

How Much Do Three Roll Mills Cost?

Is a three roll mill needed in your application? Are you ready to move forward and invest in a three roll mill? With years of experience manufacturing three roll mills and serving customers over 30 countries, we understand your first priority is to determine how much to budget for a three roll mill.

Here are a few things to consider:

- 1) Initial investment cost, or shall we say the purchase price of a three roll mill.
- 2) Cost of ownership. In other words, the cost for maintenance and spare parts.

The purchase price of a three roll mill is determined by two factors: size/throughput of three roll mill and roller type.

Torrey Hills Technologies offers three roll mills from table top model to pilot production model with throughput up to 112 lbs per hour. Price ranges from \$5K to \$30K. Ceramic rollers cost \$2500 to \$4500 more than stainless steel rollers on the same model.

The most commonly chosen roller materials are either stainless steel or ceramic (99.5% alumina). If metal contamination is a concern for a certain application, conductive ink and pharmaceutical ointments for example, we'd recommend ceramic rollers. Otherwise, stainless steel rollers will do just fine. Stainless steel rollers are actually preferred in cosmetic and off-set ink manufacturing.

Generally speaking, the life time of stainless steel rollers ranges between 5 to 10 years. It depends greatly on the hardness and abrasiveness of material being processed. Stainless steel rollers can be resurfaced, and that's why spare rollers are usually not needed. Ceramic rollers are harder than stainless steel rollers but also brittle. They can last even longer than stainless steel rollers as long as the users pay some attention to avoid ceramic rollers touching each other during operation.

Three roll mills do not wear out easily. Only simple maintenances such as cleaning and lubricating on a regular basis are needed. There are just a few types of spare parts, namely end plates and blades, may need to be changed as they wear off over time. Extra Pair of Teflon end plates and bundle of 6 blades can last 2-3 years depending on your usage. One pair of Teflon end plates cost \$200 to \$400. Bundle of 6 Blades cost \$150 to \$250.

No installation is required, which means you can save on setup and training costs. All Torrey Hills three roll mills arrive at your lab or factory ready to use. You may simply plug in and start using it. Plus our engineers are always here to answer all your technical questions.