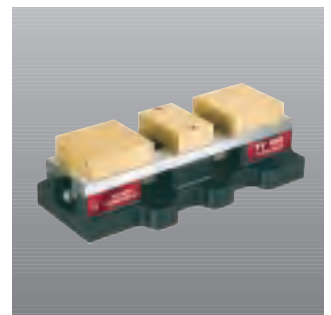
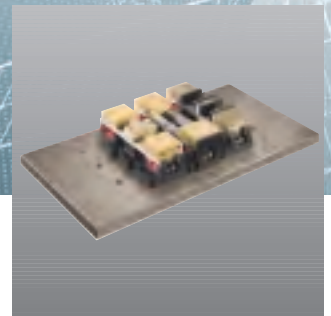
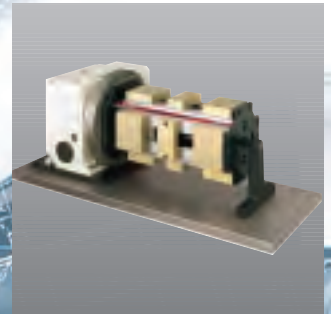
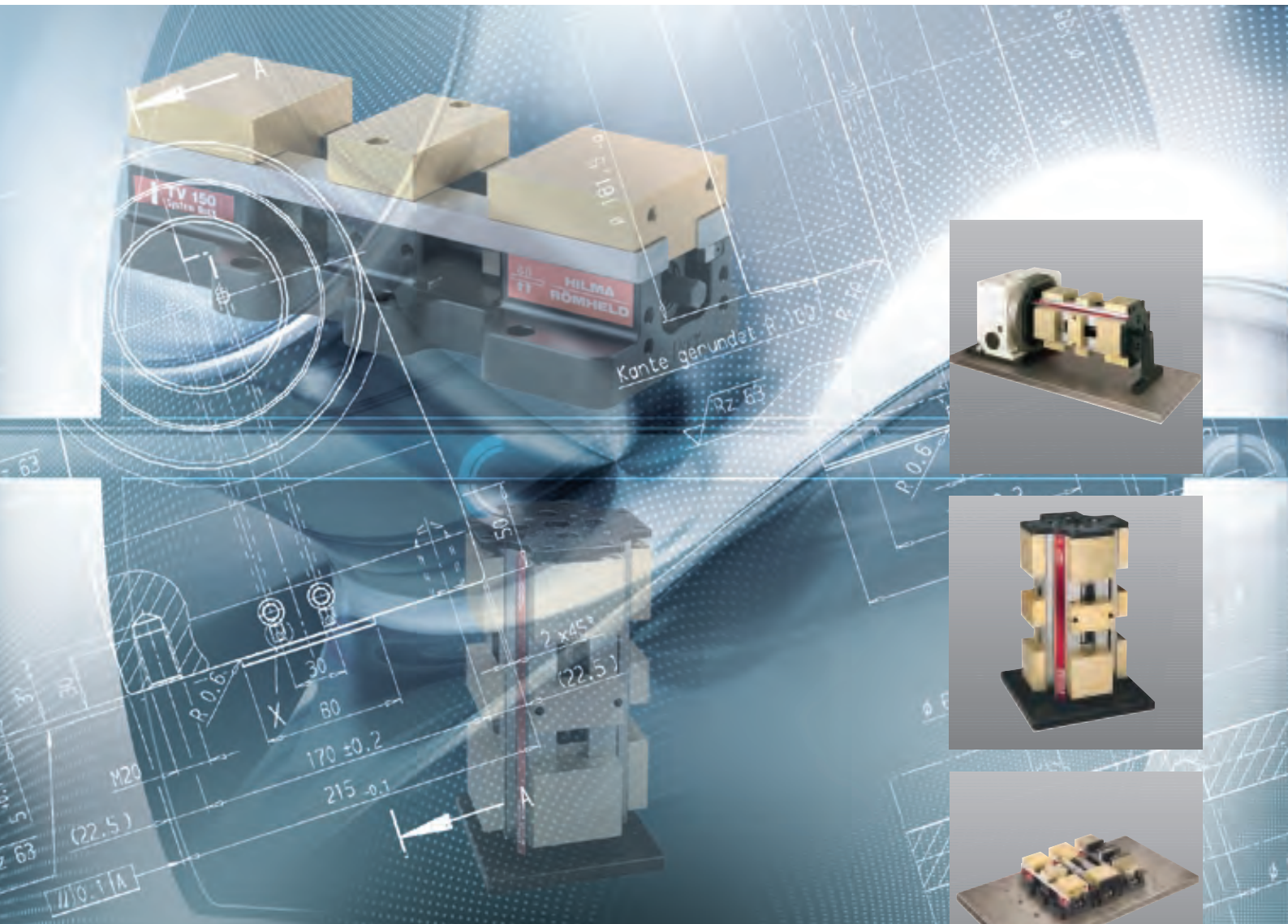




HILMA

System Bock





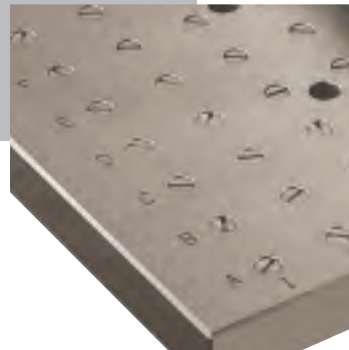
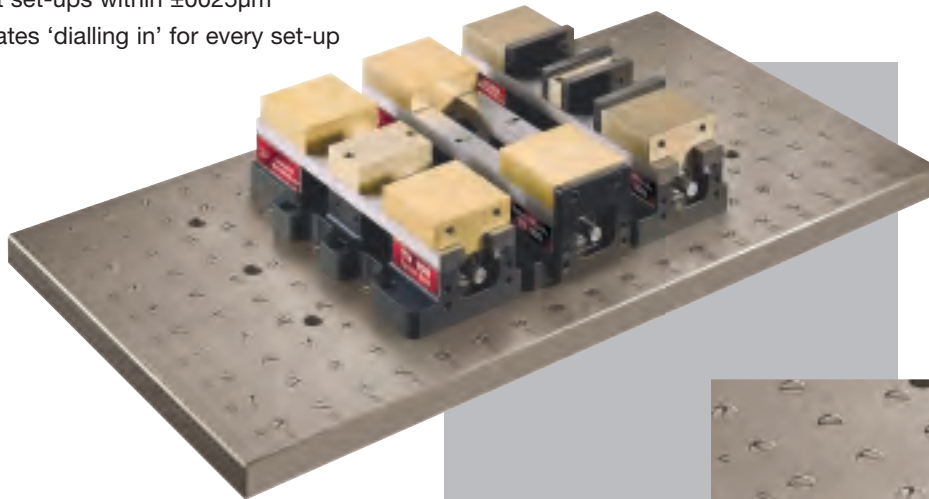
Save Set-up Time... and More!

Bock Locator Plates

The foundation for quick change workholding efficiency.

The Bock Locator Plate is a hard coated aluminium subplate with precision bored and threaded locating holes designed to save set-up time with your vices, indexers, fixtures or rotary tables.

- Repeat set-ups within $\pm 0.025\mu\text{m}$
- Eliminates 'dialling in' for every set-up



Bock Twin Vices

- Fully machinable soft jaws
- Full jaw travel to 150mm
- Hardened and ground steel guideways
- Sealed lead screw
- Interlocking base design
- High strength aluminium body
- Chip flow through cut-outs

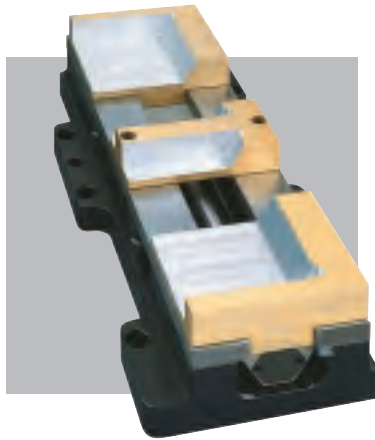
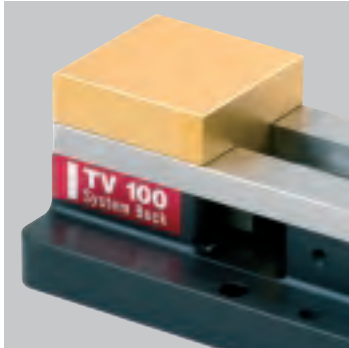
Alpha Numeric Coded Holes

for an accurate and repeatable baseline reference.



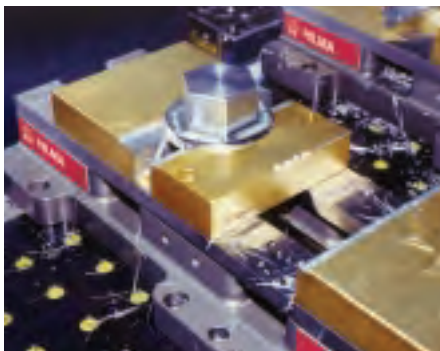


Fastest Quick Change Jaw System



Maximum Jaw Utilisation

Low profile clamping mechanism allows for maximum jaw machining area.



Cylindrical

Jaw contours machine identical to component.

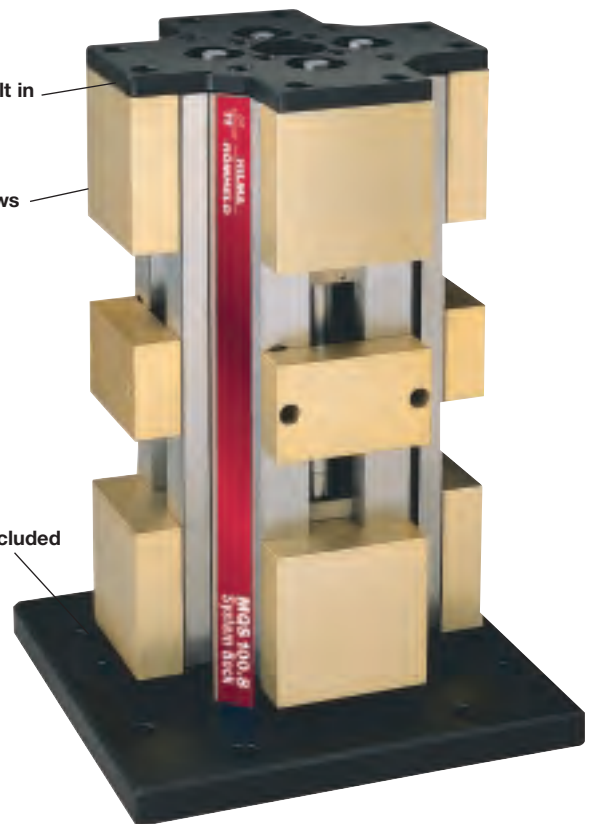
Bock MonoQuads

4, 8, 12 and 16 station models available for multiple part machining requirements.

Single station adapter plate built in

Quick release reversible soft jaws

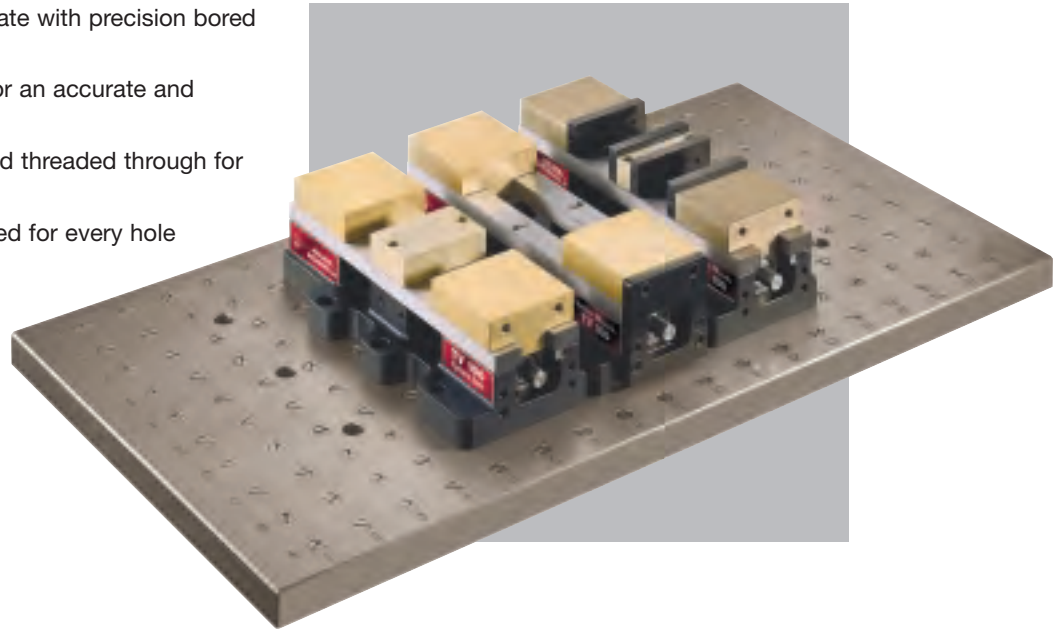
Base plate included



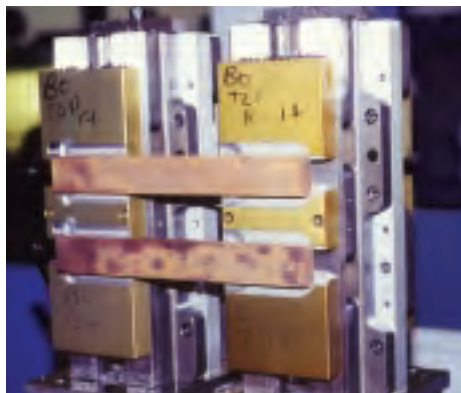


Locator Plates for Faster Set-ups

- Eliminate time consuming 'dialling in' for every set-up
- Repeat set-ups to within $\pm 0.025\mu\text{m}$
- Hard coated aluminium subplate with precision bored and threaded locating holes
- Alpha-numeric coded holes for an accurate and repeatable baseline reference
- Every hole precision bored and threaded through for maximum versatility
- Brass protection plugs included for every hole



Maximum table utilisation by easily interlocking three Bock Twin Vices on Locator Plate.



Achieve greater flexibility

Double Expanding Locator Pin

- Double expanding locator pin is used to align vices and fixtures on the Bock Locator System
- Double expanding locator pin eliminates need for realignment in repeat set-ups
- Hardened and ground steel body
- Easy fixture removal eliminates need for dowel pins or prying off fixture plates





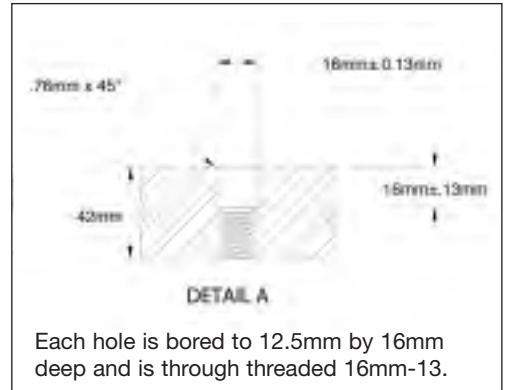
Locator Plate Material and Specification Data

Block Locator Plates are constructed of a high-strength aluminium alloy that is fully heat-treated and stress relieved.

The alphanumeric grid provides a unique address for each hole, making each hole a datum point. Holes are on a 50mm x 50mm grid.

Surface hardness: 65-70Rc
 Parallelism TIR .002 when mounted to machine tool base
 Hole spacing: $\pm .0005$ " in a 10" radius
 Repeatability of set-up in X and Y within $\pm .001$ " when using DEL01 Double Expanding Locator Pins

Locator Plate Hole Specifications



Each hole is bored to 12.5mm by 16mm deep and is through threaded 16mm-13.

Customer Specification Data

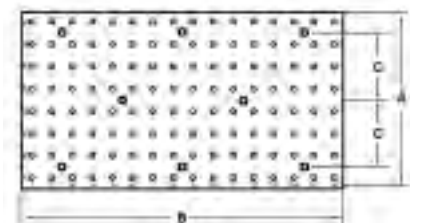
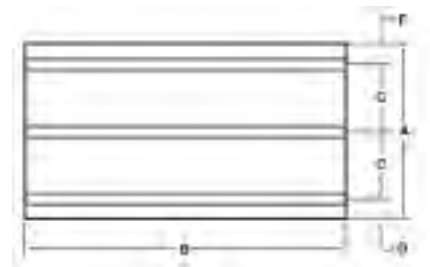
Simply complete specification data and fax back on: **01604 497648**

ROEMHELD (UK) Limited
 Moulton Park Business Centre
 Redhouse Road
 Moulton Park
 NORTHAMPTON NN3 6AQ
 ☎ 01604 497665
 ☒ 01604 497648

Machine _____

Model _____

	Table Dimensions	Locator Plate
A Overall width	_____	_____
B Overall length	_____	_____
C T-slot spacing	_____	_____
D No. of T-slots	_____	_____
E T-slot width	_____	_____
F Dimension from top of table to centre of first slot	_____	_____
G Dimension from bottom of table to centre of last slot	_____	_____



Authorisation for manufacturing to above specifications:

Approved by: _____

Date: _____

Representation drawing only. Number of holes will vary depending on plate size.



Flexible clamping - Flexible production

- **Variable batch sizes?**
- **Many different types of workpieces?**
- **Frequent set-ups?**

The BFS Flat Clamping System produced by HILMA is the answer. Three striking features combine to make your production flexible:

Aluminium jaws suitable for milling:

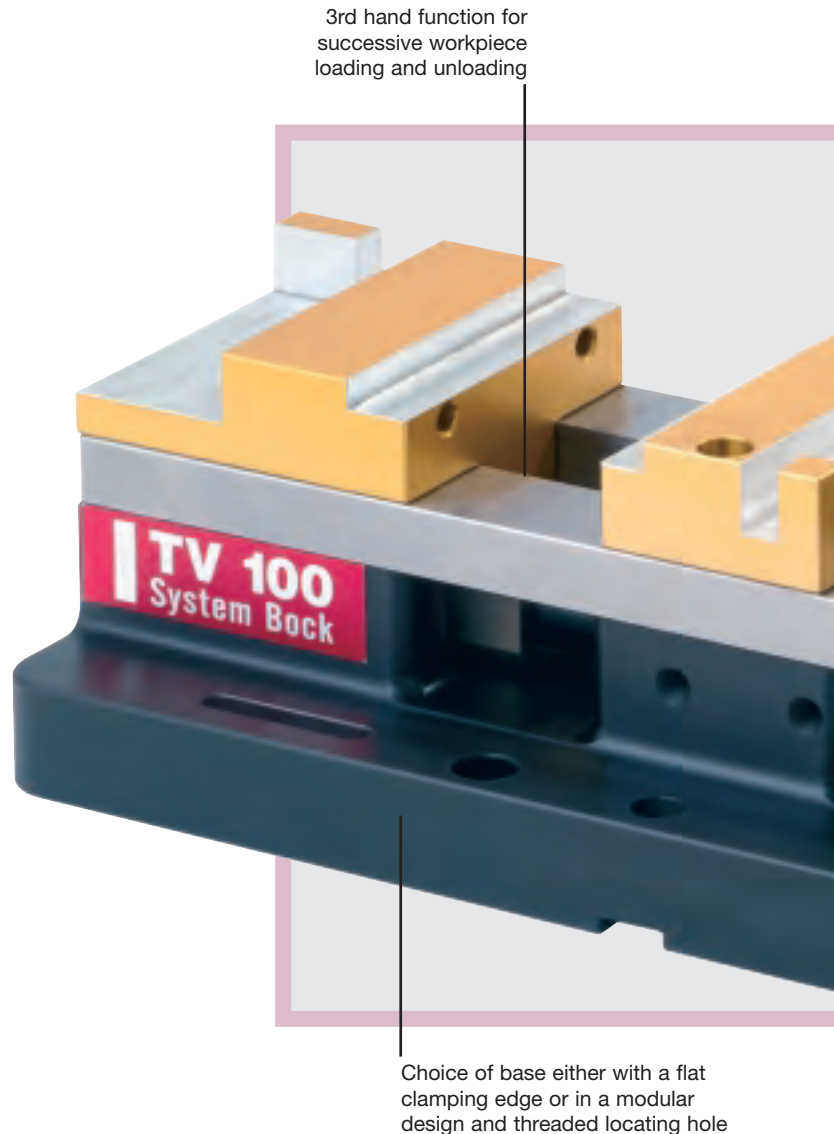
- Milling of stop, supporting and clamping surfaces
- Quick set-up for formed parts and workpieces having complex clamping contours
- Significant reduction in expenditure on fixtures

Jaw change in a few seconds:

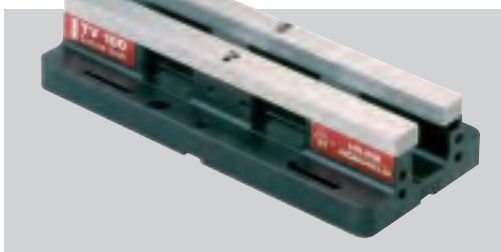
- Rapid change-over from one workpiece to the next
- Machine downtimes are reduced to a minimum

High availability:

- The clamping element can be made available for simple and complex clamping applications in a very short time



Hard coated base made from high-strength aluminium and therefore a low dead weight. Screw-on guideways made from hardened steel.



The clamping system consists only of a few components, which means quick dismantling and minimum maintenance.

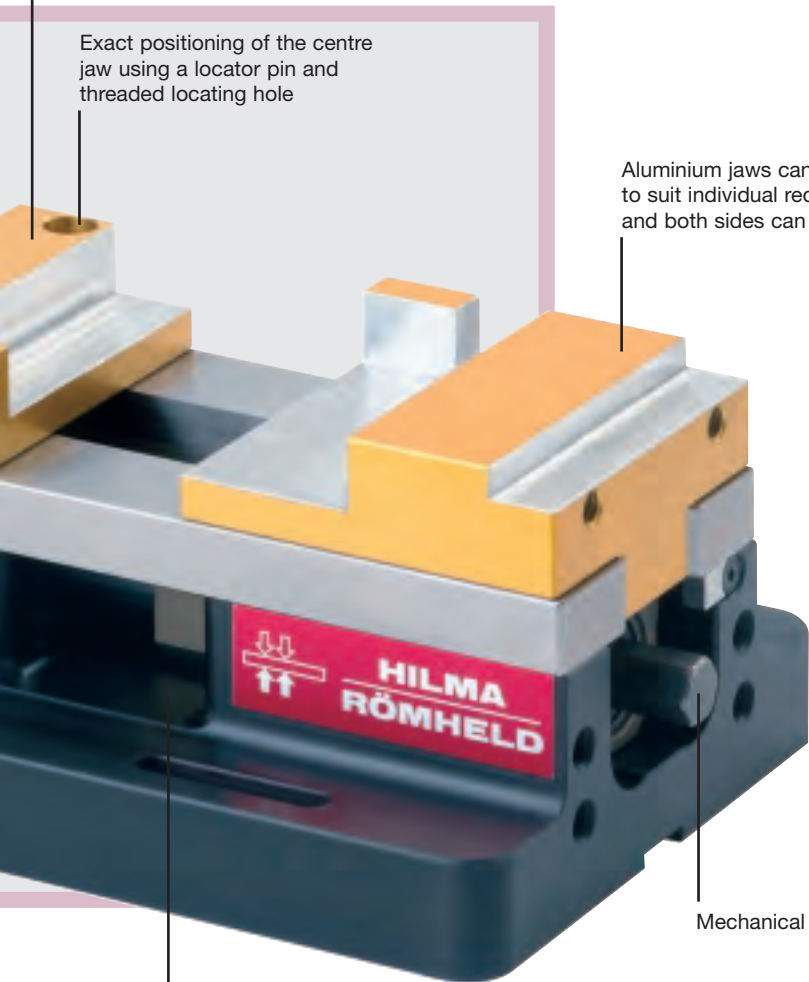




After removal of the fixed jaw, the system can be changed over to a large clamping range using the stop plate (see 'Accessories', page 13)

Exact positioning of the centre jaw using a locator pin and threaded locating hole

Aluminium jaws can be milled to suit individual requirements and both sides can be used

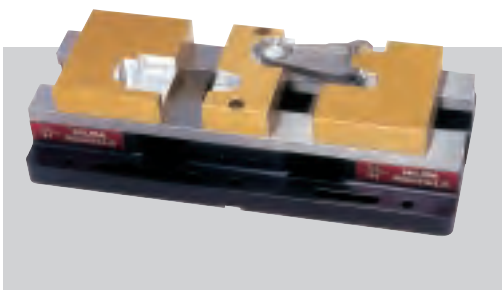


Mechanical lead screw

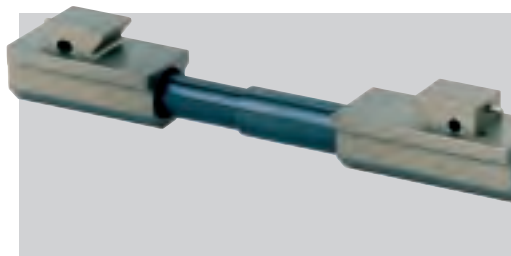
Cut-outs for chips and coolant flow



Aluminium jaws can be completely milled, therefore a high degree of adaptability to the workpiece shape. For clamping, stop and supporting surfaces.



Totally sealed lead screw assembly for trouble-free operation, power transmission through inserted steel nut, large slide stroke.



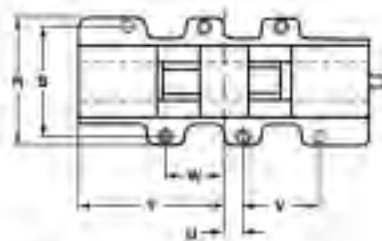


Twin Vice TV 100

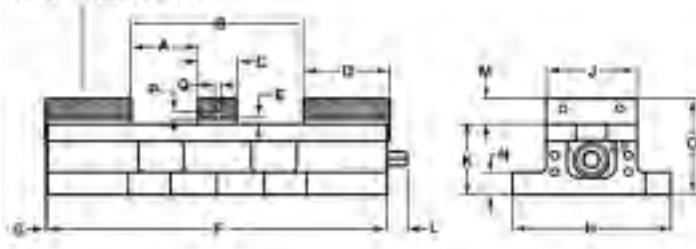
- Fastest quick change jaw system
- Fully machinable soft jaws
- Full jaw travel to 150mm
- Adjustable centre jaw
- Hardened and ground steel guideways
- Chip flow through cut-outs
- Interlocking base design
- Fully sealed lead screw assembly
- Mounts directly to locator plate



Soft Jaw Version



Machinable area



TV 100 Dimensions and Capacities	
Dimension	Soft Jaw Vice TV 100SR
A Jaw Capacity	56*
B Single Station Capacity	178*
C Fixed Jaw Width	64
D Jaw Carrier Length	102
E Jaw Plate Thickness	6
F Base Length	381
G Jaw Overhang	3
H Base Width	177
O Base Height	118
J Jaw Width	102
K Height Base to Rail	86
L Lead Screw	20 max.
M Height	32
N Base Flange Thickness	32
P Non Machinable Area	21
Q Non Machinable Area	13
R Base Width	177
S Centre Distance	150
T Centre Line to End	191
U Centre to Bolt Hole	25
V Centre Bolt/Dowel	100
W Centre Line to bolt hole	75
Weight	14kg.

*unmachined jaw capacity



Twin Vice TV 150

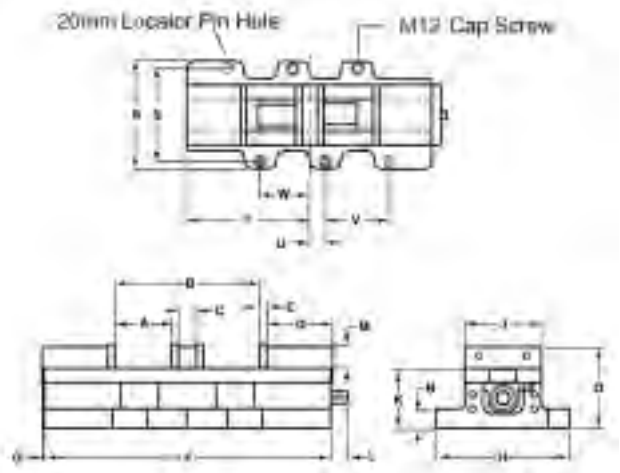
- Fastest quick change jaw system available
- Fully machinable soft jaws
- Hardened and ground steel guideways
- Full jaw travel to 200mm
- Fully sealed lead screw assembly
- Interlocking base design
- Chip flow through cut-outs
- Adjustable centre jaw



TV150 Dimensions and Capacities (in mm)		
Dimension	Hard Jaw Vice TV 150H	Soft Jaw Vice TV 150S
A Jaw Capacity	102	89*
B Single Station Capacity	254	254*
C Fixed Jaw Width	24	76
D Jaw Carrier Length	114	127
E Jaw Plate Thickness	13	6
F Base Length	508	508
G Jaw Overhang	-	-
H Base Width	227	227
O Base Height	124	124
J Jaw Width	152	152
K Height Base to Rail	86	86
L Lead Screw	20 max.	20 max.
M Height	6	38
N Base Flange Thickness	32	32
P Non Machinable Area	-	25
Q Non Machinable Area	-	15
R Base Width	227	227
S Centre Distance	200	200
T Centre Line to End	254	254
U Centre to Bolt Hole	25	25
V Centre Bolt/Dowel	50	50
W Centre Line to bolt hole	50	50
Weight	30kg.	30kg.

*unmachined jaw capacity

Hard Jaw Version





Twin clamping system TV 100 SG

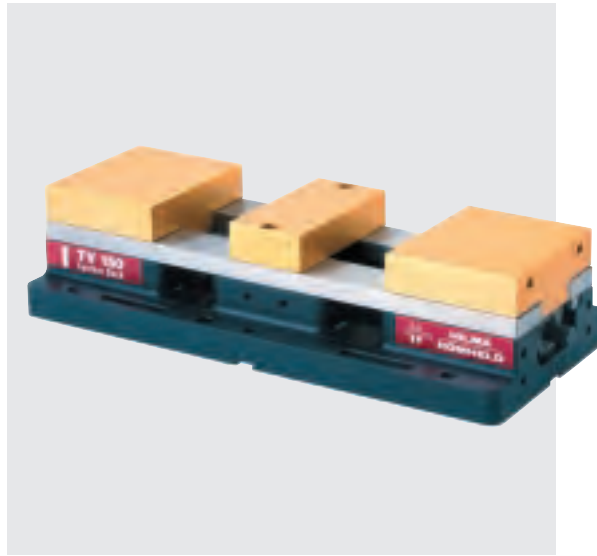
Standard version with flat clamping edge for direct installation on the machine table.
Keyways lengthwise and across the length (20 H7) are standard.

Supplied with a standard set of jaws.

Twin clamping system TV 150 SG

Standard version with flat clamping edge for direct installation on the machine table.
Lengthwise keyway and a keyway across the length (20 H7) are standard.

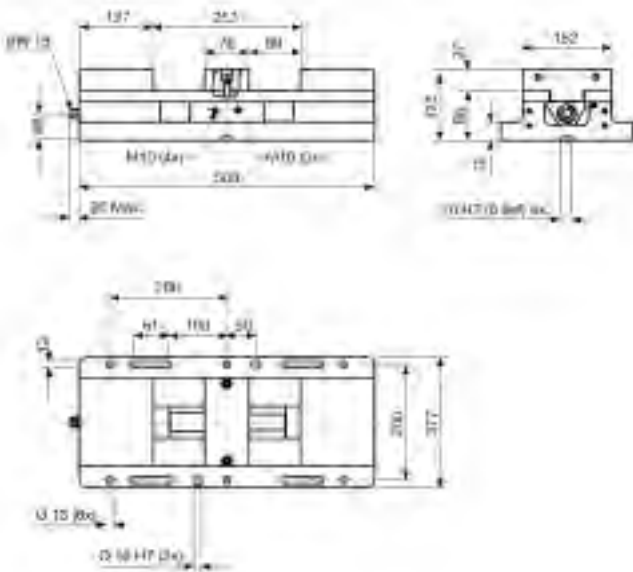
Supplied with a standard set of jaws.



Jaw width: 100mm
Type: TV 100 SG
Weight: 14kg
Part no: 9.3452.0101

Jaw width: 150mm
Type: TV 150 SG
Weight: 30kg
Part no: 9.3454.0101

TWIN VICE STRAIGHT EDGE





Tower clamping system MQS 100-8

Standard version with 4 x 2 clamping positions.
Suitable for use on horizontal machining systems or reversible damping systems.
Supplied with jaw sets.



Jaw width: 100mm
Type: MQS 100-8
Weight: 45kg
Part no: 9.3462.0401

Tower clamping system MQS 150-8

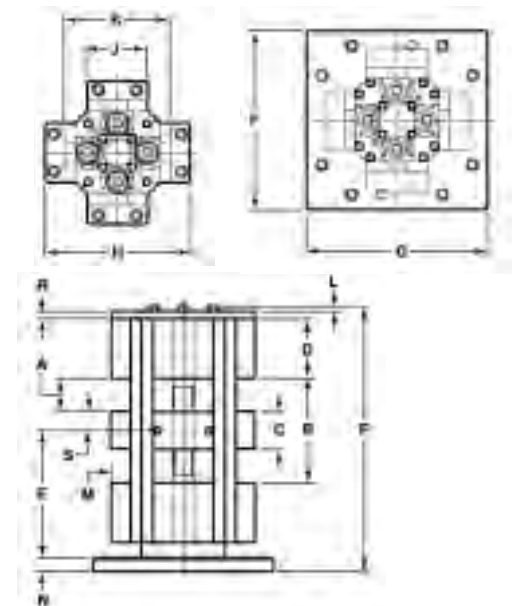
Standard version with 4 x 2 clamping positions.
Suitable for use on horizontal machining systems or reversible clamping systems.
Supplied with jaw sets.



Jaw width: 150mm
Type: MQS 150-8
Weight: 91kg
Part no: 9.3464.0401

MonoQuad 100-8 Dimensions and Capacities Soft Jaw Vice		
Dimension	MQS 100-8	MQS 150-8
A Jaw Capacity (unmachined)	57	89
B Single Station Capacity (unmachined)	178	254
C Fixed Jaw Width	64	76
D Jaw Length	102	127
E Base to Centre of Fixed Jaw	216	279
F Base Length	305	305
G Base Width	305	305
H Overall Width	243	292
J Jaw Width	102	152
K Width Rail to Rail	178	216
L Lead Screw Hex	20 max.	20 max.
M Jaw Height	32	38
N Base Flange Thickness	24	24
P Overall Height	464	591
R Top Plate Thickness	13	13
S Centre of Fixed Jaw to Face	32	38
Weight	45 kg	91 kg

TOWER CLAMPING SYSTEM

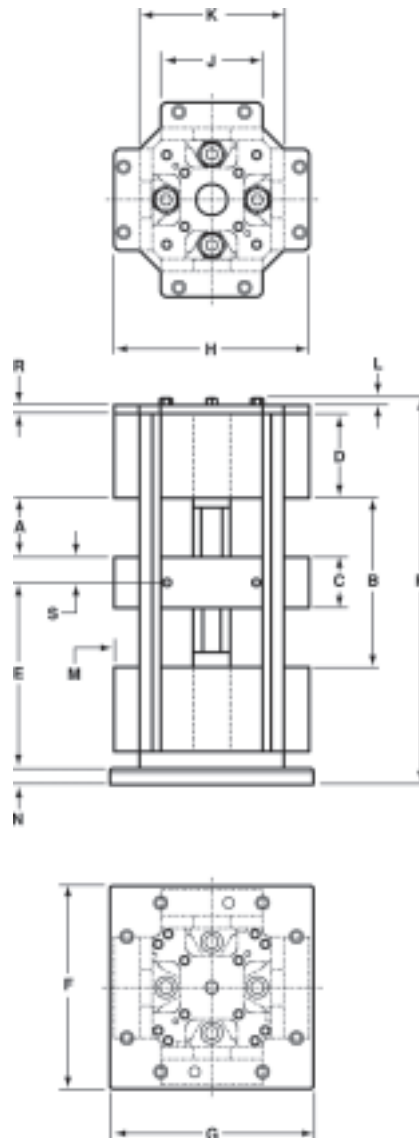




MonoQuad 150-8 Low Profile



MonoQuad 150-8 Dimensions and Capacities Soft Jaw Vice		
Dimension	MQS 100-8LP	MQS 150-8 LP
A Jaw Capacity (unmachined)	57	89
B Single Station Capacity (unmachined)	178	254
C Fixed Jaw Width	63	76
D Jaw Length	101	127
E Base to Centre of Fixed Jaw	168	224
F Base Length	242	292
G Base Width	242	292
H Overall Width	242	292
J Jaw Width	100	150
K Width Rail to Rail	177	215
L Lead Screw Hex	15	22
M Jaw Height	31	38
N Base Flange Thickness	24	24
P Overall Height	364	469
R Top Plate Thickness	14	14
S Centre of Fixed Jaw to Face	31.75	38.10
Weight (kilos)	80	90





Jaws and Accessories

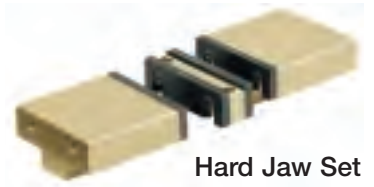
HARD JAWS

HJS-100*	100mm Hard Jaw Carrier Set 3 piece set 100mm x 32mm
HFJ-100	100mm Fixed Hard Jaw Carrier single pcs.
HMJ-100	100mm Movable Hard Jaw Carriers pair
SNJS-100	Hard Jaw Plates 100mm (4pcs.)
HJS-150*	150mm Hard Jaw Carrier Set 3 piece set 150mm x 38mm
HFJ-150	150mm Fixed Jaw Carrier single pcs.
HMJ-150	150mm Movable Hard Jaw Carriers pair
SNJS-150	Hard Jaw Plates 150mm (4pcs.)

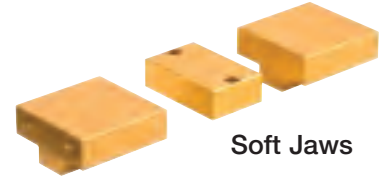
*Jaw Plates sold separately

SOFT JAWS

SJS-100	100mm Soft Jaw Set Machinable Soft Jaws 3 pcs. set 100mm x 38mm
SFJ-100	100mm Fixed Machinable Soft Jaw single pcs.
SMJ-100	100mm Movable machinable Soft Jaws pair
SJS-100x150	150mm Wide Soft Jaw Set Machinable 3 pcs. 150mm x 32mm
SFJ-100x150	150mm Wide Fixed Soft Jaw single pcs.
SMJ-100x150	150mm Wide Movable Soft Jaws pair
SJS-100x50	50mm High Soft Jaw Set 3 pcs. set 100mm x 50mm
SJS-150	150mm Soft Jaw Set 3 pcs. 150mm x 38mm
SFJ-150	150mm Fixed Soft Jaw single pcs.
SMJ-150	150mm Movable Soft Jaws pair
SJS-150x200	200mm Wide Soft Jaw Set 3 pcs. 200mm x 38mm
SFJ-150x200	200mm Wide movable Soft Jaws pair
SJS-150x62	62mm High Soft Jaw Set 3 pcs. set 150mm x 62mm



Hard Jaw Set



Soft Jaws



Wide Soft Jaws



High Wide Soft Jaws

QUICK CHANGE FIXTURE PLATES

FP-4415	Fixture Plate 100mm x 375mm fits TV100 & MQS100 vice to build fixture
FP-4615	Fixture Plate 150mm x 375mm fits TV100 & MQS100 vice to build fixture
FP-6620	Fixture Plate 150mm x 500mm fits TV150 & MQS150 vice to build fixture
FP-6820	Fixture Plate 200mm x 500mm fits TV150 & MQS150 vice to build fixture

SINGLE STATION CONVERSION PLATES

CP-100	100mm Conversion Plate to change TV100 for Single Jaw Operation
CP-150	150mm Conversion Plate to change TV150 for Single Jaw Operation

BLANK FIXTURES

FP-1016	Blank Fixture Plate 25mm x 250mm x 400mm to build new or mount existing fixtures
FP-1616	Blank Fixture Plate 25mm x 400mm x 400mm to build new or mount existing fixtures

ADAPTER PLATES

AP-K3600	Kurt 3600 Vice Adapter allows quick accurate set-up
AP-KD60	Kurt D60/675 Vice Adapter for quick accurate set-up
AP-UN400	Universal Adapter Plate 100 or 100mm Kurt/Chick Dual Vice Adapter
AP-UN600	Universal Adapter Plate 150 or 150mm Kurt/Chick Dual Vice Adapter
AP-UN1010	Indexer Adapter Plate Universal 250mm x 250mm
AP-UN1212	Indexer Adapter Plate Universal 350mm x 350mm
AP-UNTS	Tailstock Adapter Plate Universal

STOPS

PW-STD-02	Pivot Workstop 150 or 200 for TV100 or TV150 (not for MQS100 or 150)
-----------	--

PINS

DEL01	Double Expanding Locator Pin aligns vices and fixture plates
-------	--

VICE MOUNTING KITS

MKTV100	Mounting Kit for TV100 Vice 2-DEL01, 4-Cap Screws
MKTV150	Mounting Kit for TV150 Vice 2-DEL01, 6-Cap Screws
MKM100	Mounting Kit for MQS100 2-DEL01, 8-Cap Screws
MKM150	Mounting Kit for MQS150 2-DEL01, 8-Cap Screws



Fixture Plate



Conversion Plates



Adapter Plates

FP 1016 Blank Fixture Plate

250mm x 400mm

Used to create new fixtures or mount existing fixtures to blank plate.

FP 1616 Blank Fixture Plate

400mm x 400mm

Used to create new fixtures or mount existing fixtures to blank plate.

AP UN600 150 Universal Adapter Plate

Used to mount 150mm 2 station vices.

Eliminates need to realign when setting up.

AP UN400 Universal Adapter Plate

Used to mount 100mm 2 station vices.

Eliminates need to realign when setting up.

AP UN1010 Universal Rotary Table/Indexer Adapter Plate

Eliminates alignment during set-up.

AP UNTSA Universal Tailstock Adapter Plate

Accepts most tailstocks.

Eliminates set-up alignments.

AP UN 1212 350mm x 350mm Universal Rotary Table/Indexer Adapter Plate

Eliminates alignment during set-up.



Note: All adapter plates bolt directly to Bock locator plates.
Adapter plates to suit most vice systems are available on request.

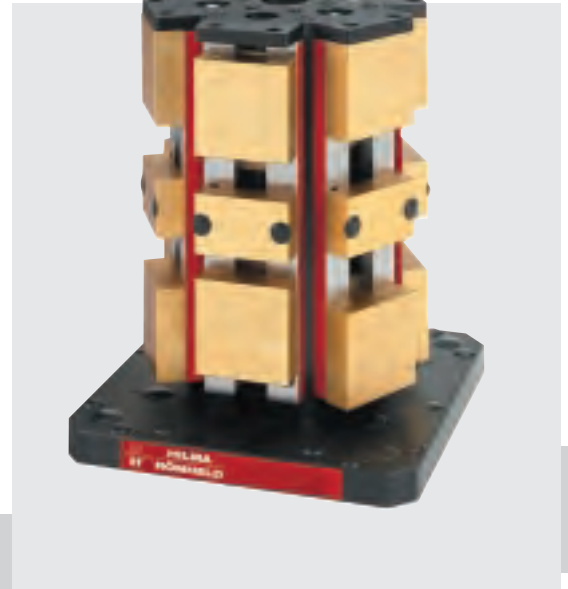


HILMA

System Bock

New innovations

- Fully machinable soft jaws
- Low weight - high strength body
- Sealed lead screw
- Rapid changeover
- Twin, cubed or hexagon designed vice systems
- Tri System



The Roemheld group companies



ROEMHELD

Hydraulic workholding elements



HILMA

Vice systems

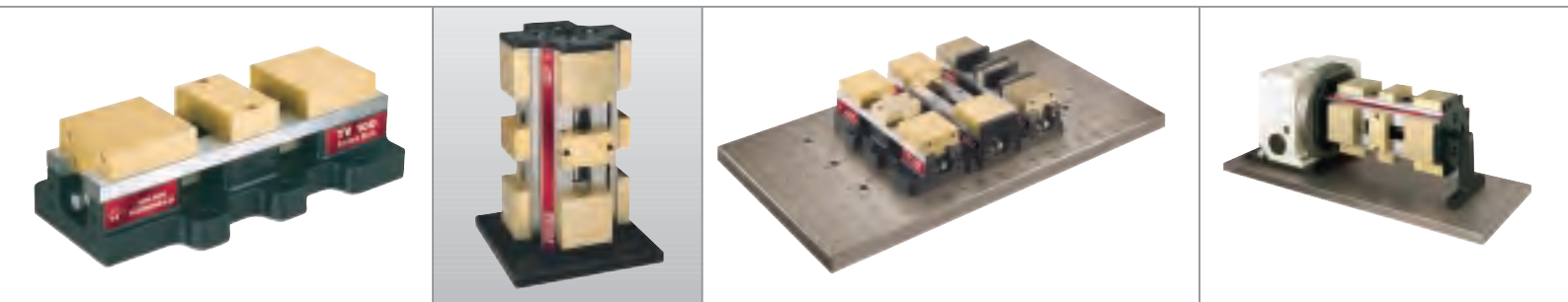


STARK

Zero point positioning systems

Web: www.roemheld.co.uk

Email: sales@roemheld.co.uk



HILMA

ROEMHELD UK Limited
Moulton Park Business Centre
Redhouse Road
Moulton Park
NORTHAMPTON NN3 6AQ
Tel: 01604 497665
Fax: 01604 497648