

# **BABY line**

From rotary tools to kelly bars, SIP&T is a company that does it all. The new Baby line designed by Baronissi brand is perfect for the most compact piling rigs on the market

he Baby line is the new range of rotary tools for compact drilling rigs designed by Sip&T. Its technical characteristics are ideal to emphasize rigs performance working in narrow and low headroom spaces. The new generation of baby tools goes and works where others cannot.

## **Compact Piling Rigs**

Nowadays, the projects involving piling in difficult access areas are constantly increasing. The working spaces are very narrow, as well as piles diameter with their relative depth are also increasing. Therefore small drilling rigs have to be structurally innovative, compact, reliable, simple to use, and

Marini Compact Piling Rig MR-P 350 assembled with Kelly bar and Rock Bucket made by SIP&T

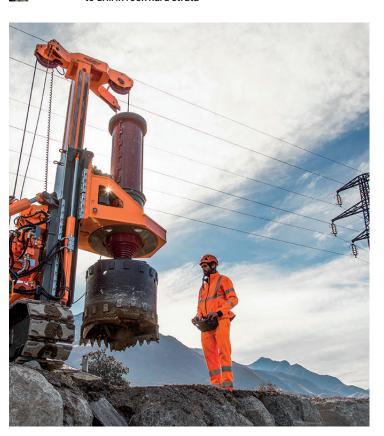






Parameters set-up to drill in rock hard strata

Detail of the Double Bottom Rock Bucket – Baby line



extremely productive and efficient. These rig types represent a big step forward in a market that has been static and conservative for years, strictly focused on big size drilling rigs not capable to perform in the above mentioned site conditions. Market is offering different models of small drilling rigs with high performance level, flexibility and adaptability, able to respond to any stringent project requirements . Their size is compact thus these small rigs are easily transportable without any special permits, safety oriented, while having high quality level and low operating costs. However, they are not the simple copy on a reduced scale of the largest traditional machines; they are carefully designed to brilliantly solve all the limitations that the reduction of size and the weight involves. All of this has to be reflected in a competitive price that in any case represents an investment from which all end users would have a reasonable high return.

### **Weak Points**

Kelly bars and rotary tools are key

components in the execution of boreholes with compact or massive hydraulic rotary drilling rigs. They transfer the torque of the rotary drive and the crowd pressure of the crowd system concurrently in order to win the soil resistance during drilling. They cannot be standardized, nor can adapt to the soil morphology or pile diameter. They have to be manufactured in accordance to the drilling depth, pile diameter, rotary torque, crowd force and the max rock compressive strength where they are supposed to be used. It happens frequently that the operator has to drill with a compact rig having excellent characteristics but with a Kelly bar and rotary tools not able to perform adequately and in line with the expectations. Additionally, most of the time, when the right equipment is not chosen, they break down causing long downtime and damaging rig components as well. We are talking about a weak points underestimated by most of the field professionals that strongly impacts on the business profitability and company's reputation in the market.



# #Technical.Notes / @SIP&T

### **New Line, Same Identity**

The conception of the Baby line is based on a long experience of SIP&T with deep foundation applications, and considers even the heaviest demands, which are nowadays made on modern rotary drilling rigs. As the existing and well known production line, the new Baby line achieves an excellent level of performance in every situation due to in-house developed leading technology. This includes the careful development, the solid design, the reliable CNC machine and process data recording system to guarantee a top-level quality. SIP&T Baby line offers a wide range of possible applications

exactly as the line dedicated to the big size drilling rigs. No existing standard concept has been used for their development. The new shape has been designed to meet with the requirements. Many innovations from SIP&T years of experience with deep foundation applications have been incorporated, and all requirements for best performance have been uncompromisingly fulfilled. Reliable SIP&T components are used to ensure the high quality and longevity of the Kelly bars and rotary tools. A clear example of performance and flexibility through innovation that comes from the DNA of SIP&T. Correct dimensions,



Baby line Interlock Kelly and Rock **Bucket in action** 

Detail of the Interlock Kelly "ZIG-ZAG" profile Baby line

economic transportation, quick production and easy assembly as well as extremely low operating costs are decisive advantages of the Baby line that matches the costeffective target. Baby line includes numerous innovative technical features ensuring easy use for the operator by holding efficiency and higher productivity through better comfort. Some examples are the new concept of the rotary sleeve, light and multi-section kelly bars, the possibility to use the patented AUTO CDA (casing drive adaptor), set of parameters to follow up according to soil strata in order to maximize the penetration rate. Thanks to low maintenance requirements, quick assistance on site and an efficient spare parts supply, SIP&T guarantees the Baby line outcome. Company culture, especially safety, reflects onto the piling applications. Integrated process is one that seeks to enhance safety while maintaing performance at all levels. SIP&T handles it all and stands behind all what it does. From rotary tools to kelly bars, the company experience, integration and commitment to continuous improvement take the bumps out of any challenge.



# Total Package Performance

IP&T has become an industry leader by earning its place at the top as a complete one-stop-shop where clients get the benefit of substantial expertise and experience that extend from standard to innovative and customized products. It all comes down to a simple equation: customization + quality + safety + service = productivity.

SIP&T has been doing precisely this for decades and it has made the company a consistent performer in case of challenges in terms of on time delivery, budget and mark. It is one of very few manufacture companies to perform in-house competency training and testing. Actually, SI-P&T has made safety, innovation and continuous improvement the

foundation of the company since the first day back in 1990. Over the years, Sip&T has consistently added to its knowledge base, thanks to its skilled employees who are predicated on passion for the job and dedication to quality. SIP&T offers a wide range of Kelly bars compatible with most famous brands along rotary tools, continuous flight augers, displacement and soil mixing tools, casings, tremie pipes, stop end elements and others. Recently, the company has decided to enter the business of kelly bars and rotary tools for compact drilling rigs creating the Baby line. The reason has been the strong drive of its customers who want to have very reliable tools with high performance and able to work in safe conditions.

