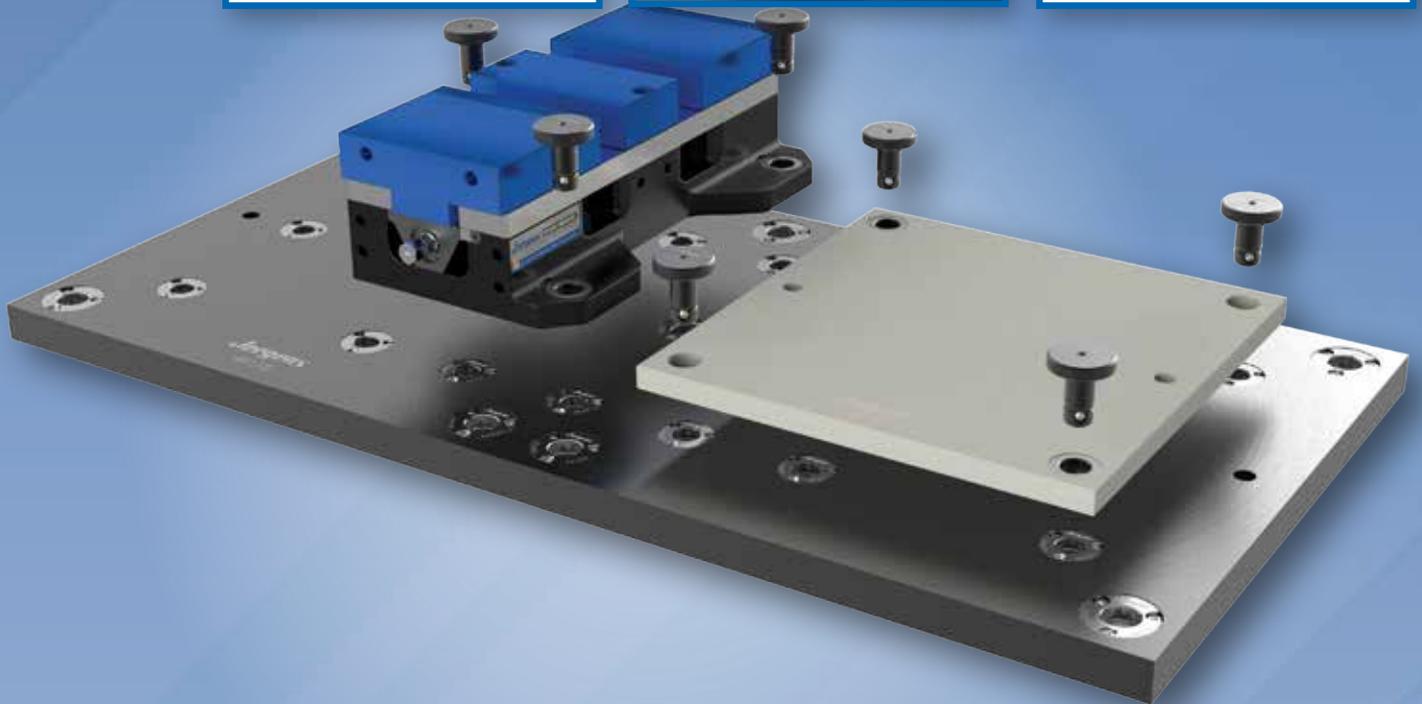
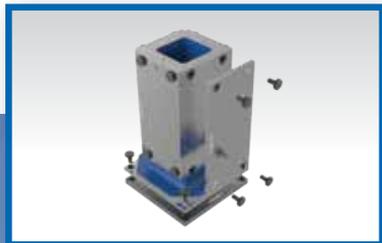


*Jergens*  
**BALL LOCK**<sup>®</sup>  
MOUNTING SYSTEM

**BALL LOCK**<sup>®</sup> QUICK CHANGE SYSTEM



WORKHOLDING SOLUTIONS | SPECIALTY FASTENERS | LIFTING SOLUTIONS

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## The Original Quick-Change Mounting System is Still the Best... The Ball Lock® Mounting System.

Since its introduction in the mid-1970's, Jergens Ball Lock® Mounting System has been and continues to be the standard for performance & quality in quick-change mounting and fixturing. Ball Lock® design features continue to be absolutely essential in today's manufacturing environment dominated by...



- Short lead times
- Smaller batch sizes
- Frequent set-ups
- Fixture-flexibility for fast response to production run changes.

The Ball Lock® Mounting System features...

- Combined locating & locking in the same motion
- Repeatability of +/- 0005" (+/- 0.03mm) or better
- 650 to 20,000 lbs of holding force
- Can eliminate the need for indicating on CNC machines

## Reduce Set-Up Times to Just Seconds...

The Ball Lock® mounting system provides a proven method to quickly and accurately locate and lock fixtures onto machine tables and subplates.

- Easily transferring fixtures and jobs across multiple machines
- Fixtures can often be exchanged in less than a minute
- Fixtures can be quickly exchanged between different Ball Lock® optimized machines
- Increase productivity from existing HMC or VMC machines

## Hundreds of Thousands of Successful Installations Worldwide...

“The applications of the Ball Lock® Mounting System are basically limitless – you're completely free from the design limitations of common tooling. We have increased utilization rates by 75% - 90%.”

—Ball Lock® Mounting System User



No other mounting system comes close to matching the universe of dedicated users worldwide. Every day, countless millions of parts are machined from set-ups that rely on the performance & accuracy of the Ball Lock® Mounting System.



## Now There Are More Ways Than Ever to Realize All the Benefits That The Ball Lock® Mounting System Can Deliver...



The Ball Lock® Mounting System is the single most cost efficient and versatile fixturing system for horizontal and vertical machining centers. In seconds, you can accurately change-out and/or connect...

- Fixtures
- Chucks
- Vises
- Pallets
- Also useful for assembly and welding fixtures

Ball Lock® Mounting System benefits include:

- Reduces set-up time
- Maximizes use of machine envelope
- Reduces in-cycle tool change time
- Minimizes spindle down time
- Frees up capacity/machine hours

### Ball Lock® Optimized Subplates & Fixture Plates for All Your Machining Needs...

Jergens offers a full range of standard sub-plates and fixture plates for all popular machines. Besides offering hundreds of stock fixture plate shapes, Jergens can work with you to produce special configurations for custom needs.

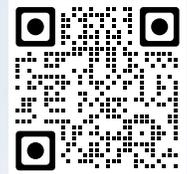
### Stainless Steel for Wet or Hazardous Environments

The 17-4 stainless steel Ball Lock® mounting system enables you to realize the many benefits that only the Ball Lock® System can deliver in the most corrosive, caustic, wet or extreme operating environments.



### Selector Guides for Haas, Mori Seiki, Mazak, Doosan and Hurco Machine Tools

Use these guides to quickly select the correct Ball Lock® Mounting System for your machine tool.



### Integrated Workholding Systems...Ball Lock® Puts It All Together

Choose from a wide range of standard workholding tooling with integrated Ball Lock® mounting to maximize productivity.

A sampling of Jergens integrated tooling includes...

- Ball Lock® Vises
- 2 & 4 Sided Fixture Columns
- Ball Lock® Base Vise Columns
- Compatible with Jergens FixturePro® 5 Axis Tooling



## It's What's Behind Every Ball Lock® Mounting System Sold That Really Sets it Apart...

No matter what your application, Jergens possesses the expert technical support to help with...

- Special engineering design support
- Up-time evaluation & consulting
- Application assistance
- Field training

We are committed to helping you realize the full value and benefit that the Ball Lock® quick change mounting and fixturing system can deliver, such as featured in the case histories below.

## It's Not Just a Mounting/Fixturing System...It's Your Competitive Edge.

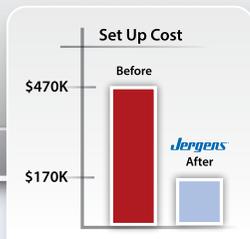
The Ball Lock® Mounting System is not just a quick change fixturing and mounting system...its real net benefit of reducing set-up time and maximizing throughput helps you produce more for less cost.

### MILITARY/DEFENSE CONTRACTOR

**Application:** Multiple job changes average 15 to 20 set up changes per week

**Results:**

76 hours per week set up time reduction  
3,800 annual machine hours gained  
Annual Cost Saving: \$300,000 +

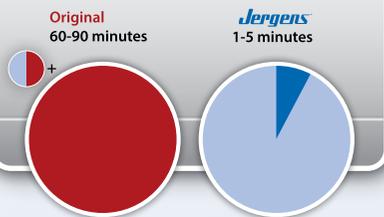


### ORTHOPEDIC MANUFACTURER

**Application:** Vise set up to machine table  
**Set Up Time:** Original method— 60-90 minutes

**Results:**

Set up time with Ball Lock 1-5 minutes  
Set up time reduction = 94%

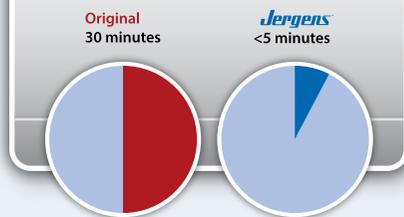


### JOB SHOP

**Application:** Rotary indexer set up  
**Set Up Time:** Original method— 30 minutes

**Results:**

Set up time reduced to <5 minutes  
Set up time reduction 87%



## Time, Productivity & Money Saving Results:

### Reducing set up time 2 hours per day results in:

- 500 machine hours/year for additional work
- Saving over \$40,000/year at typical shop billing rates



### Inch Ball Lock® Compatibility Chart - Steel

Shank Diameter (mm)	Shank Part Number	Fixture Plate Thickness +/-0.005	Primary Liner Part Number	Secondary Liner Part Number	Face Mount Receiver Part Number	Back Mount Receiver Part Number
13	49605	0.50	49705	49805	49506	49516
	49606	0.75	49706	49806		
16	49607	0.50	49707	49807	49507	49517
	49608	0.75	49708	49808		
20	49601	0.75	49701	49801	49501	49511
	49602	1.00	49702	49802		
25	49611	0.75	49711	49811	49502	49512
	49612	1.00	49712	49812		
30	49621	0.75	49721	49821	49503	49513
	49622	1.00	49722	49822		
35	49631	0.75	49731	49831	49504	49514
	49632	1.00	49732	49832		
	49633	1.50	49733	49833		
	49634	2.00	49734	49834		
50	49641	0.75	49741	49841	49505	49515
	49642	1.00	49742	49842		
	49643	1.50	49743	49843		
	49644	2.00	49744	49844		

### Inch Ball Lock® Compatibility Chart - Stainless Steel

Shank Diameter (mm)	Shank Part Number	Fixture Plate Thickness +/-0.005	Primary Liner Part Number	Secondary Liner Part Number	Face Mount Receiver Part Number	Back Mount Receiver Part Number
13	49605SS	0.50	49705SS	49805SS	49506SS	49516SS
	49606SS	0.75	49706SS	49806SS		
16	49607SS	0.50	49707SS	49807SS	49507SS	49517SS
	49608SS	0.75	49708SS	49808SS		
20	49601SS	0.75	49701SS	49801SS	49501SS	49511SS
	49602SS	1.00	49702SS	49802SS		
25	49611SS	0.75	49711SS	49811SS	49502SS	49512SS
	49612SS	1.00	49712SS	49812SS		
30	49621SS	0.75	49721SS	49821SS	49503SS	49513SS
	49622SS	1.00	49722SS	49822SS		
35	49631SS	0.75	49731SS	49831SS	49504SS	49514SS
	49632SS	1.00	49732SS	49832SS		
	49633SS	1.50	49733SS	49833SS		
	49634SS	2.00	49734SS	49834SS		
50	49641SS	0.75	49741SS	49841SS	49505SS	49515SS
	49642SS	1.00	49742SS	49842SS		
	49643SS	1.50	49743SS	49843SS		
	49644SS	2.00	49744SS	49844SS		



# Jergens<sup>®</sup>

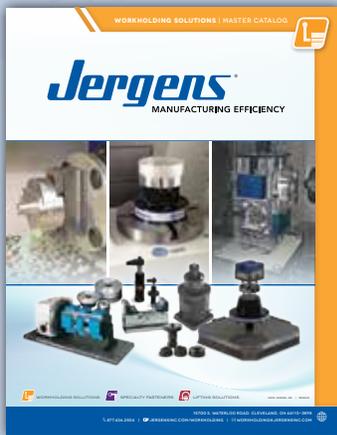
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## WORLD HEADQUARTERS

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## WORKHOLDING SOLUTIONS

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**ALSO AVAILABLE:**  
JERGENS WORKHOLDING SOLUTIONS CATALOG

Request a copy or download at [www.jergensinc.com](http://www.jergensinc.com)



Scan to watch the Ball Lock<sup>®</sup>  
Mounting System in action.

Jergens Workholding Solutions offers you a complete range of specialized quick-change fixturing solutions.



See them all at [www.jergensinc.com/workholding](http://www.jergensinc.com/workholding)

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