

CONRAD®

| Comax 800 |



Comax 800 | "Largest combination drilling rig in the range"

The Conrad Comax 800 belongs in the top segment with regard to its drilling performance and it is the largest combination drilling rig in the Conrad range. The rig quality is at a considerable high level now that all techniques that have already been standardised such as drill pipe handling and automated programs can be added. The Comax 800 has been developed to be able to perform all drilling methods by radio control. The Comax 800 can be fitted out based on customer specifications for straight flush drilling, reverse circulation/airlift drilling, percussion drilling, sonic drilling, coring and Down-The-Hole drilling.



Safety

The Conrad Comax 800 meets all applicable health and safety standards (requirements). Meeting the rig directive and, subsequently, implementing a CE mark accompanied by an EC declaration is not enough for us. Conrad Stanen has a safety inspection performed with regard to every rig by an independent inspection body appointed for this purpose before it is delivered to the customer. This ensures that you, the customer, will receive a guarantee regarding health, safety and quality standards.

Operator convenience/comfort

Conrad Stanen has translated a lot of experiences of drilling rig operators into the operating friendliness of its designs. This ensures that productivity is increased as a whole and that it is made more pleasant for the drilling rig operator to work with the rig.

A few examples of this are:

- Full drill pipe manipulation system that ensures that drill pipes no longer have to be inserted and extracted manually (no physical load)
- A semi or fully automatic facility for the above to ensure that manual control is limited to a minimum (operating comfort)
- Radio remote control for all important drilling functions and setting up the drilling rig (good visibility of the drilling process and surrounding area).
- Automatic greasing system.
- A high engine power that increases productivity.

The drilling rig operator can set himself or herself up in the area of the rig with his or her radio control unit. Inserting and extracting drill pipes takes place automatically and does not lead to physical loads. This also prevents the risk of body parts becoming trapped.



“Versatile and robust”

Environment-friendliness

Conrad Stanen has placed the environment high on its list of priorities. The following is standard on our rigs:

- Biodegradable hydraulic oil.
- Drip tray construction with drainage option so that the other oils do not end up in the environment when disasters occur.
- Noise-insulating enclosure around the diesel engine.
- Integration of a high-quality exhaust gas system that meets current and future regulations with regard to emissions and noise reduction.
- Reduction of the engine speed during work. This has resulted in the application of a powerful diesel engine that operates with an optimal speed that has a fuel-lowering and noise-reducing effect.
- The hydraulic transmission has been optimised with regard to performance and sustainability.



All in all, it is our intention to engineer and produce rigs that distinguish themselves with regard to power, speed, safety and operator comfort. The rigs can be deployed within the built-up area where the applicable environmental requirements apply.

Drilling methods

The Conrad Comax 800 can be assembled for one or a combination of the drilling principles described below.

Reverse circulation drilling | Reverse circulation drilling up to approx. 70 to 80 metres can be carried out with a reverse circulation pump and reverse circulation drilling bit diameters up to approx. 1200 mm are feasible where the details will depend on the geological conditions.

Airlift | The airlift drilling principle by using a compressor is the appropriate method to continue the reverse circulation drilling with a hole diameter of approx. 1200 mm to a depth of 650 metres, the details of which will depend on the geological conditions.

Straight flush drilling | Holes with a diameter of approx. 350 mm can be continued up to a depth of 650 metres by using a water, mud or foam circulation system with this drilling method, the details of which will depend on the soil conditions. When the correct drilling pipe is selected, shallower holes with larger diameters or deeper holes with smaller diameters are possible.

Percussion drilling | By equipping the Comax 800 with a rotary table and a stroke mechanism, percussion drilling is possible up to a depth of at least 180 metres with a max. casing diameter of 420 mm.

Auger drilling | The Comax 800 can drill with both hollow stem and full augers that have an outer leaf diameter of approximately 600 mm with the standard 6" drill head.

Counter flush drilling | For special activities the Comax 800 can be equipped with the counter flush system for sampling for exploration objectives to name but one example.

Other drilling methods such as Down-The-Hole drilling, coring and sonic drilling are possible.

Technical specifications | Comax 800

Diesel engine Truck PTO	Power	260 kW Spec. truck
Drillmast	Length Safe working load Height under crown sheave	10 m 350 kN 9 m
Pull back/ Pull down system through hydraulic cylinder and steel cables	Stroke Pull back Pull down Lifting speed	7,2 m 300 kN 150 kN 0,6 m/sec
Drill head with two Hydraulic motors	Passage Torque/revolutions	150 mm 1500 daN/m / 60 rpm 750 daN/ 120 rpm
Hydraulic hoisting winch	Line pull Steel cable Lifting speed	6000 daN 100m. Ø 16 mm 0,5 m/sec
Centrifugal mudpump (Hydraulically driven)	Rate Pressure	80 m ³ /hr 24 bar
Suction pump (Hydraulically driven)	Rate Suction height	280 m ³ /hr 9 mwc
Compressor (Hydraulically driven)	Rate Pressure	7 m ³ /min 13 bar
Rotary table unit	Passage Torque Revolutions	420 mm 4000 daNm 20 rpm

These specifications can be changed in consultation based on customer requirements

Additional options that are possible:

- Different drill head models
- Different lit of spray pump models
- Drill pipe manipulation system
- Crown sheaves construction that can be rotated / extended
- Automatically operated drill pipe manipulator
- Automatically operated restart of drilling process
- Percussion device
- Larger pull back/pull down power and speed
- Different types of winches
- Winch cable push-out arm
- Other rotary table units
- Automatic greasing system
- Mast dump (mast height adjustment)