Ergonomics

By Ali Rashid
Muhammad Shoaib Alam
Ergonomic Problems in Carpentry

- Musculoskeletal disorder
- Back pain
- Wrist
- Elbow
- Shoulder injury
- Poor lighting
- Twisting and Repetition
Musculoskeletal disorder

- Application of force
- Repetitive motion
- Overall muscular fatigue
- Contact stress
- Awkward posture.
- Manual handling tasks
- Combinations of physical tasks performed for more than 1 hour at a time
Back Strain

• Unbalanced carrying or lifting (e.g., the bulk of the load supported by one side of the body)
• Unstable, unbalanced, difficult, or awkward to handle loads being moved.
• Back muscle strain and Spinal Estenosis
Wrist and shoulder injury

- Application of force
- Extension
- Hand Stretch
- Awkward posture
- Bad handling of tools
- Acute Trauma Disorder
Twisting and Repetition

- Bones and muscles will get weak.
- Muscles and ligaments sprains
- Bones displacement
Poor lighting

- Glare
- Refraction and Reflection
- Insufficient lighting
- Light source
- Environment and contrast
Suggestions

- Use of mechanical assistance in lifting and moving heavy loads
- Keep repetitive motions to a minimum
- Space should be adequate
- Avoid awkward postures
- Use adjustable table
- More than one person should lift the load
- Use safe lifting procedures
Suggestion

- Maintain comfortable working
- Easy reach
- Proper height
- Maintain Good posture
- Reduce or minimize excessive forces
- Provide clearance
- Reduce or minimize contact stress
• Thank You