Dry mortars – Markets and Trends
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Abstract: Total production of pre-mixed dry mortars worldwide is approximately 55 million metric tons, from which Western Europe enjoys a share of 54%. Largest single markets are Germany, Italy, Spain and France. Most important dry mortars are renders and plasters, adhesives, masonry mortars, joint and crack fillers, and flooring systems. A clear tendency towards dry mortar technology, machine or hand applied, is visible. This technology transfer is supported by multinational dry mortar producers and their worldwide activities in all construction markets. Main drivers for the use of dry mortars are: Building economy, construction rationalization, legislation, and social aspects.

1. MARKETS BY GEOGRAPHY

1.1 Existing high-tech dry mortar markets
Western European countries like
- Germany
- Italy
- Spain/Portugal
- France
- Austria/Switzerland
- BENELUX
and parts of Eastern Europe, e.g.
- Poland
- Hungary
- Czech/Slovak Republic
- CIS partially

1.2 Developing dry mortar markets
Markets in other continents like
- Asia
- Middle East
- Africa
- Central/Latin America
- North America partially
A technology shift from traditional job-site mortars towards pre-mixed dry mortars (production and application) is currently underway, also caused by international activities of European multinational dry mortar producers.

2. MAIN DRIVERS

2.1 Existing high-tech dry mortar markets
Dry mortar technology here is mainly driven by
- Building economy (new residential and repair & maintenance)
• Building technology (hand versus machine, thin layer versus thick layer)
• Legislation (standards and norms)
• Labour cost

2.2 Developing dry mortar markets
Main drivers for production and application of dry mortars in these areas are
• Building technology (traditional versus pre-mixed mortars)
• Building economy (e.g. public housing programs)
• Social aspects (unemployment, labour cost, educated workers)

3. SOME TRENDS

Important modern building applications in Western Europe with growth rates above industry growth are
• Gypsum boards and joint fillers
• Premixed cement based adhesives for ceramic tiles
• Thermo insulation systems
• Machine applied plasters and renders

4. BREAKDOWN OF DRY MORTAR PRODUCTION BY GEOGRAPHY

4.1 Worldwide
Total production of cement/gypsum/lime based dry mortars worldwide is 59,0 million tons, of which 57% is produced in Western Europe, 14% in Eastern Europe, 10% in Asia/Pacific, and about 6% each in North America, Latin America and Middle East/Africa.

4.2 In Europe
Total production of cement/gypsum/lime based dry mortars in Europe is 41,8 million tons, of which 23% is produced in Germany, 22% in Italy, 15% in Spain/Portugal, and 20% in Eastern Europe. Other WE countries: all less than 10%.

5. PER CAPITA CONSUMPTION OF DRY MORTARS IN EUROPE

Highest consumption of cement/gypsum/lime based dry mortars is in Austria with 247 kg/inhabitant. Western European average is 86 kg. Countries above WE average are - besides Austria- Italy, Germany and Spain/Portugal. Countries below WE average are Greece, Switzerland, France, BENELUX, Scandinavia and UK. Great Britain has by far the lowest dry mortar consumption in Europe with 9 kg/inhabitant. It is evident that the use of dry mortars does not depend on size of population or on construction economy, but only on building technology.

6. BREAKDOWN OF DRY MORTAR PRODUCTION BY MAJOR APPLICATION
6.1 Worldwide
Dry mortars with highest production volumes worldwide are cement based renders (base renders, decorative renders, special renders etc.). They have a share of 35%. No.2 are tile cements with 32%, followed by gypsum plasters with 17%, which are mainly used in Western European countries. Other cement based mortars like masonry mortars, self levelling systems, and EIFS have a share of 14%.

6.2 In Western Europe
Cement based renders represent the highest volume of dry mortars with 40% of the total Western European production, followed by tile cements with 22%, and gypsum plasters with 21%. Other cement mortars have a share of 15% all together.

6.3 In Eastern Europe
Highest share in Eastern European countries have tile cements with 51%. Renders are No.2 with 22%, reason is that most of the rendering work is still done in a traditional way with cement, sand and water mixed right on the spot in this area. Other cement mortars and gypsum plasters follow with 14 and 11%.

6.4 In Spain/Portugal
Three important dry mortar groups exist in the market. No.1 is again renders (monocapa) with 32%, followed by tile cements with 27%, and gypsum plasters with 26%. Here we can see that gypsum plasters play a more important role than in other European countries.

7. GOOD REASONS WHY TO USE DRY MORTARS

There are many good reasons to use pre mixed dry mortars instead of traditional job-site mixed ones. There are technical and commercial advantages like:

- Constant and proved quality
- Well adjusted physical properties
- No risk of impurities
- Fast and efficient application
- Increased productivity
- Saving of material

and many others.

8. VALUE CHAIN

The dry mortar producer is supplied with raw materials like binders, fillers, aggregates, and chemical additives. In production plants with dry blending equipment and process technology pre-mixed dry mortars are produced and packed, under consideration of norms and standards. Pre-mixed dry mortars are normally ordered by contractors or applicators from specialized stores. They are delivered in bags or silos to building sites, where they are applied by educated workers, manually or with machines. Pre-mixed dry mortars are ready to use just by addition of water.