

A photograph of a construction site featuring a large yellow excavator bucket in the foreground, filled with grey concrete. In the background, a worker in a white tank top and hard hat is visible near a concrete structure. A large red semi-transparent shape is overlaid on the left side of the image, containing the title text.

Cements Product Overview 2017

Product overview

Portland cements

Cement type	Strength class	Additional requirements	Main components	Properties	Application	Delivery factory
Portland cement CEM I	32,5 R		Portland cement clinker brick	Normal hydration heat, normal early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C30/37, pre-stressed concrete according to DIN 1045-1	Bernburg
Portland cement CEM I	42,5 N		Portland cement clinker brick	Normal hydration heat, normal early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C35/45	Allmendingen Karlstadt
Portland cement CEM I	42,5 N (sd)	Total alkali content $\leq 0,8$ M.-% Na_2O -equivalent	Portland cement clinker brick	Normal hydration heat, normal early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C35/45, in particular for road surfaces of concrete according to ZTV concrete - StB	Bernburg Mergelstetten
Portland cement CEM I	42,5 R		Portland cement clinker brick	High hydration heat, high early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, prefabricated concrete parts, concrete goods, high early strength concrete, concreting in cool weather, pre-stressed concrete according to DIN 1045-1	Allmendingen Bernburg Karlstadt
Portland cement CEM I	52,5 N		Portland cement clinker brick	High hydration heat, high early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, prefabricated concrete parts, concrete goods, high early strength concrete, concreting in cool weather, pre-stressed concrete according to DIN 1045-1	Mergelstetten
Portland cement CEM I	52,5 N (ft)		Portland cement clinker brick	High hydration heat, high early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, prefabricated concrete parts, concrete goods, high early strength concrete, concreting in cool weather, pre-stressed concrete according to DIN 1045-1	Allmendingen Bernburg
Portland cement CEM I	52,5 N (bs)	SO_3 -content $\leq 3,0$ M.-%, total alkali content $\leq 0,8$ M.-% Na_2O -equivalent	Portland cement clinker brick	Very high hydration heat, very high early strength, low after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, concrete goods, high early strength concrete, concreting in cool weather, pre-stressed concrete according to DIN 1045-1, concrete sleepers	Bernburg Mergelstetten
Portland cement CEM I	52,5 R		Portland cement clinker brick	Very high hydration heat, very high early strength, low after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, prefabricated concrete parts, concrete goods, high early strength concrete, concreting in cool weather, pre-stressed concrete according to DIN 1045-1	Allmendingen ¹⁾ Karlstadt Mergelstetten
Portland cement CEM I	52,5 R (ft)		Portland cement clinker brick	High hydration heat, high early strength, low after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, prefabricated concrete parts, concrete goods, high early strength concrete, concreting in cool weather, pre-stressed concrete according to DIN 1045-1	Bernburg
Portland cement CEM I Fastcrete®plus	52,5 R (fc)		Portland cement clinker brick	Very high hydration heat, highest early strength, low after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, prefabricated concrete parts, concrete goods, high early strength concrete, concreting in cool weather, pre-stressed concrete according to DIN 1045-1	Mergelstetten

¹⁾ Only bagged goods

Portland cements

Cement type	Strength class	Additional requirements	Main components	Properties	Application	Delivery factory
Portland cement CEM I	32.5 N-LH/ SR 3	Hydration heat ≤ 270 J/g, $C_3A \leq 3,0$ M.-%	Portland cement clinker brick	Low hydration heat (LH), high sulphate resistance (SR 3), slow strength develop- ment, very good after-hard- ening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C30/37, mass components, concrete at sulphate attack by ground water and soil, exposure classes XA 2, 3 according to DIN EN 206-1, table 2/DIN 1045-2, tab. 1, pre-stressed concrete according to DIN 1045-1	Allmendingen
Portland cement CEM I	42.5 R-SR 3	$C_3A \leq 3,0$ M.-%	Portland cement clinker brick	High sulphate resistance (SR 3), normal hydration heat, higher early strength, good after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, high early strength concrete, concreting in cool weather, concrete at sulphate attack by ground water and soil, exposure classes XA 2, 3 according to DIN EN 206-1, table 2/DIN 1045-2, pre-stressed concrete according to DIN 1045-1	Allmendingen Bernburg
Portland cement CEM I	52.5 N (na)	Total alkali content ≤ 0.60 M.-% Na_2O -equivalent	Portland cement clinker brick	Low effective alkali content (na), high hydration heat, high early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, concrete from alkali-sensitive Rock grains, high early strength con- crete, concreting in cool weather, pre-stressed concrete according to DIN 1045-1, street concrete	Bernburg

Portland-composite cements

Cement type	Strength class	Additional requirements	Main components	Properties	Application	Delivery factory
Portland lime-stone cement CEM II/A-LL	32,5 R		Portland cement clinker brick, limestone	Normal hydration heat, normal early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C30/37, pre-stressed concrete according to DIN 1045-1	Allmendingen Bernburg Mergelstetten
Portland lime-stone cement CEM II/A-LL	42,5 N		Portland cement clinker brick, limestone	Normal hydration heat, high early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C35/45, pre-stressed concrete according to DIN 1045-1	Bernburg Karlstadt
Portland lime-stone cement CEM II/A-LL	42,5 N (ez)		Portland cement clinker brick, limestone	Normal hydration heat, high early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C35/45, pre-stressed concrete according to DIN 1045-1	Bernburg ¹⁾
Portland lime-stone cement CEM II/A-LL	42,5 R		Portland cement clinker brick, limestone	Normal hydration heat, high early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, Prefabricated concrete parts, concrete goods, high early strength concrete, concreting in cool weather, pre-stressed concrete according to DIN 1045-1	Allmendingen Mergelstetten
Portland lime-stone cement CEM II/A-LL	52,5 R		Portland cement clinker brick, limestone	High hydration heat, very high early strength, low after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, prefabricated concrete parts, concrete goods, high early strength concrete, concreting in cool weather, pre-stressed concrete according to DIN 1045-1	Mergelstetten Karlstadt

¹⁾ Only bagged goods

Portland-composite cements

Cement type	Strength class	Additional requirements	Main components	Properties	Application	Delivery factory
Portland-slag cement CEM II/A-S	42,5 N		Portland cement clinker brick, granulated slag	Normal hydration heat, normal early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C35/45, pre-stressed concrete according to DIN 1045-1	Karlstadt
Portland-slag cement CEM II/A-S	42,5 R		Portland cement clinker brick, granulated slag	Normal hydration heat, high early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, prefabricated concrete parts, concrete goods, high early strength concrete, concreting in cool weather, pre-stressed concrete according to DIN 1045-1	Karlstadt
Portland-slag cement CEM II/A-S	52,5 R		Portland cement clinker brick, granulated slag	High hydration heat, high early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, prefabricated concrete parts, concrete goods, high early strength concrete, concreting in cool weather, pre-stressed concrete according to DIN 1045-1	Bernburg
Portland-slag cement CEM II/B-S	42,5 N		Portland cement clinker brick, granulated slag	Normal hydration heat, normal early strength, good after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength, classes C8/10 to C35/45, pre-stressed concrete according to DIN 1045-1	Bernburg
Portland-puzzolan cement CEM II/B-P Trass cement	42,5 N		Portland cement clinker brick, trass	Low strength develop- ment, good after-hardening, good water retention capacity, good lime binding capacity	Concrete DIN EN 206-1/DIN 1045-2, Masonry mortars and plasters according to according to the corresponding rules	Allmendingen ¹⁾ Bernburg ¹⁾ Karlstadt ¹⁾
Portland-composite cement CEM II/A-M (V-LL)	42,5 N		Portland cement clinker brick, fly ash, limestone	Normal hydration heat, normal early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C35/45, pre-stressed concrete according to DIN 1045-1	Allmendingen
Portland-composite cement CEM II/B-M (V-LL) Approval no.: Z-3.17-1849	32,5 R-AZ		Portland cement clinker brick, fly ash, limestone	Normal hydration heat, normal early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C30/37, pre-stressed concrete according to DIN 1045-1	Allmendingen
Portland-composite cement CEM II/B-M (S-LL) Approval no.: Z-3.17-1828	42,5 R-AZ		Portland cement clinker brick, granulated slag, limestone	Normal hydration heat, high early strength, normal after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, prefabri- cated concrete parts, concreting in cool weather, pre-stressed concrete accord- ing to DIN 1045-1	Bernburg
Portland-composite cement CEM II/B-M (S-D) Duracrete®basic	52,5 N		Portland cement clinker brick, granulated slag, microsilica	High hydration heat, high early strength, good after-hardening, high final strength	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C35/45, C100/115, prefabricated concrete parts, concrete goods, high early strength concrete, concreting in cool weather, pre-stressed concrete according to DIN 1045-1, in particular for high-performance concretes	Bernburg Karlstadt

¹⁾ Only bagged goods

Blast furnace cements

Cement type	Strength class	Additional requirements	Main components	Properties	Application	Delivery factory
Blast furnace cement CEM III/A	42,5 N		Portland cement clinker brick, granulated slag	Normal hydration heat, normal early strength, good after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C35/45, pre-stressed concrete according to DIN 1045-1	Bernburg Mergelstetten
Blast furnace cement CEM III/A	32,5 N-LH	Hydration heat ≤ 270 J/g	Portland cement clinker brick, granulated slag	Low hydration heat (LH), slow strength development, good after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C30/37, concrete for massive parts, pre-stressed concrete according to DIN 1045-1	Karlstadt
Blast furnace cement CEM III/A	32,5 N-LH (na)	Hydration heat ≤ 270 J/g, granulated slag content ≥ 50 M.-%, total alkali content ≤ 1.1 M.-%, Na ₂ O-equivalent	Portland cement clinker brick, granulated slag	Low hydration heat (LH), low effective alkali content (na), slow strength development, good after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C30/37, concrete from alkali-sensitive rock grains, concrete for massive parts, pre-stressed concrete according to DIN 1045-1	Bernburg
Blast furnace cement CEM III/A	42,5 N (na)	Granulated slag content ≤ 49 M.-%, total alkali content ≤ 0.95 M.-%, Na ₂ O-equivalent	Portland cement clinker brick, granulated slag	Low effective alkali content (na), normal hydration heat, normal early strength, good after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C35/45, concrete from alkali-sensitive rock grains, pre-stressed concrete according to DIN 1045-1	Bernburg
Blast furnace cement CEM III/A	42,5 N-LH (na)	Granulated slag content ≤ 49 M.-%, total alkali content ≤ 0.95 M.-%, Na ₂ O-equivalent	Portland cement clinker brick, granulated slag	Low hydration heat (LH), low effective alkali content (na), slow strength development, good after-hardening	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C8/10 to C35/45, concrete from alkali-sensitive rock grains, concrete for massive parts, Pre-stressed concrete according to DIN 1045-1	Bernburg
Blast furnace cement CEM III/A Approval no.: Z-3.17-2028	52,5 N-SR	Granulated slag content ≥ 50 M.-%	Portland cement clinker brick, granulated slag	Normal hydration heat, high sulphate resistance (SR), good after-hardening, high final strength	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, concrete goods, prefabricated concrete parts, concrete at sulphate attack by ground water and soil, exposure classes XA 2, 3 according to DIN EN 206-1 table 2/ DIN 1045-2 tab. 1, pre-stressed concrete according to DIN 1045-1	Karlstadt
Blast furnace cement CEM III/B	42,5 N-LH/SR	Hydration heat ≤ 270 J/g, granulated slag content ≥ 66 M.-%	Portland cement clinker brick, granulated slag	Low hydration heat (LH), high sulphate resistance (SR), good after-hardening, high final strength	Concrete DIN EN 206-1/DIN 1045-2, recommended compression strength classes C30/37, C35/45, C45/55, Concrete goods, prefabricated concrete parts, concrete at sulphate attack by ground water and soil, exposure classes XA 2, 3 according to DIN EN 206-1 table 2/ DIN 1045-2 tab. 1, pre-stressed concrete according to DIN 1045-1	Karlstadt



The SCHWENK cement factory Bernburg



The SCHWENK cement factory Karlstadt am Main



The SCHWENK cement factory Allmendingen



The SCHWENK cement factory Mergelstetten

SCHWENK cement factories produce cements and binders environmentally compatibly and at a high quality level in technically sophisticated facilities. Use of secondary fuels and secondary raw materials in raw material processing and additives such as granulated slag, Puzzolane and limestone in cement production contributes to reducing carbon dioxide (CO₂)-emission.

In order to produce our cements at a consistently high quality level, we require careful production monitoring. Our cement factories use state-of-the-art control technologies with fully automated sampling and analysis and a comprehensive continuous production control. This starts with producing raw materials in the quarry, includes firing operation in the rotary kiln and grinding of the clinker brick in the cement mills and ends in shipping inspection of the cement from the loading silos.

Even though the cement has left our factory and reached the customer, we feel that we continue to be responsible for its further processing. We consult and support our customers in all application-technical questions regarding production of concrete and its diverse uses.

This is the quality awareness based on which we have been producing our cements for more than 170 years.



Industrial hall, concreted with CEM II/A-M (V-LL) 42,5 N



Prefabricated parts, concreted with **Fastcrete®** plus



Treatment tank of a sewage treatment facility, made with CEM I 32,5 N-SR 3



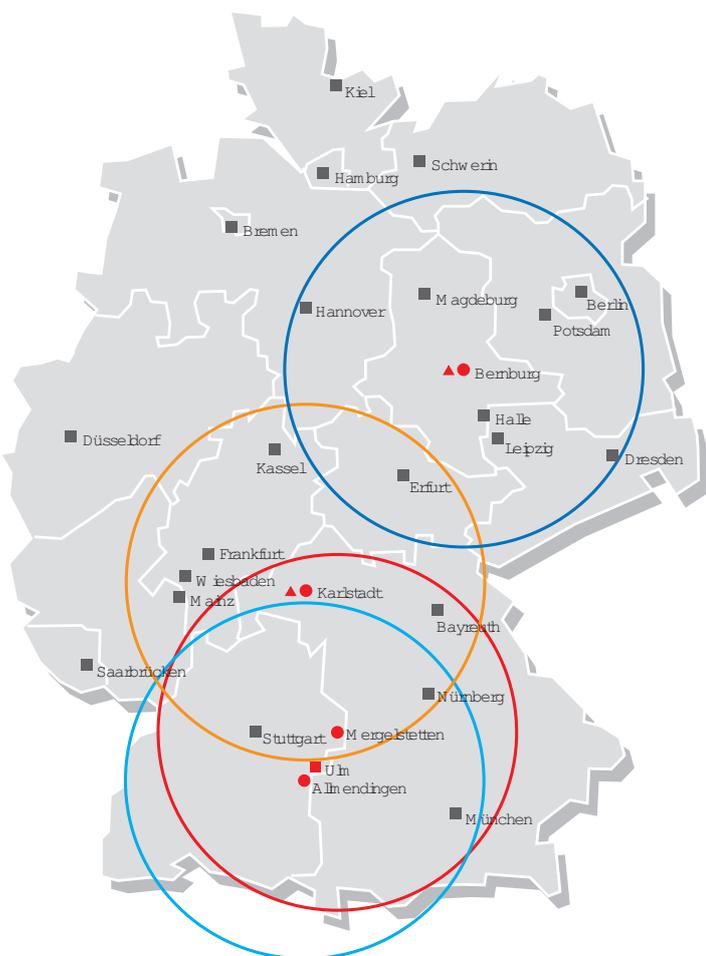
Bridge, built with Portland limestone cement CEM II/A-LL-32,5 R

Building materials of high quality for construction of demanding buildings

SCHWENK supplies the right cement for any area of construction. Skyscrapers, sewage treatment systems, bridge structures, road paving and tunnels, or concrete and artificial stone, prefabricated concrete parts, concrete pipes and shafts.

Our building consulting team will gladly help you choose the right cement and application if you have any technical questions.

Map of the delivery area



- Main administration of the materials group SCHWENK and seat of the SCHWENK Zement KG
- Factory site of SCHWENK Zement KG
- ▲ Sales office of SCHWENK Spezialbaustoffe GmbH & Co. KG
- Delivery area Allmendingen (cements)
- Delivery area Bernburg (cements and special building materials)
- Delivery area Karlstadt (cements and special building materials)
- Delivery area Mergelstetten (cements special building materials)

As of January 2017

The information in this document is based on current knowledge and experience. Earlier documents are rendered invalid by the publication of this document. Changes in the scope of product and application-technical further developments are reserved. All business relationships shall be subject to our sales and delivery conditions as amended from time to time.

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