REFINA

Mixers & Spray Equipment

Mixing Plaster

Refina were the first company in the UK to promote paddle mixers for mixing plaster, launching the German made tools including mixer paddles (made by Epi) and Megamixer slow speed mixer drills (made by Eibenstock) in 1985/86

Until the 1990's skim plaster was normally mixed by hand using a bicycle cog on a handle as a bumper and backing coat plasters with a hoe type paddle in a plasterer's bath. The backing coat was normally a sand and cement float coat mixed in a cement (freefall) mixer

Plaster is relatively easy to mix with a paddle mixer. Gauge the plaster in the correct amount of cold, clean water; for skim plaster this is 11.5 ltr for a 25 kg bag, roughly twice the volume of plaster to water. Add half the plaster to the water and run the Megamixer mixer drill for about 30 seconds till the plaster is wetted through and any lumps are blended in. Add the rest of the plaster and run the Megamixer till the mix is creamy and lump free. Test the consistency of the plaster mix by using a bucket trowel. Let the mix sit for a few minutes

"Thistle plasters should be mixed by adding to clean water in clean mixing equipment. Contamination from previous mixes adversely affects the setting time and the strength. Fresh contamination has more effect than old – so equipment should be washed just after mixing. While mechanical mixing speeds the process up, there is no need to continue mixing after dispersing lumps and achieving the right consistency – over-mixing can affect setting times, lead to deterioration in workability and create difficulty in achieving a flat finish" (From the British Gypsum Thistle Multi-Finish data sheet)

Keep the mixing tools, the bucket and gauging trowel clean; plaster residues will set the new mix off quicker. Cleanliness is next to godliness for plastering and for the successful use of mixing and pumping machines

Paddle Mixer Drills

Megamixer mixer drills are now used throughout the plastering trade for mixing skim and backing coat plasters. The mix action is quick and thorough. The paddle can be simply cleaned with a stiff bucket brush or run in a bucket of water and sharp sand. Plaster mixers must be hard working, simple to maintain, robust and durable to stand site conditions

Forced Action Pan & Batch Mixers

Forced action mixers generate a thorough mix using rotary paddles in a metal pan or drum. The material is mixed as a batch, ie a one, two or three bag mix and discharged through the pan base outlet into a barrow or transport tub. These mixing machines are suitable for backing coat plasters. The advantage of a pan mixer is the mix quantity and consistency. The disadvantage is that the mixer has to be thoroughly cleaned after every mix as any plaster residues will speed up the setting time of the next mix. Forced action mixers require a good electric supply to run the machine properly

Hopper Feed Continuous Mixers

Continuous feed mixers will mix dry plaster fed from the hopper with a metered water supply in a mixing chamber. This mixing system is the basis of the mixer pump

Electric Supply

To operate any construction equipment with a 110 volt electric motor, a good consistent electrical supply is required. Most problems with 110 volt machines are caused by the operator overloading the machine or inadequate power supply, not by faulty equipment. Machines with 1.5kw or larger 110 volt electric motor should be fitted with the larger 32 amp yellow plug and are for use with a 5kva transformer

Most building refurbishment projects use the electric supply available from the house undergoing the work. The 13 amp domestic power source is not generally suitable for running larger mixers or spray pumps

Megamixer

Forced Action Pan Mixer

Continuous Hopper Mixer