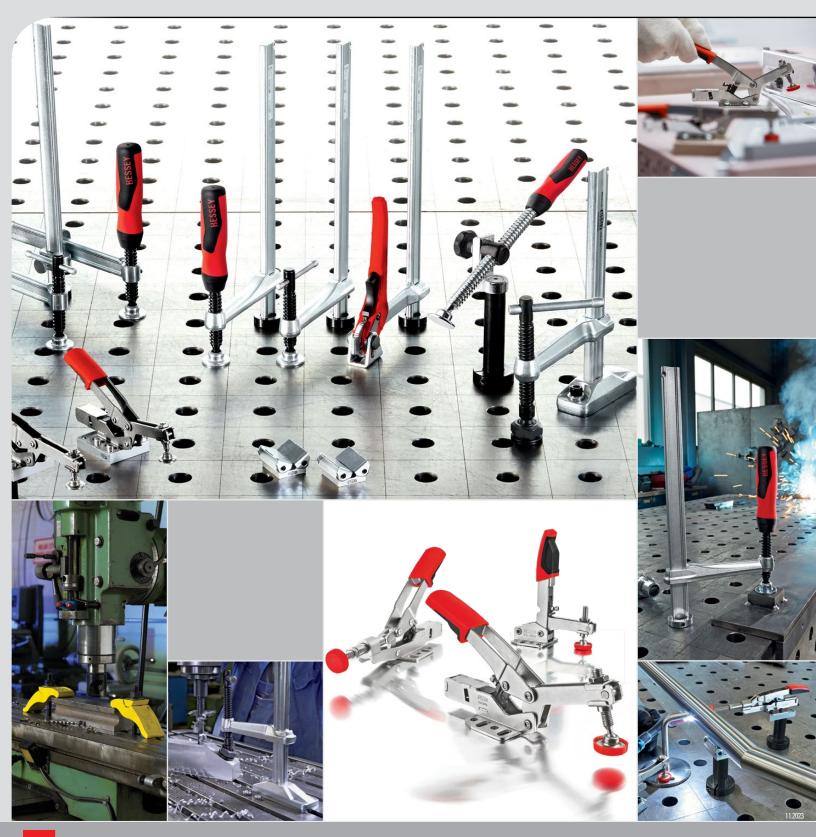
Machine Tool 2023-2024





## Machine Tool 2023-2024





### Bringing our experience to the table

Clamping elements for welding tables with 28 mm or 16 mm matrix holes. Choose from 3 handle designs for standard elements, plus variable or fixed throat depth versions. Our line-up also includes a clamping element with heat-resistant pressure plate, a gripping arm variant for easy work area access, and attachments for clamping oval, round and square workpieces.

BESSEY® toggle clamps and work table clamps can be used on welding tables thanks to special adapters, extensions and attachments. All elements can integrate into the table without using tools, making them highly adaptable with comfortable, safe and precise operation. Try them for yourself!

#### Flexible throat depth

The BESSEY® TWV series has a range of throat depths from 1 %6" up to 6 %" and is available in 3 handle variants.

#### Fixed throat depth

TW series has a range of throat depths from 4" up to  $5 \frac{1}{2}$ " and is available in 3 handle variants.

#### **■** Heavy-duty, custom design

TWM28 with heat-resistant special pressure plate and sintered steel insert, can pivot up to 35°. TW28GRS gripping arm features a spindle located outside the work area.

#### Flexible accessories

TW28VAD vario table clamping attachment is ideal for irregularly shaped workpieces. They are infinitely adjustable to the workpiece being welded, from 60° internal to 60° external.

#### ■ Accessories for BESSEY\*'s Toggle Clamp

The TW28A-STC adapter and TWX extension allow BESSEY® toggle clamps with horizontal base plates to be used on welding tables.

## Machine Tool 2023-2024



#### **Welding Table Clamp Variable Throat Depth**

- TWV Series
- 28mm and 16mm offerings
- Precise clamping with easy height adjustment and variable throat depth
- Patented rail profile for enhanced strength
- Drop forged sliding arm for strong, dependable clamping
- Choice of three handle variants





### **Welding Table Clamp Fixed Throat Depth**

- TW Series
- 28mm and 16mm offerings
- Precise clamping with easy height adjustment and fixed throat depth
- Patented rail profile for enhanced strength
- Drop forged sliding arm for strong, dependable clamping
- Choice of three handle variants





### Welding Table Clamp, Special Pressure Plate, TWM28

- Precise, individual clamping
- Tempered profiled rail and drop forged sliding arm for strength where it is most needed
- Long life due to heat-resistant pressure plate with sintered steel insert, which can be tilted up to 35°
- Patented rail profile for enhanced strength
- Drop forged sliding arm for strong, dependable clamping





### Welding Table Clamp, TW28GRS

- Spindle located on the outside for access to the work area and to protect against welding spatter
- Special, sturdy V-grooved pressure plate, for round or square workpieces
- Pivotable and infinitely adjustable in terms of height
- For the tightest of spaces, narrow openings and short projections



## Machine Tool 2023-2024



#### Welding table clamp accessories, TWVAD

- Specifically adapted to round, oval and square workpieces
- Angle infinitely adjustable from 60° internal to 60° external
- TW16VAD / TW28VAD versions with bolt for rapidly aligning and fixing the workpiece to the welding table
- TWVAD without bolt for variable movement on the welding table - 2 pieces per bag







#### Welding table toggle clamp adapter, TW-STC

- Accessory for BESSEY® STC toggle clamp with horizontal base plate
- With bolt for use directly on the welding table
- Without bolt for screwing to the extension TWX





### Hold down clamp, BSG21-14

- Vibration proof, ratchet action for rapid clamping
- Pressure pad self-adjusts on the workpiece
- Drop forged steel clamping arm
- Mounting hole accepts 1/8" bolts
- **BESSEY MorPad**









### Jig and fixture clamp, FC24-8

- Full rotation of 360° for easy work-piece removal
- Pressure pad self-adjusts on the workpiece
- Drop forged steel clamping arm
- Bushing O/D is  $^{13}\!/_{16}\!"$  and fits a table thickness of  $1\!\!/_{\!2}\!"$  to  $11\!\!/_{\!2}\!"$
- **BESSEY MorPad**

#### **BESSEY®** clamp service part, MorPads

- Long life due to heat-resistant pressure plate
- Sintered steel insert, can tilt up to 35°
- Three design versions:
  - smooth face (standard version);
  - rough face for secure clamping on dirty surfaces;
  - V-groove face for round, oval and edged workpieces.







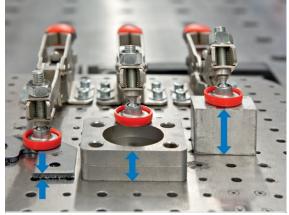
Ball-in-socket technology for greatly extended clamp life and, at full pressure... by BESSEY®. Patented.



# Machine Tool 2023-2024







## Auto-adjust toggle clamps for rapid clamping

One BESSEY® Auto-Adjust Toggle Clamp replaces a range of competitive clamps for quicker setups, smaller tool cribs and consolidated inventories.

#### Auto-adjustment of the jaw height

The BESSEY® Auto-Adjust Toggle Clamp self adjusts to variations in workpiece height while maintaining clamping force.

#### Adjustable clamping force

The integrated clamping force adjustment screw can vary the applied clamping force in a

#### Adaptable base plate

Holes are sized and spaced for easy mounting and flexibility in metric and imperial.

#### Large ergonomic handle

Soft insets for maximum comfort.

#### Check out STC in action!

Please reference our YouTube videos showing BESSEY products in action at youtube.com/user/BesseyTools

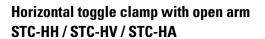
## Machine Tool 2023-2024



- Automatic and infinitely variable adjustment of the clamping height while clamping force remains unchanged – without having to make manual changes to the position of the pressure screws
- Adjustable clamping force based on the adjusting screw in the joint
- Base plate hole pattern suitable for millimetres and inches

#### Vertical toggle clamp with open arm STC-VH

	Open- ing	Nominal Clamping Force	Holding Capacity	Approx. Weight	Fastener
STC-VH20	13/16"	25 - 250 lbs.*	450 lbs.	0.44 lbs.	3/16" or M5
STC-VH50	1 <sup>9</sup> /16"	25 - 550 lbs.*	700 lbs.	0.77 lbs.	1/4" or M6



 High-quality oil-resistant two-component plastic handle with slip protection

25 - 250 lbs.\*

	Open- ing	Nominal Clamping Force	Holding Capacity	Approx. Weight	Fastener		
with horizontal base plate							
STC-HH20	13/16"	25 - 250 lbs.*	450 lbs.	0.44 lbs.	3/16" or M5		
STC-HH50	1 <sup>9</sup> /16"	25 - 550 lbs.*	700 lbs.	0.77 lbs.	1/4" or M6		
STC-HH70	2 3/8"	25 - 550 lbs.*	700 lbs.	0.86 lbs.	1/4" or M6		



450 lbs.

0.55 lbs. 3/16" or M5

with angled base plate STC-HA20  $^{13}$ /16" 25 - 250 lbs.\* 450 lb. 0.52 lbs.  $^{3}$ /16" or M5



STC-VH

STC-HH



### Push/pull clamp STC-IHH / STC-IHA

 High-quality oil-resistant two-component plastic handle with slip protection

with horizonta	l base plate
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STC-HV20 13/16"

STC-IHH15	•	25 - 250 lbs.*	450 lbs.	0.52 lbs.	3/16" or M5
STC-IHH25		25 - 550 lbs.*	700 lbs.	0.86 lbs.	1/4" or M6
with angled STC-IHA15		ate 25 - 250 lbs.*	450 lbs.	0.55 lbs.	<sup>3</sup> / <sub>16</sub> " or M5













## Machine Tool 2023-2024



#### **RiteHite Hold Down Products**

- A quick and easy set-up, ready for your T-slot table. A valuepriced hold down alternative with the great BESSEY® quality you expect.
- Single component design Self-positioning, single component design for a quick set-up.
- Workpieces of different thicknesses Wide clamping range. Adjustments up to 5".
- T-slot table ready, for T-slot hold down tables in machine shop applications.
- Sturdy frame Strong, ductile iron body, strength.
- Swivel rocker attached to body allows the clamp to self-align on the work piece.

### RiteHite Long Reach, Model L

- L series for a longer throw
- BESSEY RiteHite holds your workpiece in place with the simple self-positioning, single component design.
- Made of strong, ductile iron.
- For use on a T-slot hold down table in a machine shop.
- With a swivel rocker attached to the body to prevent

	Bolt Size	Max Clamping Height	Nominal Dimensions	Clamping Force	Max Torque	Approx. Weight
375L	3/8"	1 <sup>1</sup> / <sub>4</sub> "	3 3/4 x 1 1/8 x 1 1/4	7,000 lbs	43 LB-FT	0.50 lbs
500L	1/2"	2 <sup>1</sup> / <sub>2</sub> "	5¾ x 1½ 6 x 1½	8,800 lbs	73 LB-FT	1.39 lbs
625L	5/8"	3 <sup>1</sup> /2"	6¾ x 1¾ x 15/8	14,500 lbs	163 LB-FT	2.33 lbs
750L	3/4"	5"	9 x 2 1/8 x 2 1/4	19,000 lbs	237 LB-FT	4.96 lbs
1000L	1"	5"	11 <sup>1</sup> /8 x 2 <sup>7</sup> /8 x 3 <sup>3</sup> /8	51,000 lbs	850 LB-FT	12.80 lbs

#### **RiteHite Standard Reach, Model S**

- S series is slightly smaller than the L series.
- Strength you can depend on.

	Bolt Size	Max Clamping Height	Nominal Dimensions	Clamping Force	Max Torque	Approx. Weight
376S	3/8"	1"	3 x 1 <sup>1</sup> / <sub>8</sub> x 1 <sup>1</sup> / <sub>4</sub>	8,800 lbs	55 LB-FT	0.43 lbs
501S	1/2"	1 3/4"	41/4 x 17/16 x 11/2	13,200 lbs	110 LB-FT	1.04 lbs
626S	5/8"	2 3/4"	$5^{1}/2 \times 1^{3}/4 \times 1^{5}/8$	19,000 lbs	213 LB-FT	2.10 lbs
751S	3/4"	3 <sup>1</sup> /2"	7 x 2 <sup>1</sup> /8 x 2 <sup>1</sup> /4	27,600 lbs	345 LB-FT	4.00 lbs
1001S	1"	3"	9 x 2 <sup>7</sup> /8 x 3 <sup>3</sup> /8	67,000 lbs	1,116 LB-FT	10.00 lbs











## Machine Tool 2023-2024





## **Further tools from the complete BESSEY** range



#### Angle clamps (WSM)

- For joining two pieces of metal at an exact 90 degree angle
- WSM does the work you weld
- Even pieces of different thickness are no match for this clamp.



#### clamps Cost effective offering that embodies the

- stringent quality requirements of BESSEY® Range of options: variety of throat depths, pad/swivel styles and clamping capacities for real-world applications
- German engineering great prices and
- Standard & heavy duty pads are field



#### Heavy duty bench vise

- Guaranteed unbreakable\*!
- 90,000 Psi drop forged alloy steel
- Perfect parallel jaw design
- Precision ground, induction hardened jaws & anvil
- 360° Rotation drop forged alloy steel swivel hase
- \* Guaranteed against breakage in normal use. Conditions apply.



#### Portable induction bearing heaters

- Digital temperature and time control
- High performance fast heating with lower energy use
- Vertical or horizontal heating
- Standard cross bars.



#### Cone style bearing heaters

- Non-induction
- Small, portable, easy to use!
- Cost effective includes control box
- NCB version does not have controls.



#### Premium all-steel bar clamps

- Patented rail profile
- BESSEY MorPad
- Hardened spindle for high load capacity
- Size engineered T-Bar
- Drop forged sliding arm