



# **STM-20**

### TRUCK MOUNTED HYDRAULIC DRILLING RIG

### A new model

STM-20 is a drill unit designed to be fast, highly productive and easy to operate.

It's a fully hydraulic drilling rig mounted on standard, heavy duty truck.

Thanks to its power, reliability, and novel configuration STM-20 meets the needs for a highly capable, easily mobilized drilling rig.

### Features of STM-20:

- All States no transport permits
- Max. weight 28 tons including truck
- All position drilling
- Sliding cradle and outriggers on rigid sub-frame
- Pull down system 1.8 m
- Locking kelly or friction kelly (3 or 4 elements)
- Max drilling depth: 30 m
- New rotary: max torque 100 kNm
- Cummins 6BT 5.9 C engine with sound proofed housing
- Enclosed air conditioned operator cab
- Electronic depthmeter and inclinometer

### **Optional features:**

- Low head room version
- Extended depth, heavy version
- Tieback capability

Large diameter bored pile		
Max. pile diameter	mm	1800
Pile max. depth	m	30
Max nominal torque	kNm	100 @ 35 MPa (9 rpm)
Max drilling speed	rpm	43
Spin - off speed	rpm	178
Main winch nominal line pull (ISO M5 - L2 - T5)	kN	102
Service winch nominal line pull (ISO M5 - L2 - T5)	kN	41
Engine	Туре	CUMMINS 6BT 5.9C-30-T
Installed power	kW (HP)	116 (156) @ 2200 rpm
Cylinder crowd	kN	73.5 / 124
Cylinder stroke	mm	1800
Approx.weight with truck (Depending on truck model)	ton	25.5 / 28

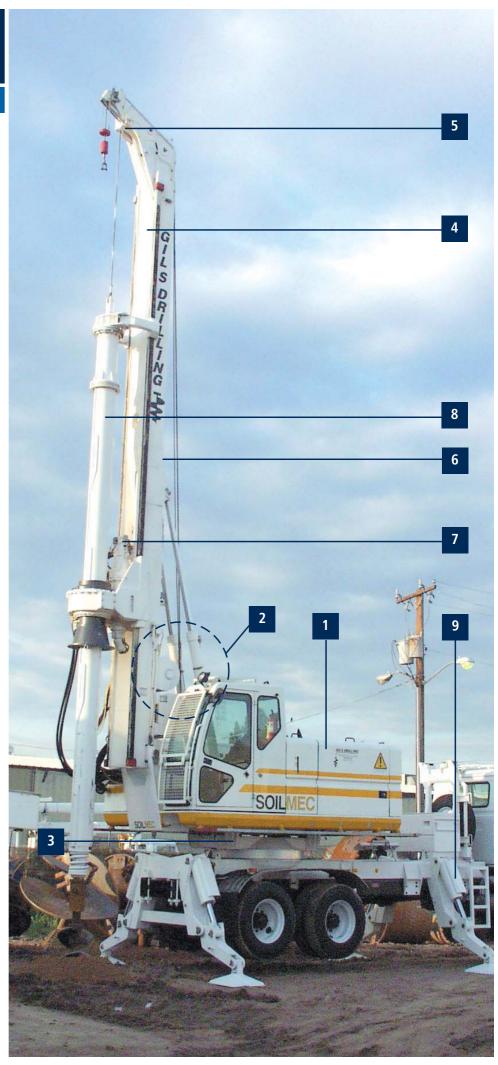
The nominal values are referred to 100% total efficiency.

Friction kelly bar – Ø 324 mm				
elements n°	length m	depth m	weight ton	
3x	7,0	18,0	1,8	
4x	7,0	24,0	2,4	
5x	7,0	30,0	3,0	

Mechanical kelly bar – Ø 324				
elements n°	length m	depth m	weight tonn	
3x	7,0	18,0	1,8	
4x	7,0	24,0	2,4	

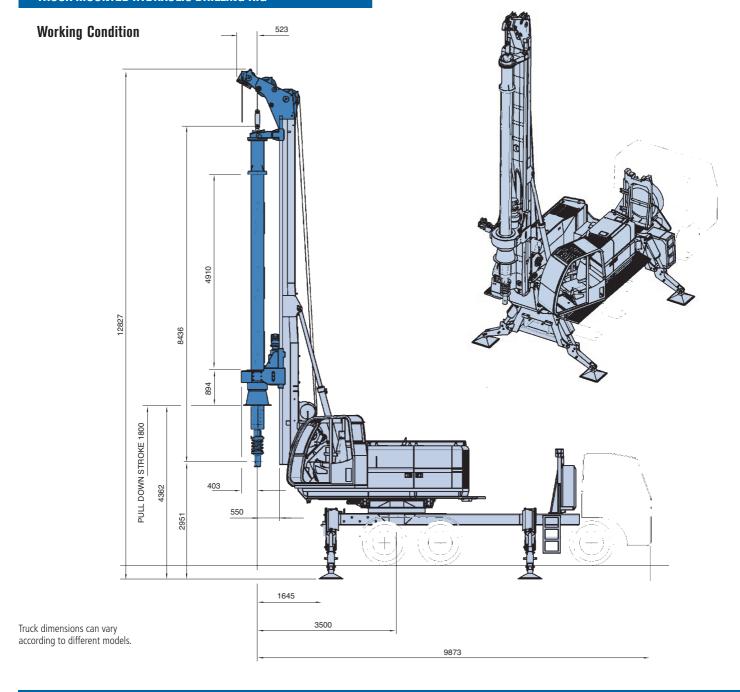
- 1 Rotaring turret with Cummins diesel engine and sound proofed canopy, mounted on sliding cradle.
- 2 Winch units 102 kN and 41 kN
- **3 Sliding cradle**: 1000 mm horizontal stroke
- **4 Self-erecting mast** withstanding the full torque all over the length. It's composed by one single element including sheave cathead.
- **5 Cathead** with service jib.
- **6 Crowd system**: 1,8 m stroke hydraulic cylinder.
- 7 100 kNm torque rotary table c/w two hydraulic motors and reducers.
- 8 **Telescopic kelly bar** with guide connection to mast with friction or mechanical locking type (see chart).
- **9 Four hydraulic stabilizers** mounted on sub-frame.





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## **Pictures**



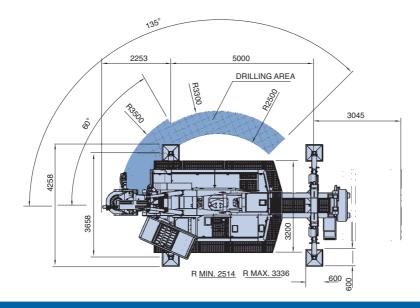




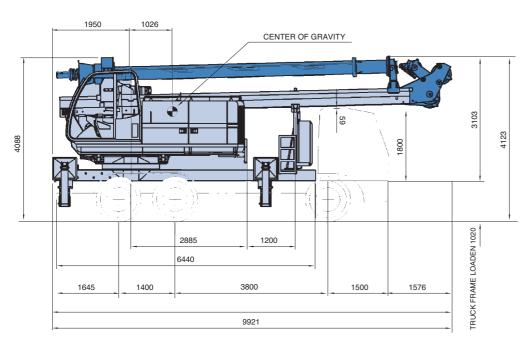
# **STM-20**

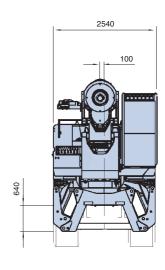
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## **Drilling Area**



## **Transport Condition**



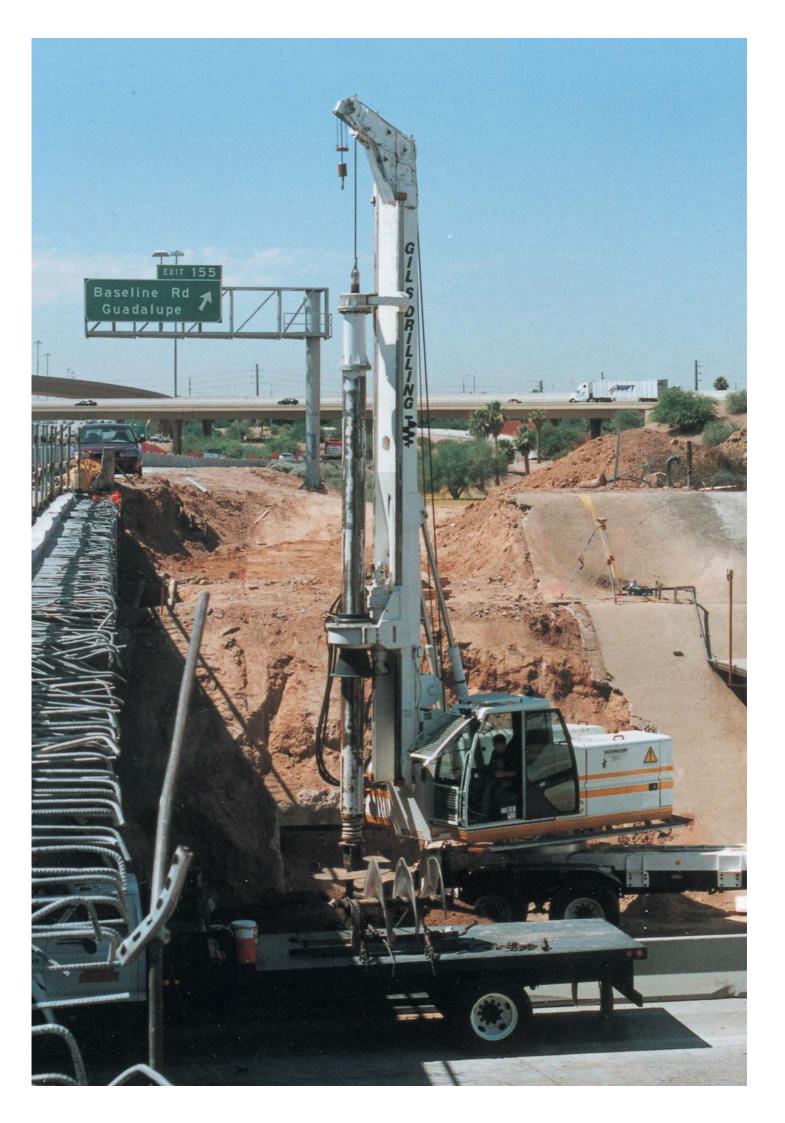






















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# **CERTIFIED QUALITY SYSTEM**

In 1990 Soilmec was awarded with the certification of its Quality System complying with ISO 9001:2000 and ISO 14001:2004 standards.





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