



**DIAMOND PULSE-TECH CATALOGUE** 





### About us

We are CARDI, a leading manufacturer of diamond drilling, cutting and sawing solutions for the construction industry.

We have launched our first core drill in 1985 and we have come a long way since then. Today general contractors, construction workers and professional drilling and cutting companies, like you, can count on CARDI's wide range of diamond core drills, blade saws, chainsaws and diamond tools.

We know its tough out there on the field.

That's why each of our power tools is made to ensure top-notch quality and reliability. All our products are designed and manufactured with passion, expertise and craftsmanship by our team in Italy.

We have been pioneers in technological development throughout the years, launching innovative products as the first single-phase chainsaw, the powerful 3-phase water-cooled core drill motors and innovative electronic and mechanical safety features as the CARDI TOTAL PROTECTION SYSTEM.

Our latest innovation, DIAMOND PULSE-TECH, is an advanced hybrid drilling technology that is revolutionizing the drilling industry.

You can now choose between dry and wet drilling and get an unmatched drilling performance, with working time reduced by >40%.

Forget about the hassle of water when needed and go where nobody else goes, faster.

Take a look at our drilling, cutting and sawing range.

We are looking forward to helping you find the right solution for your job and to making it easier, everyday.

the CAROI team



A family company

- Founded in **1985**
- Family owned
- Located near Milan, Italy
- Integrated structure: all products developed, designed, manufactured and assembled in-house



Our products

- Diamond drilling equipment as original core business
- Expansion into diamond drilling, cutting and sawing solutions for the construction industry
- Renowned for quality, reliability and innovativeness in the construction equipment industry



Our team

- Functions led by senior professionals with 20+ year experience in the industry
- Wide team of experienced engineers, specialized in R&D, design, manufacturing of electromechanical equipment



Our markets  60+ countries covered by an extensive network of authorized dealers and service centers





### Our drilling, cutting and sawing range



Drilling



GC ARDI CC ARDI COCCODRILIO36

Cutting

Sawing

### Why choosing CARDI

### • Made in Italy, by CARDI

 All our products are designed and manufactured in our plant near Milan, Italy, ensuring control over quality in each phase, from design to assembly

### Developed to last longer

- Each component is designed to last longer, using selected materials and leveraging manufacturing processes fine-tuned in 35 yrs. of company history

### Passing the toughest tests

- Every product passes the toughest, most comprehensive tests in the industry
- Proprietary tests were developed and added to simulate the on-load conditions on the field, to ensure a higher product life and reliability

### · At the technological frontier

 High and continuous investments in R&D are being made to ensure our products keep being at the forefront of technology, to provide better solutions to the users' needs

### Delivering real innovations

- COCCODRILLO35: single-phase diamond chainsaw for construction workers
- FR range: powerful 3-phase water-cooled core drill motors
- DIAMOND PULSE-TECH: innovative core drills with adv. hybrid technology with micro-percussion, to drill dry and wet with unmatched speed
- CARDIFACILE: device for quick core-bit unscrewing

### CARDI commercial and technical support

 A dedicated sales support is available to help on any commercial or technical question

### Global network of dealers and service centers

- A worldwide network of authorized dealers is there to provide support
- A global network of authorized service centers is available to provide technical service, with CARDI-trained mechanics handling repairs according to CARDI standards

### Fast-track for spare parts

- CARDI warehouse can ship spare parts globally within 48h

### CARDI TOTAL PROTECTION SYSTEM

 A combination of functions, electronic and mechanical, is present in each machine and works in synergy to ensure top-level protection for the operator and the product itself

### Setting the standards

 Safety has always been our utmost priority and we strive to anticipate and implement improvements that increase the safety for the operator, setting the standard for the industry



**Innovation** 

Quality



Support





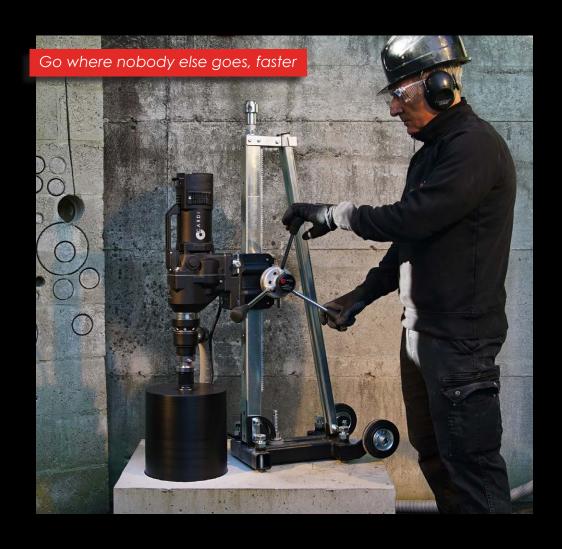
### **DIAMOND PULSE-TECH**

CARDI's revolutionary technology: get unmatched performances in dry and wet drilling



## Advanced hybrid drilling technology with micro-percussion

A revolutionary technology, featuring tens of thousands of micro-percussions per minute, enabling for the first time advanced dry and wet drilling with an unmatched performance







### A unique and revolutionary technology

DIAMOND PULSE-TECH features breakthrough innovations, developed from scratch, across the entire drilling system



### DPT technology with micro-percussion

- features a super-fast soft hammering effect – 10-29k hits/min on load
- enables 2 advanced drilling options with unparalleled performance;
- advanced dry drilling
- advanced wet drilling

### Innovative state-of-the-art core bits, specifically studied for the DPT

- are specifically studied to ensure resistance to elevated temperatures and micro-percussion impacts
- ensures faster drilling times on all materials

### The system

All components of the DIAMOND PULSE-TECH system work in synergy to enable advanced hybrid drilling



### Advanced hybrid core drill with micro-percussion

- allows to choose between 2 advanced drilling options:
- advanced dry drilling: for a clean and faster drilling, in any environment
- advanced wet drilling: for a faster drilling
- features the innovative DPT technology with micro-percussion, developed by CARDI, which provides a super-fast soft hammering effect – 10-29k hits/min on load – and maintains the segment sharped, clear from dust and debris, in all materials and conditions
- is equipped with the reliable, robust and powerful CARDI motors, delivering max power / current up to 4,600 W / 22 A, respectively



### • Core drill stand (rig) with anti-vibration technology

- features a new technology, developed by CARDI, that reduces vibrations by 50%, providing increased safety for the user and allowing longer working hours
- delivers a stable and efficient drilling performance, thanks to the reinforced structural design and materials used in all CARDI stands (rigs), while maintaining a compact size to ease transportability



### · Advanced dry and wet core bits

- feature segments that ensure faster drilling times on all materials, including the toughest reinforced concretes
- have segments laser-welded on a high-quality steel body, to ensure resistance to elevated temperatures and micropercussion impacts



- Industrial dust extractor for any dry drilling, cutting, sawing work
- ensures an efficient removal of dust and debris and provides cooling to the core bit, thanks to the double powerful motors
- guarantees the safety for the user, thanks to the double and sizeable H/HEPA + M -class filters



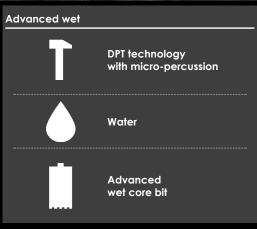


### The advanced hybrid drilling options

DIAMOND PULSE TECH is the only technology that let you choose between advanced dry and advanced wet drilling



## DPT technology with micro-percussion Air Advanced dry core bit



### The advantages of advanced dry and wet drilling

DIAMOND PULSE-TECH takes core drilling to new frontiers and delivers an unmatched drilling performance

### Advantages of the advanced dry



- **Drill cleanly**, keep your site spotless: no water / slurry
- Do not worry about water connection
- Work in every environment:

   e.g., finished interiors, historical
   buildings, cold sites, working sites with no water connection





Work faster  Higher drilling speed, on all materials, vs. standard wet drilling

Reduce drilling time by >40%: great savings and more jobs done



Work as usual • Keep on working with water

when / if you prefer, as you are used to, while getting an unmatched drilling performance



faster

- Drill faster
- -Higher drilling speed, on all materials, vs. standard wet drilling

-No water connection, no water

• Avoid site clean-up

Avoid site set-up

hose running

-No need to clean up slurry

-No waterproof drilling area

- No time wasted on slurry disposal

Reduce working time by >40%: great savings and more jobs done



waste

- Get less waste
- -Get drilling dust; no water / slurry
- Get a simpler, useful waste
- -Get dust, reusable to make concrete
- Avoid slurry and its disposal



• Avoid risk and costs of property damages due to water leakages

- Drill cleanly: drill everywhere and better
- Drill faster: save time and money
- Take on more jobs: grow your business

- Use one single core drill
- Get multiple advanced drilling options
- Obtain unparalleled performance





### Applications, professions, materials, diameters, lengths

DIAMOND PULSE-TECH targets the same applications, professions, materials, diameters and lengths of standard wet drilling

### Drillings for HVAC installation

- Drillings for networks (e.g., internet, security systems, fire protection systems) installation
- Drillings for anchors installation
- Drillings for chimneys installation
- Drillings of marble and stone slabs
- Sampling of cores
- Manhole / round openings
- Drillings for guardrails and fences installation
- Consolidation and securing of buildings deep drillings
- Stitch drilling
- Drillings of marble and stones in quarries

## **4**

**Professions** 

**Applications** 

- Plumber
- Electrician
- Installer (e.g., HVAC, networks, anchors, chimneys, fences, guardrails)
- Stonemason
- Landscaper / gardener
- Company specialized in materials' testing
- Construction company / general contractor
- Professional drilling and cutting company
- Demolition expert
- Company specialized in quarrying



- Materials
- Reinforced concrete
- Concrete
- Stones
- Asphalt
- Masonry
- Bricks







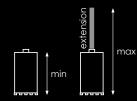




Advanced wet

min max
32 mm 250 mm





Advanced dry		
min	max	
320 mm	820 mm	

Advanced wet		
min	max	
450 mm	950 mm	

### The DIAMOND PULSE-TECH range

Choose the right model for your need

## Advanced hybrid core drills with micro-percussion

- DPH 2200 ME-16
- DPH 2200 ME-16-K
- CARDI HS 200-K
- DP 2200 MA-16
- DP 2200 MA-16-K
- CARDI DS 200-K
- DPH 3000 ME-17
- DPH 3000 ME-17-K
- CARDI HS 250-K
- O/ IIIDI I II
- DPH 3500 SEDPH 3500 SE-K
- CARDI HS 300-K

Core drill stands (rigs) with
DPT anti-vibration technology

LDP 200CDP 520

### Adv. dry / adv. wet core bits

DPTCDU

### Industrial dust extractor

DPT H COMPACT

### Accessories

- CARDIFACILE device for quick core-bit unscrewing
- Anchoring fixing bolt kit
- Axial guiding device for hand-held drilling
- Core bit extensions
- Core bit adaptor





### **DPH 2200 ME-16**

Advanced hybrid – wet / dry core drill

Operational mode

Weight

Supplied in

Dimensions - L x W x H

# CCARDI

Technical features

Drilling mode Advanced hybrid - wet / dry Technology DIAMOND PULSE-TECH with micro-percussion Input power - rated (max) 2,200 (max 2,500) W Input current - rated (max) 10.0 (max 11.5) A **Materials** Reinf. concrete, stones, asphalt, masonry, bricks Gears Rated no-load rpm 1,230 min-1 Rated load rpm 870 min-1 20,880 min<sup>-1</sup> Load micro-percussions Core bit connection 1" 1/4 UNC PRCD / GFI Included

57.0 x 10.2 x 17.3 cm

Heavy duty plastic case

Hand-held or on stand (rig)

Diameters Hand-held / on stand

Masonry, bricks 32 - 202 32 - 202 mm

Reinforced concrete 32 - 102 32 - 152 mm

7.9 kg

Applications | Installations (HVAC, networks, anchors, chimneys, fences), any round opening

Professions | Plumber, electrician, installer, stonemason, landscaper, construction co.

### DPH 2200 ME-16-K and CARDI HS 200-K

Advanced hybrid – wet / dry core drilling kits











### DP 2200 MA-16

Advanced dry only

### DP 2200 MA-16-K and CARDI DS 200-K

CARDI DS 200-K

Advanced dry core drilling kits



Technical features

Operational mode Hand-held or on stand (rig)

Drilling mode Advanced dry

Technology DIAMOND PULSE-TECH with micro-percussion

Input power - rated (max) 2,200 (max 2,500) W
Input current - rated (max) 10.0 (max 11.5) A

Materials Reinf. concrete, stones, asphalt, masonry, bricks

Gears

Rated no-load rpm 1,230 min<sup>-1</sup>
Rated load rpm 870 min<sup>-1</sup>
Load micro-percussions 20,880 min<sup>-1</sup>
Core bit connection 1" 1/4 UNC

PRCD / GFI Not necessary - no water

Weight 7.8 kg

Dimensions - L x W x H 57.0 x 10.2 x 17.3 cm Supplied in Heavy duty plastic case

Diameters	Hand-held / on stand	4-1			
	Masonry, bricks	32 - 202	32 - 202	mm	
	Reinforced concrete	32 - 102	32 - 152	mm	

Applications | Installations (HVAC, networks, anchors, chimneys, fences), any round opening

Professions | Plumber, electrician, installer, stonemason, landscaper, construction co.



DPT H COMPACT

H / HEPA + M compact ind. dust extractor



DPT H COMPACT

H / HEPA + M compact ind. dust extractor





### DPH 3000 ME-17

Advanced hybrid – wet / dry core drill

## CG ARDI

Technical features

Operational mode Hand-held or on stand (rig) Drilling mode Advanced hybrid - wet / dry Technology DIAMOND PULSE-TECH with micro-percussion Input power - rated (max) 3,000 (max 3,300) W Input current - rated (max) 14.0 (max 15.5) A **Materials** Reinf. concrete, stones, asphalt, masonry, bricks Gears Rated no-load rpm 1,250 min-1 Rated load rpm 840 min-1 20,160 min<sup>-1</sup> Load micro-percussions 1" 1/4 UNC Core bit connection PRCD / GFI Included Weight 8.4 kg Dimensions - L x W x H 55.0 x 11.1 x 17.7 cm Supplied in Heavy duty plastic case

Diameters	Hand-held / on stand	7		
	Masonry, bricks	32 - 202	32 - 250	mm
	Reinforced concrete	32 - 102	32 - 202	mm

Applications | Installations (HVAC, networks, anchors, chimneys, fences), any round opening

Professions | Plumber, electrician, installer, stonemason, landscaper, construction co.

### DPH 3000 ME-17-K and CARDI HS 250-K

Advanced hybrid - wet / dry core drilling kits



DPT H COMPACT



Optional





### **DPH 3500 SE**

Advanced hybrid - wet / dry core drill motor

### DPH 3500 SE-K and CARDI HS 300-K

Advanced hybrid - wet / dry core drilling kits



Technical features

Operational mode On stand (rig)

Drilling mode Advanced hybrid - wet / dry

Technology DIAMOND PULSE-TECH with micro-percussion

Input power - rated (max) 3,420 (max 4,600) W Input current - rated (max) 16.0 (max 22.0) A

Materials Reinf. concrete, stones, asphalt, masonry, bricks

Gears

Rated no-load rpm 670 - 1,100 - 1,830 min<sup>-1</sup>
Rated load rpm 440 - 720 - 1,200 min<sup>-1</sup>
Load micro-percussions 10,560 - 17,280 - 28,800 min<sup>-1</sup>

Core bit connection 1" 1/4 UNC PRCD / GFI Included Weight 16.4 kg

Dimensions - L x W x H 64.2 x 16.1 x 16.7 cm

Supplied in Carton box

Diameters On stand

Masonry, bricks 32 - 250 mm

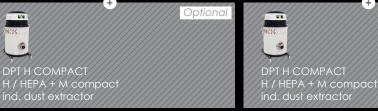
Reinforced concrete 32 - 250 mm

Applications | Installations (fences, guardrails), building consolidations, any round opening

Professions | Construction co., professional drilling and cutting co., demolition expert







Optional





**LDP 200** 

Core drill stand (rig) with DPT anti-vibration technology for DPH 2200 ME-16, DP 2200 MA-16 and DPH 3000 ME-17



**CDP 520** 

Core drill stand (rig) with DPT anti-vibration technology for DPH 3500 SE



Technical features

Base
Column
Carriage
Feeding handle
Max carriage run
Max drilling diameter

Tilting angle Fixing system

Core drill mounting

Weight

Rear bars

Dimensions - L x W x H

Aluminum - compact and light

Aluminum - 50x50 mm
Self-lubricating sliding pads
DPT anti-vibration technology

577 mm 202 mm Steel - 2 bars 0° - 45° Anchoring

Rapid-lock quick connection

13.3 kg

44.0 x 33.0 x 100.0 cm

Technical features

Base Steel - heavy duty
Column Steel - 50x50 mm

Carriage Steel rollers and bearings
Feeding handle DPT anti-vibration technology

Max carriage run650 mmMax drilling diameter500 mmRear barsSteel - 2 barsTilting angle0° - 45°Fixing systemAnchoring

Core drill mounting Dove-tail quick connection

Weight 25.4 kg

Dimensions - L x W x H

53.3 x 42.0 x 113.2 cm





### **DPT**

Diamond core bits for advanced dry drilling with micro-percussion 1" 1/4 connection – laser-welded segments – 320 mm usable length

CDU Diamond core bits for advanced wet drilling with micro-percussion 1" 1/4 connection – laser-welded segments – 450 mm usable length

Item code	<b>Diameters,</b> mm	Segments, # x L - W - H, mm
DPT 032	32	4 x 16 - 3.8 - 10
DPT 042	42	4 x 19 - 3.8 - 10
DPT 052	52	4 x 20 - 3.8 - 10
DPT 062	62	5 x 20 - 3.8 - 10
DPT 082	82	6 x 20 - 3.8 - 10
DPT 102	102	8 x 20 - 3.8 - 10
DPT 112	112	8 x 20 - 3.8 - 10
DPT 122	122	9 x 20 - 3.8 - 10
DPT 127	127	9 x 20 - 3.8 - 10
DPT 132	132	9 x 20 - 3.8 - 10
DPT 152	152	14 x 20 - 4.3 - 10
DPT 162	162	15 x 20 - 4.3 - 10
DPT 182	182	17 x 20 - 4.3 - 10
DPT 202	202	18 x 20 - 4.3 - 10
DPT 250	250	20 x 20 - 4.5 - 10



DPT diamond core bits developed for advanced dry drilling with micro-percussion, both hand-held and on stand (rig), on:

> reinforced concrete concrete stones asphalt masonry bricks

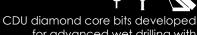


Item code	<b>Diameters,</b> mm	<b>Segments,</b> # x L - W - H, mm
CDU 042	42	4 x 20 - 3.5 - 9
CDU 052	52	5 x 24 - 3.5 - 11
CDU 062	62	6 x 24 - 3.5 - 11
CDU 072	72	7 x 24 - 3.5 - 11
CDU 082	82	7 x 24 - 3.5 - 11
CDU 092	92	8 x 24 - 3.5 - 11
CDU 102	102	9 x 24 - 3.5 - 11
CDU 112	112	9 x 24 - 3.5 - 11
CDU 122	122	10 x 24 - 4 - 11
CDU 127	127	10 x 24 - 4 - 11
CDU 132	132	10 x 24 - 4 - 11
CDU 142	142	10 x 24 - 4 - 11
CDU 152	152	12 x 24 - 4 - 11
CDU 162	162	13 x 24 - 4 - 11
CDU 172	172	13 x 24 - 4 - 11
CDU 182	182	14 x 24 - 4 - 11
CDU 192	192	14 x 24 - 4 - 11
CDU 200	200	15 x 24 - 4 - 11
CDU 225	225	16 x 24 - 4.5 - 11
CDU 250	250	17 x 24 - 4.5 - 11



- #: number of segments
- L: segment length
- W: segment width H: segment height





for advanced wet drilling with micro-percussion, both hand-held and on stand (rig), on:

reinforced concrete concrete stones asphalt masonry bricks





- #: number of segments
   L: segment length
   W: segment width
   H: segment height









### DPT H COMPACT DUST EXTRACTOR

For drilling, cutting and sawing



### Highly-efficient filters

- Double H / HEPA and M filters, certified by 3rd party
- Filter clogging warning light
- Adequate airflow-surface ratio
- Double Ametek Lamb Electric motors, made in EU
- Large H / HEPA and M filtering surfaces
- Safe handling of dust
- PTFE bag for dust collection
- Heavy duty and easy to transport
- 100% made of steel
- Compact design

|Illustrative, |not exhaustive

Accessories
For drilling

### **CARDIFACILE** device for quick core-bit unscrewing

for 1" 1/4 core bits

Item code	Compatibility
506102	for hand-held core drills
505355	for core drill motors







Technical features

 Voltage
 230 V / 50-60 Hz

 Power
 2.3 kW (2 x 1,150 W)

 Max water lift
 2,500 mmH2O

Max air flow 360 m³/h

Filter type H / HEPA and M filters: cartridges

76 db (A)

22.0 kg

H / HEPA filter surface 11,150 cm<sup>2</sup>
M filter surface 6,000 cm<sup>2</sup>

H / HEPA filter - filtration class H14 / 99.995% D.O.P.

M filter - filtration class M / PTFE
Air load on filters 450 m³/m²/h
Suction inlet 50 mm

Dimensions - L x W x H 38.0 x 38.0 x 80.0 cm

Weight

Noise level

Anchoring fixing bolt kit

for a safe anchoring of the drill stand (rig)

Item code	Description
503628	M12 thread







**Accessories** 

For drilling

Illustrative, not exhaustive

### Contacts

### Axial guiding device for hand-held drilling

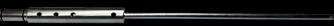
for 1" 1/4 core bits

Compatibility Item code DP 2200 MA-16 504841 DPH 2200 ME-16 DPH 3000 ME-17

How to use:

- drill a hole into the material with a drill
- use the drilled hole as a guide for the axial guiding device





### Visit us



www.cardi.biz



► YouTube



Linked in

### Core bit extensions

for 1" 1/4 core bits; made of aluminum

Item code	Usable length
501369	200 mm
501370	300 mm
502410	500 mm



### Core bit adaptor

made of aluminum

Item code	Description
501367	1" ¼ (f) - ½G (f)



Contact us

sales@cardi.biz

+39 035 795029

www.cardi.biz











Via Leonardo da Vinci, 21 I-24030 Pontida (BG), Italy

+39 035 795029 info@cardi.biz

www.cardi.biz