

The production chain

Cement manufacturing runs through four stages. Understanding them explains both the quality guarantees and the price differences between grades:

Stage	Process	Output
1. Raw meal	Limestone and clay are quarried, crushed and blended into a fine raw meal.	Raw meal
2. Clinkering	The raw meal is fired in a rotary kiln at approx. 1,450 °C. It sinters into hard nodules.	Clinker
3. Grinding	Clinker is ground with gypsum (set regulator) and mineral additions — limestone and/or granulated slag.	Cement
4. Packing	Cement is shipped in bulk, big-bags, palletised bags or road bags.	Delivered product

Clinker is the high-value intermediate; the finished cement is clinker plus gypsum plus mineral additions, ground to a controlled fineness. The proportion of clinker in the final cement is the main driver of both performance and cost — a higher clinker content means a stronger, faster cement and a higher price.

How to read the cement designation

All grades follow the European standard EN 197-1. The designation encodes the composition and the strength:

Code	Meaning
CEM II	Portland-composite cement — Portland clinker with a defined share of mineral additions.
A / B	Level of additions. A = 6–20 %, B = 21–35 %. More additions (B) means less clinker.
L / M (S-L)	Type of addition. L = limestone. M (S-L) = a mix of granulated slag (S) and limestone (L).
32,5 / 42,5 / 52,5	Standard compressive strength class at 28 days, in MPa. Higher = stronger.
N / R	Early strength. N = normal, R = rapid (higher strength at 2 days).

Example: CEM II/A-L 42,5 N is a Portland-limestone cement, 6–20 % limestone, 42.5 MPa class, normal early strength.

3. Product Range & Technical Specifications

All grades below are manufactured in Algeria by our production partner, conform to the Algerian standard NA 442 (equivalent to EN 197-1:2012) and are ISO 9001 certified. The CEM II/A-M (S-L) 42,5 N grade additionally holds AFNOR CE certificate No. 0333-CPR-104801 under EU Regulation 305/2011, first issued 07/02/2025. A certificate of analysis accompanies every lot.

CEM II/A-L 42,5 N — Portland-Limestone Cement

Portland cement obtained by fine grinding of clinker with limestone addition and gypsum as set regulator. High clinker content, high early and 28-day strength.

Typical applications: structural concrete, precast elements, reinforced and prestressed concrete, ready-mix, civil engineering (bridges and roads), foundations in non-aggressive soils.

Mechanical & physical characteristics

Property	Value	Standard
Compressive strength — 2 days (MPa)	15–19	NA 234 / EN 196-1
Compressive strength — 7 days (MPa)	30–38	NA 234 / EN 196-1
Compressive strength — 28 days (MPa)	43–51	NA 234 / EN 196-1
Initial setting time (min)	≥ 60	NF EN 196-3
Soundness / expansion (mm)	≤ 10	NF EN 196-3
Specific surface — Blaine (cm²/g)	3 300–4 000	NF EN 196-6

Composition (% by mass)

Clinker	Limestone	Gypsum
80–94	6–20	0,5

Chemistry (typical): CaO 55–65 %, SiO₂ 22–28 %, SO₃ 1,8–2,5 %, Cl⁻ ≤ 0,01 %.

CEM II/A-M (S-L) 42,5 N — Portland-Composite Cement · CE certified

Portland-composite cement combining clinker, granulated blast-furnace slag and limestone. Carries AFNOR CE certificate 0333-CPR-104801. High 28-day strength with the durability benefits of slag.

Typical applications: structural and general concrete, precast, ready-mix, civil engineering, foundations in moderately aggressive environments.

Mechanical & physical characteristics

Property	Value	Standard
Compressive strength — 2 days (MPa)	14–19	NA 234 / EN 196-1
Compressive strength — 7 days (MPa)	30–38	NA 234 / EN 196-1
Compressive strength — 28 days (MPa)	43–51	NA 234 / EN 196-1
Initial setting time (min)	≥ 60	NF EN 196-3
Soundness / expansion (mm)	≤ 10	NF EN 196-3
Specific surface — Blaine (cm²/g)	3 300–4 000	NF EN 196-6

Composition (% by mass)

Clinker	Slag	Limestone	Gypsum
80–88	6–10	6–10	0,5

CE marking under EU Regulation 305/2011 (System 1+). Chemistry (typical): CaO 55–65 %, SiO₂ 22–28 %, SO₃ 1,8–2,5 %.

CEM II/B-M (S-L) 42,5 N — Portland-Composite Cement

Portland-composite cement with a higher share of slag and limestone additions. 42.5 N strength class at a more economical clinker factor. Excellent for mass and general-purpose concrete.

Typical applications: construction (housing, commercial and industrial buildings), general masonry, mass concrete, ready-mix, civil engineering, reinforced and non-reinforced foundations in non-aggressive soils.

Mechanical & physical characteristics

Property	Value	Standard
Compressive strength — 2 days (MPa)	14–16	NA 234 / EN 196-1
Compressive strength — 28 days (MPa)	42,5–45	NA 234 / EN 196-1
Flexural strength — 28 days (MPa)	6,8–7,7	NA 234 / EN 196-1
Initial setting time (min)	≥ 60	NF EN 196-2

Property	Value	Standard
Soundness / expansion (mm)	≤ 10	NF EN 196-3
Specific surface — Blaine (cm²/g)	3 300–4 000	NF EN 196-6

Composition (% by mass)

Clinker	Slag	Limestone	Gypsum
65–79	11–18	10–17	4,5

Chemistry (typical): CaO 60–66 %, SiO₂ 19–23 %, SO₃ 1,8–3,5 %, MgO 1–2 %, Cl⁻ 0–0,01 %.

CEM II/B-L 32,5 R — Portland-Limestone Cement

Portland-limestone cement, 32.5 R strength class with rapid early strength. The highest limestone content of the range, ideal for finishing mortars and non-structural concrete.

Typical applications: construction, finishing mortars for screeds and renders, general masonry, dressing and floating, cement-based products, foundations in non-aggressive soils, ready-mix, soil stabilisation.

Mechanical & physical characteristics

Property	Value	Standard
Compressive strength — 2 days (MPa)	10–14	NA 442 / EN 196-1
Compressive strength — 28 days (MPa)	32,5–45	NA 442 / EN 196-1
Flexural strength — 28 days (MPa)	6,8–7,7	NA 234 / EN 196-1
Initial setting time (min)	≥ 60	NF EN 196-3
Soundness / expansion (mm)	≤ 10	NF EN 196-3
Specific surface — Blaine (cm²/g)	3 300–4 000	NF EN 196-6

Composition (% by mass)

Clinker	Limestone	Gypsum
65–79	21–35	0,5

Chemistry (typical): CaO 59–65 %, SiO₂ 18–20 %, SO₃ 1,8–2,5 %, Cl⁻ 0–0,01 %.

CEM I 52,5 N/R — Ordinary Portland Cement (on request)

Pure Portland cement, 52.5 MPa strength class, the highest clinker factor and the highest early strength of the Portland range. Used for high-performance and prestressed concrete, precast with fast demoulding cycles, and demanding structural work.

This grade is not part of the standard schedule but can be sourced on request. Technical data sheet, availability, minimum lot size and price are provided upon enquiry. Speciality grades — sulphate-resisting (CRS) and oil-well (class G) cements — are also available on request.

4. Grey Cement Clinker

Beyond finished cement, we can supply grey Portland clinker — the semi-finished nodules produced before grinding. Clinker is bought by grinding stations and cement producers who add gypsum and mineral additions locally.

Parameter	Typical value
Type	Grey Portland cement clinker
Lime saturation factor (LSF)	0,90–0,98
C ₃ S (alite)	approx. 55–60 %
Free lime	≤ 1,5 %
Loading form	Bulk

Clinker price, guaranteed chemistry, minimum lot size and monthly capacity are quoted on enquiry against a firm destination and shipment size. Please indicate your required tonnage per shipment and your discharge port and we will revert with a firm FOB offer.

Payment	Irrevocable letter of credit, confirmed at sight, issued by a first-class bank, opened 15 days before loading. CAD or TT considered according to amount and relationship history.
First shipment	30–45 days after LC opening and vessel confirmation.
Inspection	SGS or Bureau Veritas before loading: quality (EN 197-1 / NA 442) and quantity (draft survey), at our charge. Buyer's counter-inspection allowed, at buyer's charge.
Documents	Commercial invoice, packing list, bill of lading, certificate of origin, certificate of analysis, weight certificate, inspection report, insurance certificate (CIF).
Standards	EN 197-1 (CE marking) and Algerian standard NA 442. ISO 9001 certified producer.
Governing law	English law.
Arbitration	LCIA London or ICC Paris, at the parties' choice.
Force majeure	ICC clause.
Annual contracts	Price schedule revised quarterly, indexed to the mill price, ocean freight and USD/DZD parity.

8. How to Order

1. Send us your enquiry: grade, packaging, tonnage per shipment and total tonnage, discharge port, schedule.
2. We revert with a firm priced offer (FOB, CFR or CIF) within 48–72 hours, after confirming the producer price and availability.
3. Sale contract is signed, then the letter of credit is opened.
4. Pre-shipment inspection, vessel loading and delivery of the complete documentary set.

9. Reservations

The prices in this dossier are indicative and subject to availability at the order date and to written confirmation by the producer. They do not constitute a firm offer in the contractual sense: only the nominative offer we issue in response to your enquiry, for a defined grade, tonnage, packaging and destination, binds the parties. Any material change in the producer price, logistics cost or exchange-rate parity leads to a re-issue of the schedule.

We look forward to defining, together, the volumes and destinations of a lasting cooperation.

5. FOB Price Schedule

Net prices per metric tonne, loaded on board at the port of Skikda, Algeria. Our FOB offer includes inland haulage mill-to-port, port handling, wharfage, export customs clearance, certificate of origin, pre-shipment inspection and demurrage provision. Prices apply to all tonnages; a volume commitment opens a negotiated rebate set in the contract.

No.	Product	Packaging	FOB (USD/MT)
1	CEM II/A-L 42,5 N · CEM II/A-M (S-L) 42,5 N	Bulk	60.50
2	CEM II/A-L 42,5 N · CEM II/A-M (S-L) 42,5 N	Big-bags (1)	62.50
3	CEM II/A-L 42,5 N · CEM II/A-M (S-L) 42,5 N	Palletised 50 kg	66.50
4	CEM II/A-L 42,5 N · CEM II/A-M (S-L) 42,5 N	Palletised 25 kg	77.00
5	CEM II/A-L 42,5 N · CEM II/A-M (S-L) 42,5 N	Road bags 50 kg (2)	60.00
6	CEM II/B-M (S-L) 42,5 N	Bulk	55.50
7	CEM II/B-M (S-L) 42,5 N	Big-bags (1)	57.00
8	CEM II/B-M (S-L) 42,5 N	Palletised 50 kg	60.50
9	CEM II/B-M (S-L) 42,5 N	Palletised 25 kg	62.00
10	CEM II/B-M (S-L) 42,5 N	Road bags 50 kg (2)	60.00
11	CEM II/B-L 32,5 R	Bulk	56.50
12	CEM II/B-L 32,5 R	Big-bags (1)	65.50
13	CEM II/B-L 32,5 R	Palletised 50 kg	66.00
14	CEM II/B-L 32,5 R	Kraft bags 50 kg	61.00

(1) Big-bags: the supply of big-bags and sling-bags is not included in the price; a surcharge of USD 3.00/MT applies if the packaging is provided by us.

(2) Road bags 50 kg: non-palletised packaging suited to road collection. Palletised version recommended for ocean shipment.

CEM I 52,5, clinker and speciality grades (CRS, oil-well): price on request.

CFR / CIF pricing

CFR and CIF prices are quoted case by case, as ocean freight depends on the discharge port, the shipment size and the chartering window. Please provide your discharge port, tonnage per shipment and schedule; we revert within 48–72 hours with a firm quotation. Under CIF, cover is an ICC A (all-risks) policy for 110 % of the CIF value, at our charge.

6. Packaging & Loading Rates

Packaging	Characteristics	Daily loading rate
Bulk	Direct loading to truck / vessel	2,500 T/day
Big-bags	Packaging not supplied — see note 1	600 T/day
Palletised 50 kg	1.95 T per pallet — 39 bags	1,500 T/day
Palletised 25 kg	1.55 T per pallet — 62 bags	1,500 T/day

Bags are 2-ply kraft paper with a guaranteed tamper-proof closure, available in 25 ± 0.25 kg and 50 ± 0.50 kg. Cement is available in bulk and in bags. The loading rate governs the laytime to be agreed with the shipowner: a bagged cargo loads significantly more slowly than a bulk cargo, which must be reflected in the charter-party.

Storage recommendations

- Store under cover, away from humidity.
- Stack bags on wooden pallets, no more than 10 bags high.
- Do not store beyond three months.

7. Commercial Terms

Incoterm	FOB Skikda, Algeria (Incoterms® 2020). CFR / CIF on request.
Currency	US Dollars per metric tonne.
Validity	15 calendar days from issue, subject to written confirmation of the producer price.
Quantity tolerance	± 10 % at seller's option, according to vessel capacity.