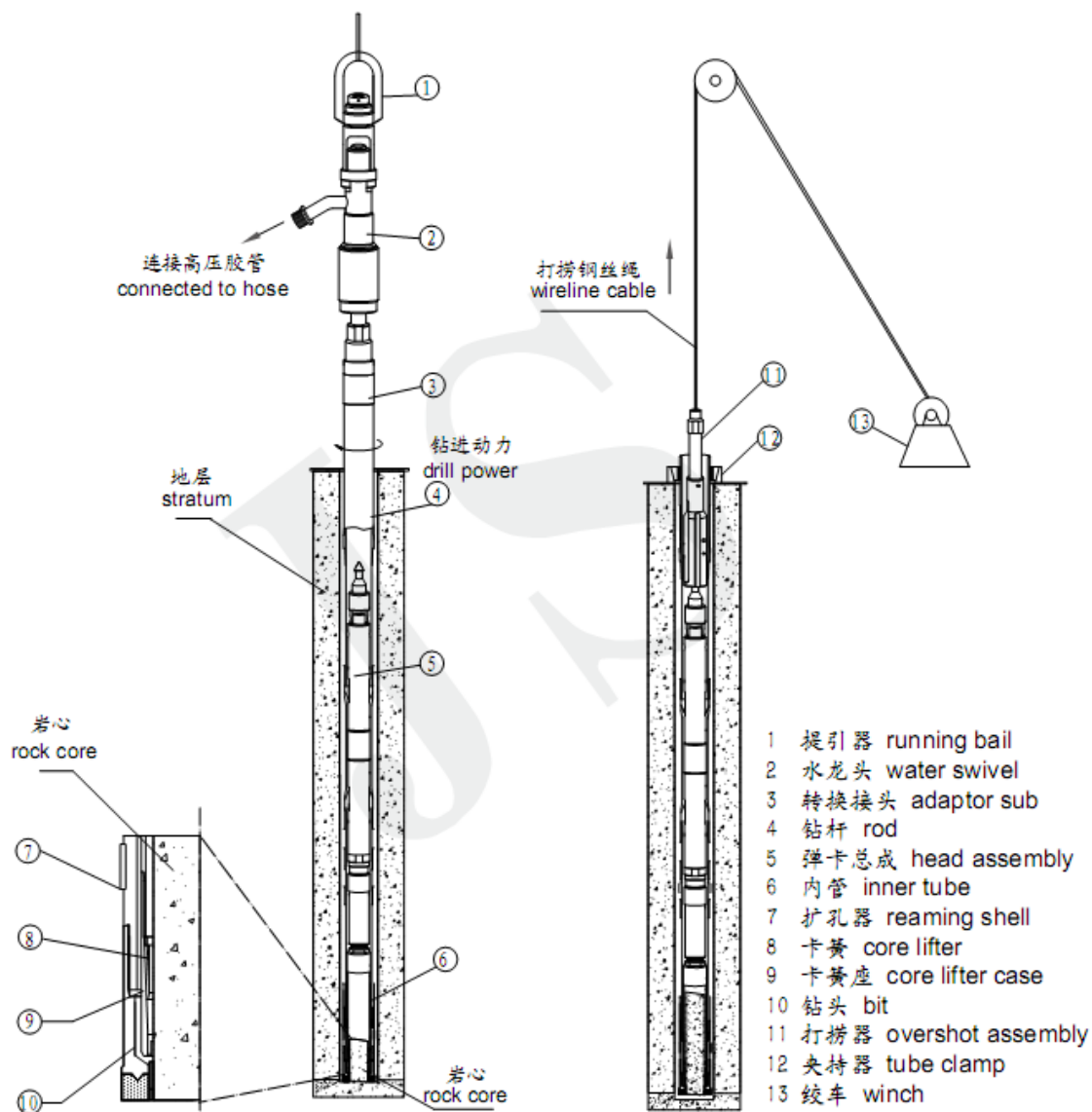


*TRUST STEM FROM QUALITY*



## DIAMOND CORE DRILLING TOOLS

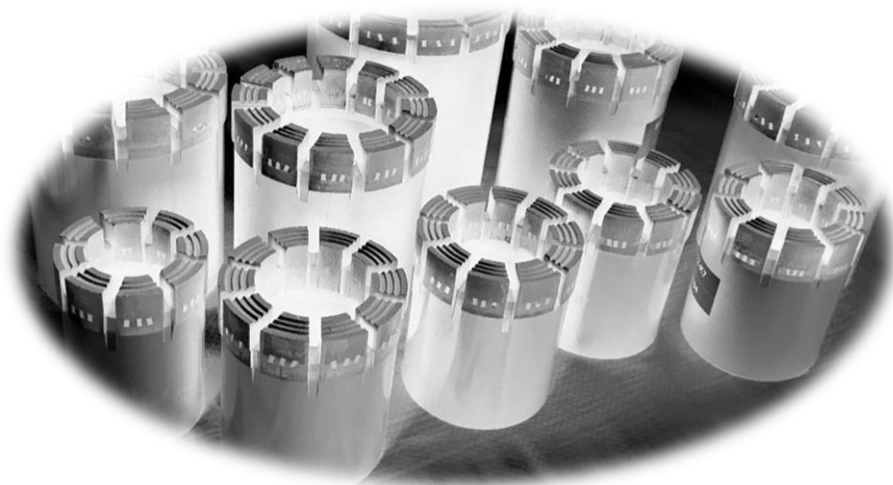
## Wireline drilling Products introduction



◎ Wireline core drilling process diagram

【Drill bits】	【drill rods】	【core barrel】
【Reaming shell】	【Casing bits & rods】	

## Impregnated diamond core bits



**Impregnated diamond core bit** is manufactured with small, high quality synthetic diamonds mixed evenly through a metal matrix. The diamonds used are fine to micro fine industrial grade diamonds; they are set within a matrix of varying hardness, from brass to high-grade steel. The main technical parameters of impregnated diamond core bits include diamond type, size, concentration and diamond grade, matrix hardness and crown shapes etc. Matrix hardness, diamond size and dosing can be varied according to the rock which must be cut. If a driller can make rational selections according to the rock formations, then they can get satisfied drilling performance on various formations with different hardness.

**How to select an impregnated bit?** 1. Bits size; 2. Bit series. (Example: **NQ GV7**)

### Impregnated core bits Matrix selection guide

Rock Type	Abrasiveness	Rock Hardness	Matrix Hardness	Series. NO
Clay, Shale, Siltstone, Cypsum	Medium	Soft	HRC 50	GV1#
Ash Stone, Coal, Argillite,, Volcanics, Sandy Pebble	Very High	Soft	HRC 48-50	GV1/ GV2
Sandstone, Sandy Shale, Lithoid, Limestone, Limonite Sandstone	Very High	Medium Soft	HRC 45-48	GV1#/ GV2
Medium-hard Limestone, Medium-hard Shale, Medium-hard Ash Stone	High	Medium	HRC 40-45	GV3/ GV4
Marble, Hard Schist, Hard Streak Stone	Medium	Medium	HRC 38-42	GV5/ GV6/ GV7
Diabase, Andesite, Gneiss	Medium	Medium Hard	HRC 38	GV6/ GV7
Grandiorite, ,Limonite	Medium	Medium Hard	HRC 35-38	GV7/ GV8
Granite, Basalt, Hard Streak Stone	Medium To Low	Hard	HRC 32-35	GV8/ GV9
Rhyolite, Crystauze Gneiss, Quartz Porphyry	Medium To Low	Hard	HRC 25-30	GV9/ GV10
Silicious Stone, Hard Sandstone	Medium To Low	Extreme Hard	HRC 20-25	GV11/ GV12
Rhyolite, Dense Quartzite, Iron Stone	Low	Ultra Hard	HRC 10-20	GV12#