supplying tools but fostering growth and progress in every project we touch. We're focused on enhancing our services by developing rapid response teams, further decreasing dispatch times, and expanding our product catalogue. Join us in redefining drilling industry standards with solutions that speak of quality, efficiency, and innovation!

### **EU** HUB

Focusing on local stock within Europe, PileCritter has significantly reduced delivery times and improved service dependability for our European clients. This strategic move underscores our dedication to addressing the unique requirements of the European market and strengthening our position in the region.

### **BESPOKE SERVICE**

We are eager to take on special requests, ensuring clients receive precisely what they need for their projects. We specialize in understanding unique requirements and leveraging an extensive product range to fulfill even the most specific demands. With a focus on customization and adaptability, our team is committed to turning special requests into reality, offering solutions that are not just satisfactory, but perfectly aligned with each client's unique business needs.

# **KELLY BARS** PileCritter's range of Kelly bars, indispensable for hydraulic rotary drilling rigs, is engineered with high-quality materials and innovative designs to ensure efficient torque transmission and adaptability in diverse drilling conditions. 6

# **ABOUT KELLY BARS**



### **DESCRIPTION**

Kelly bars, essential for hydraulic rotary drilling rigs, are expertly designed to transmit torque and pressure to drilling tools. Comprising 2 to 5 telescopic sections with drive keys and lock recesses, these bars come in interlocking, friction, and full locking types, each tailored for specific drilling requirements.

### **Key features include:**

### **High-Quality Materials:**

Kelly Bar Diameter < 508mm:

2 sections: inner tube 35CrMo & outside tube S355

3 sections: inner 1&2 tube 35CrMo & outside tube S355

4 sections: inner 1&2 kelly tube 35CrMo, outside 2 tubes S355

5 sections: inner 1&2&3 kelly tube 35CrMo, outside 2 tubes S355

Kelly Bar Diameter >= 508mm:

Increased strenght materials are used

**Design Innovation:** Features like reinforcement ring structures and a long guiding design enhance performance and reliability.

**Drive Rib Design:** Interlocking bars have drive ribs for efficient torque transfer.

**Shock Absorbing Spring:** High-capacity disc springs offer adaptability and longevity..

With strict quality control and advanced manufacturing, our kelly bars are ideal for challenging drilling tasks. A one-year warranty and custom solutions have established us as a trusted supplier for major rotary drilling rig brands globally, underscoring our commitment to excellence and customer satisfaction in various piling projects.

Service for Rig Leading Brands. Special designs and dimensions are available on request. Maximum length of kelly bar and drilling depth is subject to type of drilling rig, capacity of winch and type of drilling tool. Our kelly bars are suitable for brands such as Bauer, Liebherr, Delmag, Wirth, MGF, Soilmec, Mait, CMV, IMT, Casagrande, Entego, Liamada, Junttan, BSP, APE, Ingersollrand, NIPPON, Sumitomo, KATO, Hitachi, SANY, XCMG, Sunward, CRRC, Zoomlion, Jintai.

# **UNDERSTANDING CODES**

IK 394 / 4 / 14









- 1 Kelly bar type: interlockig kelly bar
- 2 The outer kelly bar diameter
- **3** The number of tubes
- 4 Each section length

Drilling depth = 4 sections X (14-2m) = 48m

# **KELLY BAR MAIN TYPES**

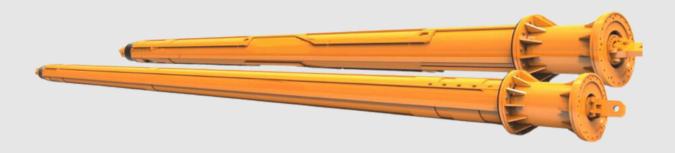


### FRICTION KELLY BARS

Friction kelly bars are properly defined by their frictional contact between rail of each element.

**Application:** friction kelly bars are normally supplied in 4 or 5 telescopic elements, they are mostly used for drilling silt, clay and less dense sand and gravel conditions.

**Kelly elements:** Kelly bar 2 - 5 elements. **Size:** Diameter range from 355mm-630mm.



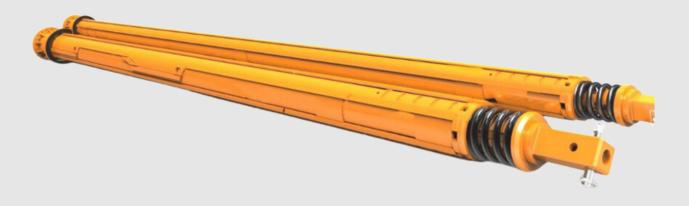
## **INTERLOCKING KELLY BARS**

Interlocking kelly bars are provided with drive ribs which are welded with lock devices in order to transfer the maximum torque to each scope.

**Application:** For piling rigs for drilling in various conditions such as dense sand, gravel and hard rock conditions.

Kelly elements: 2-5 elements

Size: Diameter range from 300mm - 930mm



### **ADVANTAGES**





We offer kelly bars with diameter up to 930mm, consisting from 5 sections, which are the largest kelly bars in the world.



High-grade materials and special welding guarantee a high durability and wear resistance.



Our kelly bars have advantage for the super hard rock formation and for large torque roatary drilling rigs.



The key components are made of high quality steel, through special heat treatment and surface painting, with better performance in large torque, large diameter and ultra-deep drilling.



To prevent the terminal joint not to be cracking, reinforcment ring for each termal joint is added. For the guiding sleeve, we added two baffle rings with one swivel ring, to keep the kelly bar in staightness when it is under the state of force.



We individually adapt our kelly bars to your drilling and rotary power head.

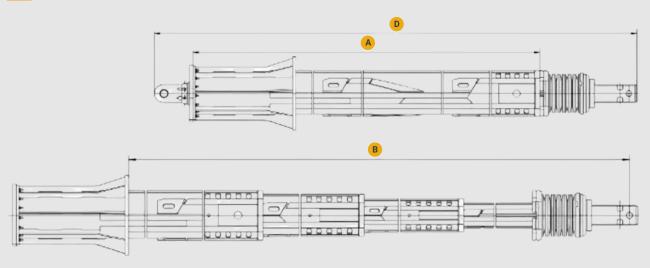




# MATERIAL PROPERTIES

MATERIAL	S355	35CrMo4
Tensile Strenghth (σ [MPa])	345	≥985
Yield Strenghth (R [MPa])	510-600	≥835
Chemical Composition	C: 0.13~0.19 Si: 0.20~0.60 Mn : 1.20~1.60 Cr≤0.30 P<0.030 S≤0.030 Ni≤0.30 Cu≤0.25	C: 0.32~0.40 Si: 0.17~0.37 Mn: 0.40~0.70 S: ≤0.035 P: ≤0.035 Cr: 0.80~1.10 Ni: ≤0.030 Cu: ≤0.30 Mo: 0.15~0.25

# **D**IMENSIONS



- A The first section length
- **B** The extended lenghth
- **D** The transport length







# COMPATIBLE WITH BAUER







MODEL	KELLY BA	AR MODEL	ТҮРЕ
BG11H	Ø368	3*9.2	Interlocking
BG14	Ø300	3*12	Interlocking
BG15	Ø340	4*11	Interlocking
BG15	Ø343	3*8	Interlocking
BG15	Ø343	3*10	Interlocking
BG15	Ø343	3*12	Interlocking
BG18	Ø368	3*11	Interlocking
BG20	Ø368	4*9	Interlocking
BG20	Ø368	4*15	Interlocking
BG24	Ø394	3*15	Interlocking
BG24	Ø394	4*11	Interlocking
BG25	Ø394	4*14.5	Friction
BG25	Ø394	4*17	Interlocking
BG26	Ø394	3*12	Interlocking
BG26	Ø394	4*14.5	Interlocking
BG26	Ø394	4*15	Interlocking
BG26	Ø419	4*11.1	Interlocking
BG26	Ø419	4*17	Interlocking
BG28	Ø406	4*9	Interlocking
BG28	Ø419	3*11.5	Interlocking
BG28	Ø419	3*12	Interlocking
BG28	Ø419	3*13	Interlocking
BG28	Ø419	3*17	Interlocking

MODEL	KELLY BA	AR MODEL	TYPE
BG28	Ø419	3*18.5	Interlocking
BG28	Ø419	4*10	Interlocking
BG28	Ø419	4*11.5	Interlocking
BG28	Ø419	4*12	Interlocking
BG28	Ø419	4*13	Interlocking
BG28	Ø419	4*13	Interlocking
BG28	Ø419	4*19.5	Interlocking
BG30	Ø419	4*7.5	Interlocking
BG30	Ø419	4*17	Interlocking
BG36	Ø470	4*16	Interlocking
BG36	Ø470	5*20	Friction
BG36	Ø470	5*21	Friction
BG36	Ø559	4*21.5	Interlocking
BG38	Ø470	4*16	Interlocking
BG39	Ø470	4*8.5	Interlocking
BG40	Ø470	3*14	Interlocking
BG40	Ø470	4*18	Interlocking
BG40	Ø470	4*19	Interlocking
BG46	Ø559	4*18	Interlocking
BG46	Ø559	4*18.5	Interlocking
BG46	Ø559	4*20	Interlocking
BG46	Ø559	4*21.5	Interlocking
BG55	Ø575	5*17	Interlocking



### COMPATIBLE WITH SANY







# COMPATIBLE WITH SOILMEC







MODEL	KELLY BA	AR MODEL	ТҮРЕ
SR150	Ø377	4*12	Interlocking
SR150	Ø377	4*14	Interlocking
SR155C10	Ø377	4*12	Interlocking
SR155C10	Ø377	5*12	Interlocking
SR220	Ø445	4*9	Interlocking
SR220	Ø445	4*12	Interlocking
SR220	Ø445	4*13	Interlocking
SR220	Ø445	4*13	Friction
SR235	Ø445	4*10	Interlocking
SR235	Ø455	4*15	Interlocking
SR250	Ø445	4*9	Interlocking
SR250	Ø445	4*13	Friction
SR250	Ø445	4*13	Interlocking
SR250	Ø445	4*14	Interlocking
SR280	Ø508	4*11.5	Interlocking
SR280	Ø508	4*15.5	Interlocking
SR280	Ø508	4*15.5	Interlocking
SR280	Ø508	4*16	Interlocking
SR280	Ø508	4*16	Interlocking
SR285	Ø508	3*12	Interlocking
SR285	Ø508	3*15	Interlocking
SR285	Ø508	4*12	Interlocking
SR285	Ø508	4*17	Interlocking
SR285	Ø508	6*17	Friction
SR360	Ø508	4*18	Interlocking
SR360C10	Ø508	5*17.5	Interlocking
SR445	Ø580	3*12	Interlocking
SR445	Ø580	4*12	Interlocking

MODEL	KELLY BAR MODEL		TYPE
SR20	Ø324	3*8	Interlocking
SR20	Ø325	3*11.5	Interlocking
SR30	Ø355	3*10.5	Interlocking
SR30	Ø355	4*9	Friction
SR30	Ø355	4*9.5	Interlocking
SR30	Ø355	4*10.5	Interlocking
SR30	Ø355	4*11	Interlocking
SR40	Ø355	4*10	Interlocking
SR40	Ø355	4*11.5	Friction
SR60	Ø406	4*10	Interlocking
SR60	Ø406	4*12	Interlocking
SR60	Ø406	3*13	Interlocking
SR60	Ø406	4*11	Interlocking
SR60	Ø406	4*12	Interlocking
SR60	Ø406	4*13.5	Interlocking
SR60	Ø406	3*14.5	Interlocking
SR60	Ø406	4*15	Interlocking
SR60	Ø406	4*16	Interlocking
SR60	Ø406	5*13.5	Friction
SR60	Ø406	5*15	Friction
SR60	Ø406	5*16	Interlocking
SR60	Ø406	5*16	Friction
SR60	Ø406	5*22	Friction
SR60	Ø406	4*11.5	Interlocking
SR90	Ø482	4*10	Interlocking
SR90	Ø482	4*14.5	Interlocking
SR95	Ø480	4*19.5	Interlocking



# COMPATIBLE WITH CASAGRANDE





MODEL	KELLY BAR MODEL		ТҮРЕ
B125	Ø355	4*10	Interlocking
B155	Ø355	4*11	Friction
B155	Ø355	4*12	Friction
B170	Ø355	4*11.5	Interlocking
B175	Ø355	4*12.5	Interlocking
B175	Ø355	4*14	Interlocking
B180	Ø419	4*12.5	Friction
B180	Ø419	5*12	Friction
B250	Ø419	4*15	Interlocking
B300	Ø419	4*14	Interlocking
B300X	Ø470	4*16	Interlocking
B300	Ø508	4*9.5	Interlocking
C800	Ø508	4*15	Interlocking

# COMPATIBLE WITH ZOOMLION









MODEL	KELLY BA	TYPE	
ZR160	Ø377	3*12	Friction
ZR200	Ø406	5*13	Friction
ZR220	Ø440	4*11.5	Interlocking
ZR220	Ø440	4*12	Interlocking
ZR220	Ø440	4*15	Interlocking
ZR220	Ø440	5*15	Friction
ZR280C	Ø508	4*19	Interlocking
ZR330	Ø508	4*17.5	Interlocking
ZR330	Ø508	6*17.5	Friction

# COMPATIBLE WITH LIEBHERR





MODEL	KELLY BA	AR MODEL	ТҮРЕ
LB24	Ø419	4*17.5	Interlocking
LB24	Ø419	5*17	Friction
LB35	Ø470	4*17	Interlocking
LB36	Ø470	4*15	Interlocking
LB36	Ø470	4*16	Interlocking
LB36	Ø470	4*17	Interlocking
LB36	Ø470	4*22	Interlocking
LB44	Ø559	4*18	Interlocking
LB44	Ø559	5*23	Interlocking
LB44	Ø559	5*25	Interlocking

# COMPATIBLE WITH TR



MODEL	KELLY BAR MODEL		TYPE
TR288	Ø508	4*15.5	Interlocking
TR360HB	Ø503	4*17.6	Interlocking

# COMPATIBLE WITH DELMAS





MODEL	KELLY BAR MODEL		ТҮРЕ
RH12	Ø349	3*9.5	Interlocking
	Ø370	4*11	Interlocking



# COMPATIBLE WITH JINTAI





MODEL	KELLY BAR MODEL		ТҮРЕ
SD25A	Ø445	4*16	Interlocking
SH36	Ø540	4*19.5	Interlocking
SD30W	Ø470	4*16	Interlocking
SH46AW	Ø630	4*10	Interlocking
SH46AW	Ø630	4*11	Interlocking
SH46AW	Ø630	4*15	Interlocking
SH46AW	Ø630	5*11	Friction

## COMPATIBLE WITH SUNWARD







MODEL	KELLY BAR MODEL		TYPE
SWDM 150	Ø377	3*11	Interlocking
SWDM 150	Ø377	4*8	Interlocking
SWDM 280	Ø470	4*13.5	Interlocking
SWDM 280	Ø470	5*16.5	Interlocking
SWDM 300	Ø470	4*9	Interlocking
SWDM 360H	Ø508	4*17.4	Interlocking

# **COMPATIBLE WITH MAIT**







MODEL	KELLY BAR MODEL		ТҮРЕ
MAIT 150	Ø368	3*8.5	Interlocking
MAIT 180	Ø355	4*14	Interlocking
MAIT 180	Ø377	4*9.5	Interlocking
MAIT 180	Ø445	5*11.5	Interlocking

# COMPATIBLE WITH XCMG







MODEL	KELLY BAR MODEL		ТҮРЕ
XR150	Ø377	4*12.5	Friction
XR220	Ø406	4*14.5	Interlocking
XR220	Ø440	4*11.5	Interlocking
XR220	Ø440	4*14.5	Interlocking
XR280	Ø508	4*12.5	Interlocking
XR400	Ø530	4*15	Interlocking
XR550	Ø630	5*24	Interlocking
XR550	Ø630	6*25	Friction
XR1050	Ø580	4*12.5	Interlocking

# COMPATIBLE WITH IMT





MODEL	KELLY BAR MODEL		TYPE
IMT A150	Ø377	5*8	Friction
IMT A215	Ø406	5*15	Interlocking
IMT AF220	Ø406	4*16	Full lock
IMT AF280	Ø482	5*15	Mixing





# We will cater our service to the needs of your company.

We are committed to catering to each client's specific needs, offering the flexibility to discuss and arrange dedicated stock on a case-by-case basis.

Our team excels in tailoring solutions to meet unique project requirements, ensuring that every client receives exactly what they need.

With a focus on personalised service and adaptability, we are dedicated to providing customised solutions that align precisely with your unique business and project demands.





# Connect with us for a personalised service.

Reach out to be assigned your dedicated account manager, ready to assist with all your project needs:

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