

WORKHOLDING

WORKHOLDING INTRODUCTION

Workholding Factors/Influences
 Workholding & Production Demands

Pallets & Workchanging
 Mini-Pallets
 Pneumatic/Hydraulic Clamping
 Vacuum Workholding
 Application-Dedicated Fixtures

PRINCIPLES OF WORKHOLDING

Datums
 Part Location
 Six Degrees of Freedom
 Plus & Minus X Axis
 Plus & Minus Y Axis
 Plus & Minus Z Axis
 Clockwise/Counterclockwise Rotation Around Axes
 3-2-1 Locational Method
 3 Primary Locators
 2 Secondary Locators
 1 Tertiary Locator
 Use of Redundant Locators
 Negative Impact of Reclamping/Rechucking
 Reasons for Required Reclamping/Rechucking
 Multi-Part Workholding Setups

LATHE WORKHOLDING

Chucks
 3-Jaw Chucks
 6-Jaw Chucks
 4-Jaw Chucks
 2-Jaw Chucks
 Indexing Chucks
 Collets
 Shape Variety
 Multi-Size Collets
 Collet Chucks
 Between-Centers Turning
 Drive Dog
 Tailstock
 Steady Rest
 Face Driver
 Mandrels
 Magnetic Chucks/Fixtures

MILLING & MACHINING CENTER WORKHOLDING

Small-Lot Workholding
 Medium-Lot Production Workholding
 Mass-Production Workholding
 Clamps
 Clamp Variety
 Manual & Automatic Vises
 Multi-Vises
 Cubes/Columns
 Tombstones
 Indexers/Rotary Tables
 Modular Fixturing
 T-Slot/Dowel-Pin

REVIEW OF PROGRAM INFORMATION