

# **Gas distribution**Connection solutions









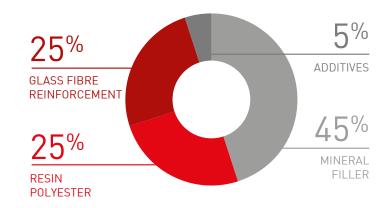
# Durable and rugged SMC products

Groupe Cahors has been developing, manufacturing and marketing metering units and enclosures in composite materials since 1965, compliant with specifications by Enedis, GrDF and other network operators. The thermo-hardening polyester SMC meets requirements in terms of durability, ruggedness, safety, and resistance to climatic events.

Over the last 40 years, **as an expert in SMC manufacturing**, **CAHORS** has mastered the formulation of pre-impregnated and hot compression transformation.

## **TYPICAL SMC COMPOSITION**

The SMC is a composite material made of a glass fibre reinforced polyester matrix





## The SMC is the best device

to guarantee operation of network equipment while protecting persons and property over the long term.



### Resistance to climatic events

UV, humidity, ozone, oxidization, pollution, corrosion. The SMC withstands extreme

temperatures from -50°C to 150°C.



## Resistance to fire

The SMC is halogen-free. Its smoke is non-corrosive, low density and low toxicity.

The SMC does not melt or drip.

- No risk of fire propagation.
- Maintains safety.



## Service life

Over 40 years.



## Mechanical performance

Non-deformable, the SMC withstands impacts > 20 joules and crack propagation.



## Made in France

Our products were developed and designed in CAHORS's plants.

## **SEALING TEST BENCH**





## **S22 Boxes and Terminals**

GAS CONNECTION BOX SETS

Range of compact boxes and terminals for individual and collective connections.



## Use

Installed at property boundary, S22 boxes connect subscribers to the Gas distribution network and implement connections for cut-off and cutting-pressure reduction from 6 to 30 m<sup>3</sup>/h.



## **Protection indexes**

- IP43 as per IEC 60529
- IK10 as per IEC 62262





## Technical specifications

- HN 62-S-22 (GrDF specification)
- SMC material : **HN 60-E-02** and HN 60-S-02 RAL 1015



## Range advantages

- 3 box heights available
- Compact boxes, small footprint
- Removable fastening plate
- Door opening at 270°



Example of basic box fitted with a 25m³/h regulator



Example of high box assembly

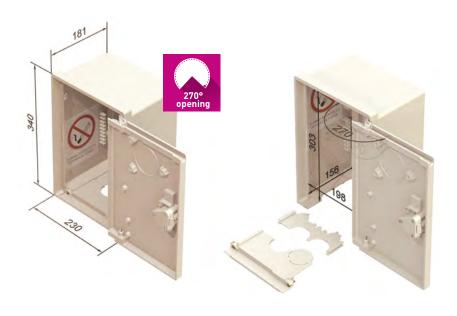
## > BASIC BOX

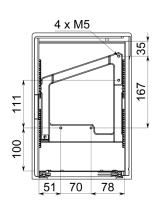
## **Components**

- Tank with a plate,
- Closing plate,
- Door (270° opening / closing by rectangular head safety latch)
- 2 types of connection: cut-off/pressure reduction from 6 to 30 m³/h or single LP cut-off cal. 25

## **Fastening**

Embedded or projecting, fitted on a pedestal or not.





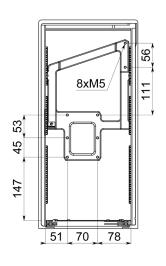
## Components • Tank with a plate,

- Closing plate,
- Door (270° opening / closing by rectangular head safety latch)
- 3 types of connection: cut-off/pressure reduction from 6 to 30 m³/h or single LP and LP/MP cal.25

## **Fastening**

Embedded or projecting, fitted on a pedestal or not.





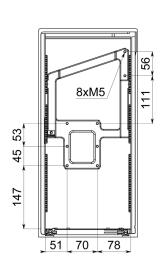
## Components

- High pedestal closed by a cap,
- Door (270° opening / closing by rectangular head safety latch)
- 3 types of connection: cut-off/pressure reduction from 6 to 30 m³/h or single LP and LP/MP cal.25.

## **Fastening**

Built-in or projecting





**Components**• Tank with removable strip at the top and a plinth at the bottom.

## **Fastening**

Sealed at bottom of excavation, on 4 cylindrical feet with adjustable end pieces (0 to 35 mm).





## Boxes, terminals & bases

	Packing	Unit weight (Kg)
Basic box with plate	110 / pallet	3,5
High box with plate	77 / pallet	5
Base	50 / pallet	8
Basic terminal with plate	40 / pallet	9





## **MININTER Boxes**

## GAS CONNECTION BOXES

Compact boxes for individual and collective connections.



### Use

Installed at property boundary, MININTER boxes are used to connect subscribers to the distribution network and install connections for cutoff and cutting-pressure reduction up to 25 m<sup>3</sup>/h.



## **Protection indexes**

- IP43 as per IEC 60529
- IK09 as per IEC 62262







## **Technical specifications**

• EN 62-208

RAL 7035 RAL 1015



## Range advantages

- Compact boxes, small footprint
- 2 colours available: beige and grey
- Door opening at 180° (Horizontal)

## Components

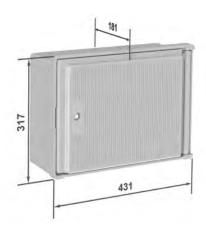
- Tank fitted with fastening inserts
- Triangle closing for Mininter H
- Rectangle closing for Mininter V
- Door (180° opening for Mininter H)
- 2 types of connection: cut-off and cut-off pressure reduction up to 25 m<sup>3</sup>/h.

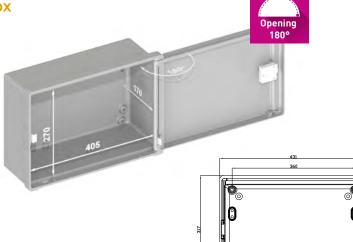
## **Fastening**

Built-in or projecting.

## > BOX

## MININTER-H HORIZONTAL box

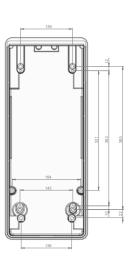




## **MININTER- V VERTICAL box**







## **Boxes**

	Packing	Unit weight (Kg)
Mininter-H horizontal box	48 / pallet	4
Mininter-V vertical box	49 / pallet	3,6

## **Accessories\***

Meter reading window	I
Wall fastening tab	
Post fastener	
Sealing cones	
Grommet	

<sup>\*</sup> Please call





## **MINIMIXT Boxes** (design S2300)

## **GAS METERING CONNECTION BOXES**

Boxes for individual and collective connections.





Installed at property boundary, MINIMIXT boxes are used to connect subscribers to the Gas distribution network and implement connections for metering of 6 m<sup>3</sup>/h and cutting/ pressure reduction from 6 to 65 m<sup>3</sup>/h.



## **Protection indexes**

- IP43 as per IEC 60529
- IK10 as per IEC 62262



## **Technical specifications**

- HN 62-S-20 (GrDF specifications)
- SMC material : HN 60-E-02

and HN 60-S-02 RAL 1015



## Range advantages

- Boxes for individual metering up to 6 m<sup>3</sup>/h
- Door opening at 180°
- Boxes for pressure reduction up to 65 m<sup>3</sup>/h

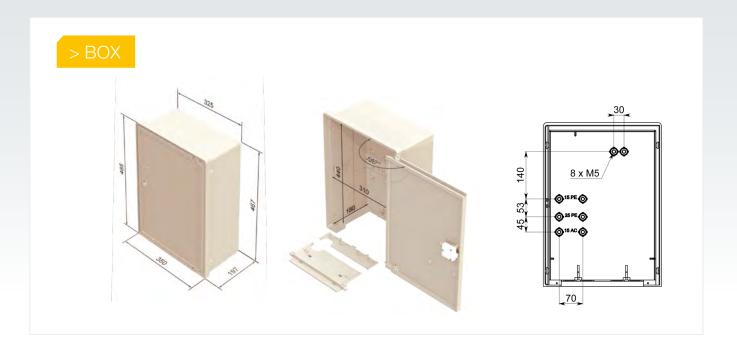
## Components

- Tank with fastening inserts,
- Sealable closing plate,
- Door: 180° opening and closing by safety latch (rectangular head)
- 3 types of connections :
  - Cut-off/metering up to 6 m<sup>3</sup>/h
  - Cut-off/pressure reduction up to 65 m<sup>3</sup>/h
  - Cut-off/pressure reduction/metering up to 6 m<sup>3</sup>/h.

## **Fastening**

Built-in or projecting, fitted on a pedestal or not.

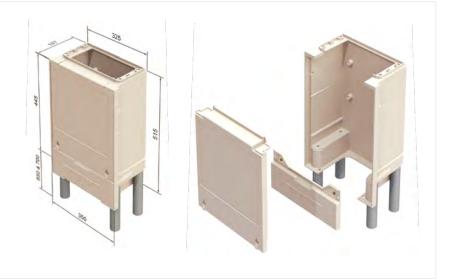




Components

Tank plus a plinth in the lower part.

**Fastening**Sealed at bottom of excavation, on 4 cylindrical feet with adjustable end pieces (0 to 35 mm).



## Boxes ans pedestal

	Packing	Unit weight (Kg)
Empty box	43 / pallet	5,5
Basic pedestal	27 / pallet	8,1





## **MINIMIXT Boxes** (S2400 design)

## **GAS METERING CONNECTIONS BOXES**

Boxes for individual and collective connections.



Installed at property boundary, MINIMIXT boxes are used to connect subscribers to the Gas distribution network and implement connections for metering of 6 m<sup>3</sup>/h and cutting/pressure reduction from 6 to 65 m<sup>3</sup>/h.



## **Protection indexes**

- IP43 as per IEC 60529
- IK10 as per IEC 62262



### Technical specifications

- SCOF-240-1(GrDF specification)
- SMC material : HN 60-E-02

and HN 60-S-02 RAL 1015





Example of box with smart metering of 6 m<sup>3</sup>/h



## Range advantages

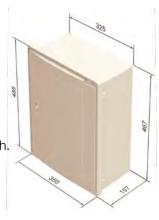
- Boxes for individual metering up to 6 m<sup>3</sup>/h
- 2 pedestals available
- Door opening at 180°
- Collective connecting boxes up to 65m3/h

## Components

- Tank with fastening inserts,
- Sealable closing plate,
- Door: 180° opening and closing by safety latch (rectangular head)
- 3 types of connections :
  - Cut-off/metering up to 6 m<sup>3</sup>/h
  - Cut-off/pressure reduction up to 65 m<sup>3</sup>/h
  - Cut-off/pressure reduction/metering up to 6 m<sup>3</sup>/h.

## Fastening

Built-in or projecting, fitted on a pedestal or not.





ComponentsTank plus a plinth in the lower part.

**Fastening**Sealed at bottom of excavation, on 4 cylindrical feet with adjustable end pieces (0 to 35 mm).

## Low pedestal



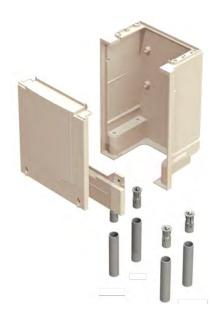




## High pedestal







## **Boxes and bases**

	Packing	Unit weight (Kg)
Empty box	43 / pallet	5,5
Low pedestal	70 / pallet	3,7
High pedestal	24 / pallet	8,1





## **PANINTER Boxes** (S300 design)

Boxes for individual and collective metering connections.



Installed at property boundary, Paninter boxes are used to connect subscribers to the distribution network and implement connections for metering up to 16 m<sup>3</sup>/h



## **Protection indexes**

- IP43 as per IEC 60529
- IK10 as per IEC 62262



## **Technical specifications**

- HN 62-S-15 (GrDF specification)
- SMC material : HN 60-E-02

and HN 60-S-02 RAL 1015





## Range advantages

- 2 door models
- 2 tank versions
- 2 pedestal versions

## Components

- Tank fitted with fastening inserts and fastening rails according to the versions
- Closing plate,
- Door 90° opening and closing by triangular or rectangular cam
- 3 types of connections :
- cut-off/metering : double metering G4 and single metering G6 and G10
- cut-off/pressure reduction/metering : double metering G4 and single metering G6 and G10.

## **Fastening**

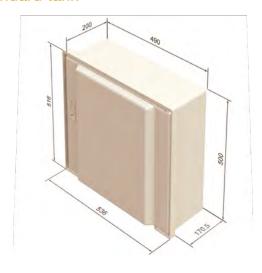
Built-in or projecting, fitted on a pedestal or not.



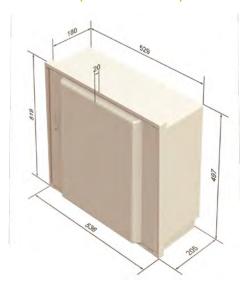
Example of box fitted with G6 metering

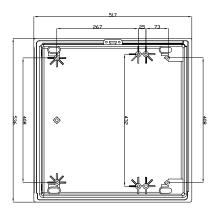
## > 2 TANK VERSIONS

## Standard tank



## Widened tank (+ 31mm wide)









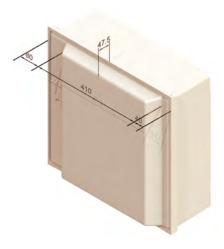
## > 2 DOOR VERSIONS

CAHORS offers models of boxes with different depths, with removable plates, adapting to all types of equipment.

Call to find the enclosure corresponding to your needs.



Door Large Volume



## > 2 PEDESTAL VERSIONS

## **Components**

2 models of bases available:

- A tank with a removable panel in the upper part, by 2 sealable triangular head screws and a plinth at the bottom.
- A tank with one-piece panel locked inside.

## **Fastening**

Sealed at bottom of excavation, on 4 cylindrical feet with adjustable end pieces (0 to 35 mm).







Removable panel + plinth version

Fixed panel

## **Boxes**

	Packing	Unit weight (Kg)
S300 box	From 21 to 32 / pallet according to versions	8,5
S300 pedestal	16 / pallet	9,5

## **Accessories\***

Meter reading window

Wall fastening tab

Post fastener

Sealing cones

Grommet



<sup>\*</sup> Please call



## **MAXINTER Boxes**

Compact boxes for individual and collective metering connections.





Installed at property boundary, Maxinter boxes are used to connect subscribers to the distribution network and implement connections for metering up to 2 x10 m<sup>3</sup>/h.



## **Technical specifications**

• EN 62-208

**RAL 7035** 



## **Protection indexes**

- IP43 as per IEC 60529
- IK09 as per IEC 62262



## Range advantages

- Large boxes
- Tank can be closed or fitted with a removable closing plate

## Components

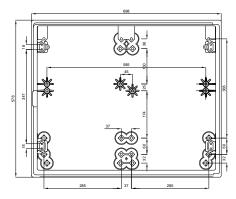
- Tank fitted with fastening rails and inserts
- Door (180° opening/ closing by triangular, rectangular cam lock / key 220, brass triangle screw)
- 2 types of connections:
- Cut-off/metering up to 2 x G6
- Cut-off/pressure reduction/metering up to 2 x G6

## **Fastening**

Built-in or projecting, fitted on a pedestal or not.

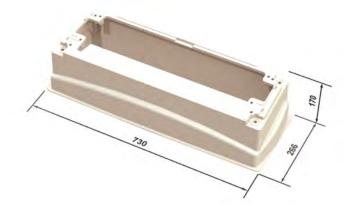






## **Components** One-piece pedestal

Fastening
Anchored to the ground by adjustable feet.



## **Boxes and pedestals**

	Packing	Unit weight (Kg)
Maxinter Box	16 / pallet	11,6
One-piece pedestal	32 / pallet	3,5





## **MAXIPOL** cabinets

Range of large volume modular, configurable and customizable cabinets integrating all types of equipment for managing, monitoring and connecting to gas networks.



## **Protection indexes**

- IP55 as per the IEC 60529 standard
- IK10 as per the IEC 62262 standard
- IK08 door with window





### Modular: Total flexibility

Many assembly configurations:

Tailor-made painted steel roof adapted to all combinations (please call).







Vertical

Horizontal

Back to back

### Broad selection of enclosures

## Box roof

- Flat roof (IP55)
- Sloped and ventilated roof (IP43 or IP54 upon request)





## Two Depths

## 300 and 420 mm.

For all needs: electronics, telecommunications, temporary installations, public lighting, etc.



### Customization







Bespoke machining

## Closing system







Different locking systems are available : 3-point closing, retractable handle, etc.



Refer to our Large Volume Cabinet catalogue for more information on our ranges of enclosures.







# Underground modules 250 kN

Compact or cylindrical underground manholes for individual and collective connections.



### Use

Installed under sidewalk, underground modules are used to connect subscribers to the Gas distribution network and implement connections for cut-off and cutting-pressure reduction from 6 to 65 m<sup>3</sup>/h.





## **Protection indexes**

- IPX4 as per IEC 60529
- IK09 as per IEC 62262



## **Technical specifications**

- S -BLD-900
- EN 124



## Range advantages

## Easy installation and handling

- Weight: 6.5 kg without equipment
- Large inside volume ( $\approx 40$  l) for implanting any type of regulator from B6 to C65
- Tank adjustable in height

### Resistance

- Resistance to backfilling and compacting during installation.
- All connections sealed by a retractable sleeve or a grommet.
- Cover resistance 250 kN

## **Components**

- A 250 kN cast iron cover on site frame (SMC material)
- Tank on 3 adjustable feet with several zones to drill for penetrations of connecting ducts.

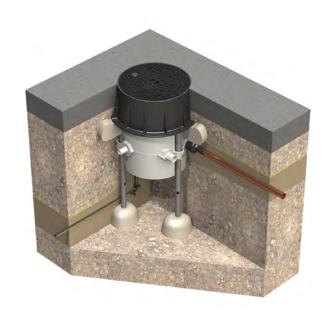
## > MODULE





## **Underground modules**

	Packing	Unit weight (Kg)
Empty module only	15 / pallet	7,1
Manhole 250 kN (cast iron cover + composite frame)	15 / pallet	20





## "Multi-Compozit" manholes

Rectangular underground manholes for individual and collective connections.



### Use

Installed under sidewalk, MULTI-COMPOZIT manholes connect subscribers to the Gas distribution network and implement connections for cut-off and cutting-pressure reduction from 6 to 30m<sup>3</sup>/h.



## **Protection indexes**

- IK09 for the tank as per IEC 60529
- IK10 for the covers as per IEC 60529





## **Technical specifications**

• EN 124



## Range advantages

- Several depths available
- Modular and configurable
- Several composite cover solutions
- Light: version from 7 kg



- Lipped cover up to 15 kN
- Composite cover up to 125 kN on sliding frame
- Base fitted with fastening embossing
- Riser in option



## > MANHOLE

## Fixed height



Riser height : 150 mm



## **Covers**

	Packing	Unit weight (Kg)
Multi-Compozit cover 5 kN	24 / pallet	7
Multi-Compozit cover 125 kN	24 / pallet	15

## Height adjustable with sliding frame











## **CAHORS INTERNATIONAL**

ZI de Regourd • CS 90149 • 46003 Cahors cedex 9 - FRANCE Tel. +33 (0)5 65 35 82 01 • Fax +33 (0)5 65 35 82 14 Email. sales.support@groupe-cahors.com