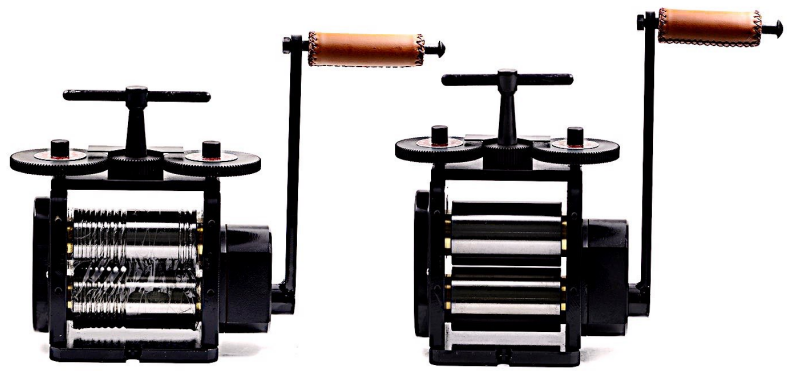
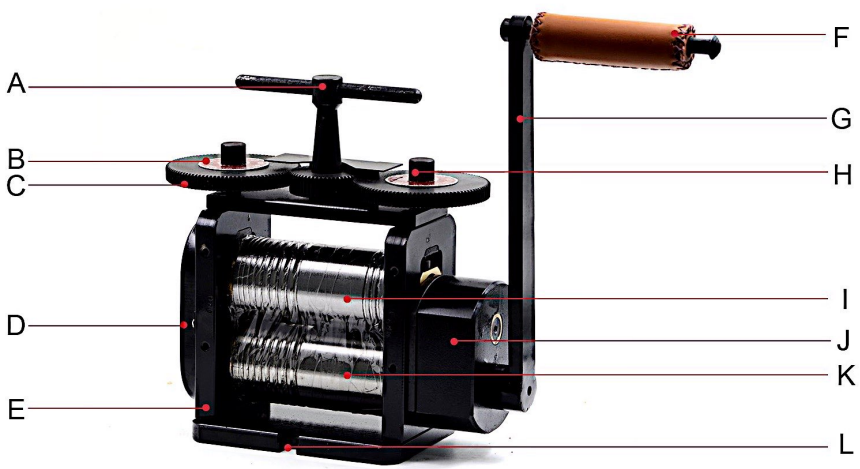
Ultra Series Rolling Mills.
Setup-Usage-Tips-Advice



Item No.	Photo	Gear Ratio	Roller Width	Roller Diameter	Flat Area	Square Wire(+/ 0.01mm)	Ring Shank-half round ellipsis	Dimension	Shipping Dimension	Shipping Weight
HH-RM01A		4 : 1	110mm	55mm	53mm	1.0、2.0、2.5、3.0、4.0、4.5、5.0mm	2.5*1 3*1.25 4*1.5mm	23*13.5*28cm	33*33*20cm	18.5KG
HH-RM02A		4 : 1	130mm	65mm	63mm	1.0、2.0、3.0、4.0、4.5、5.0、5.5、6.0 6.5mm	2.5*1 3*1.25 4*1.5mm	30*13.5*30cm	34*34*20cm	23KG
HH-RM01B		4 : 1	110mm	55mm	110mm			23*13.5*28cm	33*33*20cm	18.5KG
HH-RM02B		4 : 1	130mm	65mm	130mm			30*13.5*30cm	34*34*20cm	23KG



A . T BAR HEIGHT ADJUSTMENT
B . DIAL
C . HEIGHT ADJUSTMENT
D . END GEARS COVER
E . FRAME
F . WOODEN HAND GRIP
G . HANDLE
H . HEIGHT ADJUSTMENT SCREWS
I . TOP ROLLER
J . GEARBOX
K . BOTTOM ROLLER
L . MOUNTING HOLES

How to care for your mill.
Your rolling mill is a very robust piece of equipment and should give you years of service.As with any mechanical item,a little maintenance will keep it in optimum condition for the best possible performance.

Oil all moving parts.

A light household oil such as 3 in 1 should be applied to all moving surfaces. Particularly around the brass bushings and the ends of the rollers.It is important that the rollers do not become rusted,so be aware of condensation in damp areas.Wipe the rollers with light coat of oil on a cotton cloth and store the mill with the rollers apart.If the unit is to be unused for a long period of time,oil all parts thoroughly and cover it ensuring it is kept dry and free from moisture.

The gearbox should not require any special maintenance.Inside of the frame where the brass bushes move up and down,will benefit from a little grease or oil,but there is no need to dismantle any part of the unit to do this.Simply close the rollers apply grease around the bushes,then open fully&close several times to move the grease.

If the rollers obtain any superficial marks or stains they can be polished by hand using a cloth and car metal polish such as Autosol.Very fine emery paper and oil can be used(if absolutely necessary)to remove superficial marks,but generally harsh abrasives should always be avoided.

The unit is designed for jewellery use with precious and nonferrous metals.Do not attempt to roll hardened steel as this may damage the rollers.

When annealing and pickling metal,always ensure that all items are dry thoroughly before passing through the rollers. After a busy day of extensive use,a quick clean and wipe of oil on the rollers will be highly beneficial. Develop good working habits,look after your mill and it will provide years of service.

If the surfaces of the rollers become damaged through improper use this may require replacement of the rollers,which may incur a cost.Please contact Pepe for help and advice and we will do our best to get you up and running again as quickly as possible.

Embossing Tips

Almost anything can be embossed into precious metal and non-ferrous metals.Such as lace,leaves,fabric,paper cut-out's,wire etc.And this technique can be used to add interesting textures to your jewellery.However you don't want to damage your rollers by embedding a pattern into the steel.So for this reason it is vitally important that you use a sacrificial piece of metal as a shield between your texturing item and your rollers.

Create a sandwich as shown.On the bottom is you metal.Flat,clean and well annealed,e.g.silver sheet. The uppermost face will be embossed.On top of it is the item to be embossed,e.g.a leaf or loops of wire(shown here). The side you want embossed should be face down onto the silver.Above it is a scrap sheet of copper or brass. This will protect your rollers.Use soft metals,do not use steel,as this may scratch your rollers.Whilst this is referred to as scrap,the pattern will be embossed onto this sheet also and so some interesting results can be obtained.But usually this is just a piece of flat scrap metal,which can be reused as a shield.Ensure the shield is larger than the silver,to avoid embossing the edges into your silver. Ensure that the sandwich is only passed through the flat part of the rollers.If you want to do a lot of embossing then considers the full width flat rollers such as the 130 Flat.Passing it through the V rollers will leave flat parallel lines on the underside of your silver.Again,this can produce some nice effects...if desired.

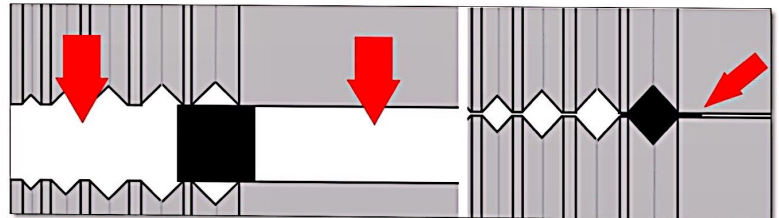
Place the sandwich between the rollers and lower the top roller until the sandwich is snug between them.Removethe sandwich and turn the top handle 1/2 a turn(or a little less).-Pass the material through and the half turn will provide enough pressure to emboss the item into the silver.

Annealing

As the metal is forced through the rollers and transformed,this will work harden it.When your material becomes hard to roll or feels rigid. It should be annealed.Annealing is the process of softening metal and reducing the stress in it,to make it more pliable.If you are not already familiar with annealing, it is advisable to check the best method to anneal the metal you are working with.Usually this is done by heating it gently to a dull red heat, maintain that for a minute or so,and then quenching in water or leaving to air cool.This makes the metal more pliable,easier to work with and less likely to crack.If working an ingot down into wire,you may need to anneal seeral times during this process.Tip:-work several separate pieces at once. So whilst one is cooling you can be rolling another.

Note always ensure your metal is dry before taking it through the mill. Avoid any moisture on the rollers.

Creating Perfect Edges.Work your metal slowly and gradually,rotating it as you go.Forcing the metal through in one direction with too much pressure
can cause it to pinch"the sides,creating thin sharp edges.If this happens,rub the metal with emery paper to remove the edges(wear leather gloves).
And pass it through the roller several times with the sharp edge pointing upwards in the V groove.



D shaped Wire. When using the flat/oval section of the combinationroller.You can make D profile wire for ring shanks etc. Start with well annealed square wire a little narrower than the groove and gradually roll the wire through in several passes to dome the top surface. Parallel Edges.When working with long thin strips,it is possible to turn the metal 90and place it in the V shaped groves.You may notice that the bottom of the groves are actually flat.This allows thin strips to be rolled through edge on.Useful
when making strips for ring bands or bangles.

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