



中德鼎立集团
ZHONGDEDINGLI GROUP

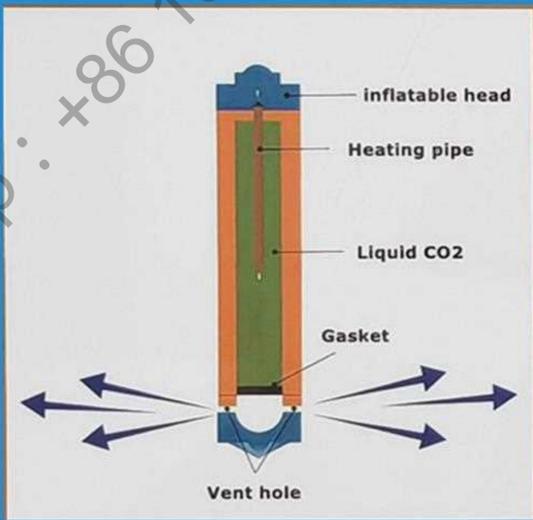
C02 Rock Breaking System

C02 rock breaking system is a new type of rock breaking equipment that can replace explosive blasting. There is no vibration, shock wave, open flame, or harmful gas during the construction of C02 rock breaking system, which is very safe and convenient. And it can be reused, which significantly reduces the construction cost. The emergence of C02 rock breaking system perfectly solves the problem of the prohibition of blasting in mines and rock excavation and the low efficiency of hydraulic breakers! It has been widely used in mining, quarrying, highway construction, construction foundation, tunnel excavation, and other fields.

- No explosive
- No vibration
- No hazardous chemicals
- Easy and quick to operate
- No pollution or emission of dust
- Rock-breaking steel pipes are reusable
- No need for a bureaucratic procedure or license
- High output compared with conventional machinery



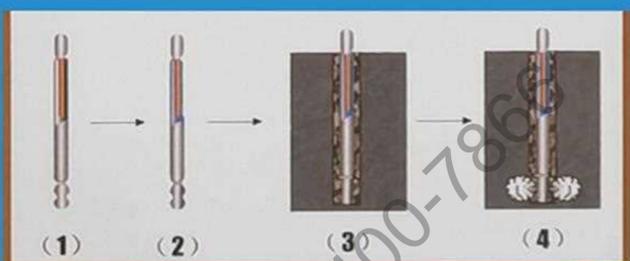
HOW DOES IT WORK



Below the critical temperature (-31.1 degrees Celsius), carbon dioxide can become liquid carbon dioxide under pressurized conditions, and its volume shrinks. When the temperature is higher than this temperature, it will become a gas and its volume will expand. The CO2 rock-breaking system takes advantage of this feature, first putting the heating tube into the rock-breaking steel pipe, and filling the rock-breaking steel pipe with liquid carbon dioxide. Then insert the steel pipe into the hole. When the start button on the detonator is pressed, the temperature of the heating pipe will rise rapidly, and the liquid carbon dioxide will vaporize and expand rapidly at high temperatures, and the volume will expand 600 times in an instant. The intense pressure will burst the gasket on the vent head, releasing the gas, and breaking the rock from within.



Model	Steel pipe diameter (MM)	Drilled hole diameter (MM)	Steel pipe length (MM)	CO2 filling volume (KG)	Release stress (Mpa)	Weight (KG)
DL-51	Ø51	Ø60/Ø75	1200	0.7 - 0.8	210	12
DL-73	Ø73	Ø105	1700	2.8-3.5	260	35
DL-108	Ø108	Ø140	2300	7 - 8	310	83



ROCK BREAKING MADE EASY