

NT 40.5 Rod

NLC NT40.5 Rod - developed for grouting /

soil investigation / SPT with a new concept.

Features

- 1) Flush Joint structure eliminates couplings.
- 2) The no-coupling structure with wide rod I.D. can prevent pressure loss inside the rod, which brings about:
 - ① Higher core retrieval rate; and
 - **②** Reduction of pump fuel consumption / burden on a pump.
- 3) Taper threads with wide joint areas realize:
 - ① Rigid Joint resisting high complex torque;
 - 2 Easy make-up and break-up;
 - ③ High sealing capability without water leakage; and
 - ④ Avoiding the expansion of box threads caused by drill bit pressure.



NT40.5 Ro	bd
NT40.5 Rod Trapezoida	Il Thread
Contact Area	Retaining Strength
Pin Thread	Box Thread
	/

O.D.	40.5 mm	
I.D.	27.5 mm	
Weight	16.5 kg / 3 m 8.2 kg / 1.5 m 5.5 kg / 1.0 m	
	Yield Str.	Breaking Str.
Tension	217 kN	271 kN
Torque	4010 N-m	4500 N-m

Normal Drill Rods







	NT40.5	Normal Drill Rods
	Flush Joint	with Coupling
Thread Type	Taper Thread	Square Thread
	Similar to wireline Q thread	
Connection	 Wider contact areas 	 Smaller connection area
	between threads realize:	between threads
	 High Sealing Capacity 	 Lower Sealing Capacity
	 Rigid Joint against high 	・Weaker Joint
	torque	
	・Easy make-up / break-up	
SPT	• Higher resistance against	• Lower resistance against
	knocking force and shocks	knocking force and shocks
	\cdot Less damage to thread	\cdot Box threads easily swell /
	connection	open by knocking force
Pumping	Less pressure for :	More pressure for :
	Drilling water	Drilling Water
	Grouting Cement Milk	Grouting Cement Milk
Pump unit	Less burden	More burden
	• Less fuel	• More fuel
Core	• Less damage by low	• More damage by high
	water pressure	water pressure
	\cdot Superior core retrieval rate	Inferior core retrieval rate

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