

### 1408-1

Mark Nelson shows how to set up a workbench.

For more information visit:



Please continue to page 2 for project instructions.

#### **Guest:**



**Mark Nelson** 

# **Bench Ergonomics**

Your bench has to be versatile to accommodate the many tasks you do and the tools you use. By setting up your work space properly, you'll ensure your work is safe and efficient while putting as little stress as possible on your greatest tool of all—your body! Rio Grande thanks Charles Lewton-Brain and Arthur Skuratowicz, whose research on bench ergonomics aided this article.



## tips:

- Work Surface: Start by assessing the work surface itself.
  Make sure it is sturdy, level and well-grounded, because jewelers exert a lot of pounding, hammering and pressure on their work surfaces.
- 2. **Bench Height:** Make sure you are working at the correct height for your body. Use a comfortable chair with an adjustable height, such as an office chair, to make sure you're working under the best possible ergonomics. When sitting, make sure your knees are parallel with or slightly above your waist. If you have a bench pin set up, adjust your table and/or chair to have your bench pin level with your chest. This will allow you to work on tiny details at an ideal 5"–8" of depth from your field of vision.
- 3. **Lighting:** Prevent stress on your eyes by going three-deep with your lighting. Check that you have adequate ceiling light for your room, as well as a secondary bench lamp that illuminates your entire work surface. Finally, consider an adjustable task light that you can move in any direction for clear light on just the spot where you are working.
- 4. **Optics:** Another way to relieve stress on your vision is to invest in a good pair of optics. Comfort is paramount, so test a few to see which pair is right for you.
- 5. **Bench Features:** The best work environment is the one that offers you versatility and efficiency. Bench trays will help catch any debris, and a series of smaller drawers will allow you to store and access whatever tool you need at any moment, without a lot of reaching and digging around.
- 6. GRS Benchmate®: The GRS Benchmate lets you swap out mandrels, bench pins and other tools quickly and easily. Installing a bench vise is another way to save time and excessive movement by having the vise ready to go when you need it.
- 7. **Customize It:** Your bench has to fit you. If something does not fit how you like to work, change it. There are many books and websites available with resources on building benches and outfitting your work space. A little time and research up front will save you many hours and sore muscles down the road.



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### suggested supplies:

| Order#  | Description   |
|---------|---|
| 113-410 | Rio double-drawer workbench                           |
| 113-084 | Hammer and mandrel organizer                          |
| 113-619 | GRS Benchmate® basic kit                              |
| 118-177 | GRS mounting adapter                                  |
| 118-126 | GRS mounting plate                                    |
| 118-178 | GRS adjustable height bracket                         |
| 113-857 | GRS bench pin   |
| 113-049 | Magnetic tool organizer strip, 18"                    |
| 113-353 | Dazor® fluorescent lamp                               |
| 113-242 | Dazor® Wolf® EcoFlex lamp                             |
| 117-291 | Flex shaft Swing-Away™ stand                          |
| 117-534 | Foredom® SR motor with 30 handpiece flex shaft system |
| 116-528 | Pliers rack   |
| 550-945 | The Jeweler's Bench Book                              |
| 112-317 | Rotating bracelet mandrel holder                      |
| 112-367 | Ring mandrel  |
| 112-384 | Bracelet mandrel                                      |
| 113-208 | Optivisor™  |