

Makino + System 3R tooling

# Ledger for Reference elements and 3Rulers

Older machines



This ledger is only to guide suitable length of reference elements and 3Ruler for specific machine model. Contents for 3Rulers and/or reference elements, see also TPS-sheets covering the range of 3R-200.yyJ-x, 3R-239-xxx and accessories.

## Makino

Model	Tooling configuration for X-axis		Tooling configuration for Y-axis		MIC-xxxx	
	Ref. element	3R-239-xxx	Ref. element	3R-239-xxx		
DUO43	3R-200.49J-1	495	3R-200.49J-1	345	2915	Page: 3
DUO64	3R-200.5J-2	695.86	3R-200.3J-1	445	2916	Page: 5
EU43	3R-200.4J-1	515	3R-200.4J-1	345	2917	Page: 5
EU64	3R-200.6J-1	645	3R-200.5J-2	N.a.	2919	Page: 6
SP43 (Japan, yr 2005-)	3R-200.4J-1	515	3R-200.4J-1	345	2917	Page: 7
SP43 (US, yr 2005-)	3R-200.4J-1	515	3R-200.44J-1	365	2920	Page: 8
SP64 (yr -2005)	3R-200.49J-1	715.86	3R-200.3J-1 + 3R-200.29J-1	465	N.a.	
SP64 (yr 2005-)	3R-200.49J-1	715.86	3R-200.29J-1	445	2918	Page: 9
U32 (Square)	3R-200.44J-1	415	3R-200.3J-1	315	2909	Page: 10
U32 (U-shape)	3R-200.44J-1	415	3R-200.3J-1	N.a.	2910	Page: 11
U32i (Square)	3R-200.44J-1	415	3R-200.3J-1	315	2909	Page: 10
U32i (U-shape)	3R-200.44J-1	415	3R-200.3J-1	N.a.	2910	Page: 11
U53 (Square)	3R-200.6J-1	565	3R-200.6J-1	415	2911	Page: 12
U53 (U-shape)	3R-200.6J-1	565	3R-200.6J-1	N.a.	2912	Page: 13
U53i (Square)	3R-200.6J-1	565	3R-200.6J-1	415	2911	Page: 12
U53i (U-shape)	3R-200.6J-1	565	3R-200.6J-1	N.a.	2912	Page: 12
WB32B (Square)	3R-200.44J-1	415	3R-200.3J-1	315	2909	Page: 10
WB32B (U-shape)	3R-200.44J-1	415	3R-200.3J-1	N.a.	2910	Page: 11
WB53B (Square)	3R-200.6J-1	595	3R-200.6J-1	415	2913	Page: 14
WB53B (U-shape)	3R-200.6J-1	595	3R-200.6J-1	N.a.	2914	Page: 15

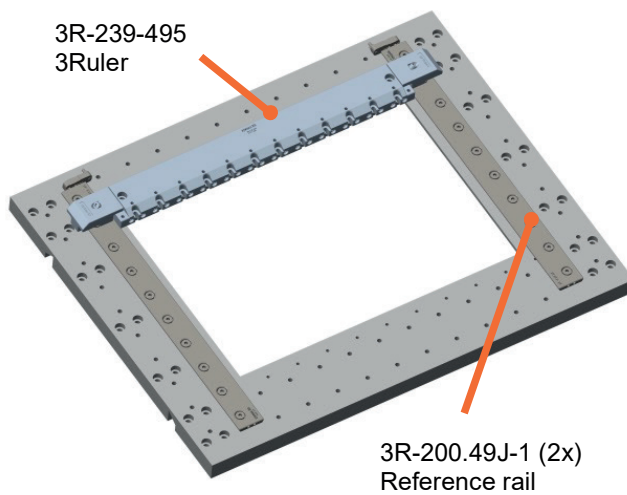
# System 3R

## MIC – Machine Interface Configuration

July 10, 2019

Subject to modifications  
MIC-2915

### Makino – DUO43



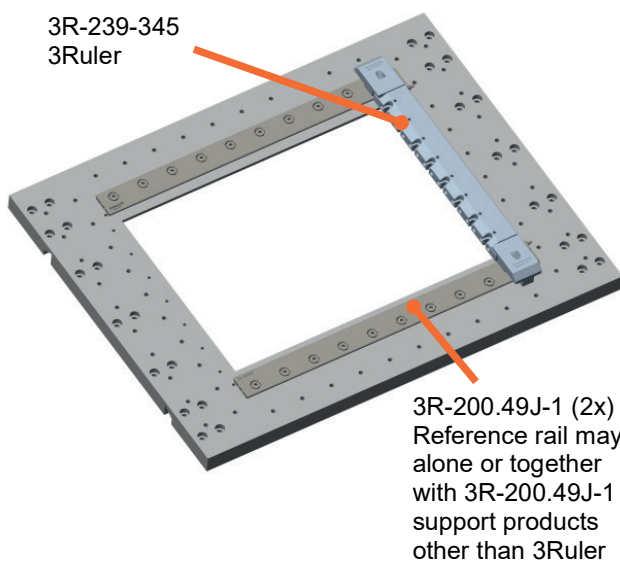
Machine table without tooling

Working area:  
X: 450 mm  
Y: 300 mm

#### Horizontal configuration

This configuration display one 3Ruler, but two cross bars may be used.

Working area:  
X: 450 mm  
Y: 300 mm



#### Vertical configuration

This configuration display one 3Ruler, but two cross bars may be used.

Working area:  
X: 427 mm  
Y: 300 mm

See also TPS-sheet "3R-239-xxx" covering 3Ruler and recommended accessories.

Note: The reference rail also enables the use of other products like: 3R-218-S, 3R-243.2-1 or 3R-272HP.

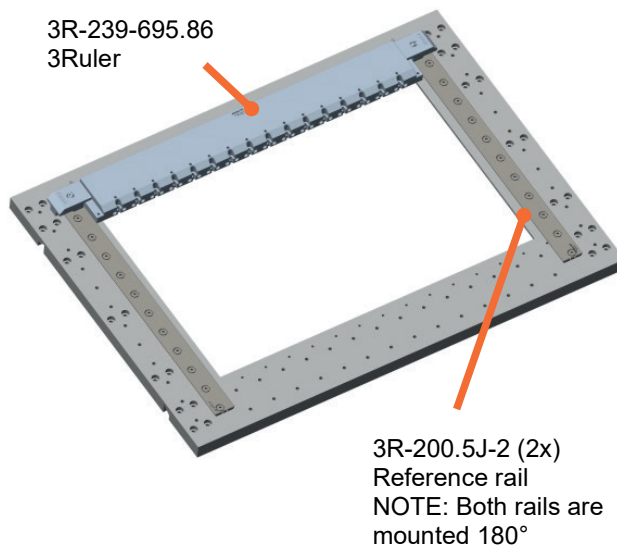
# System 3R

## MIC – Machine Interface Configuration

July 10, 2019

Subject to modifications  
MIC-2916

### Makino – DUO64



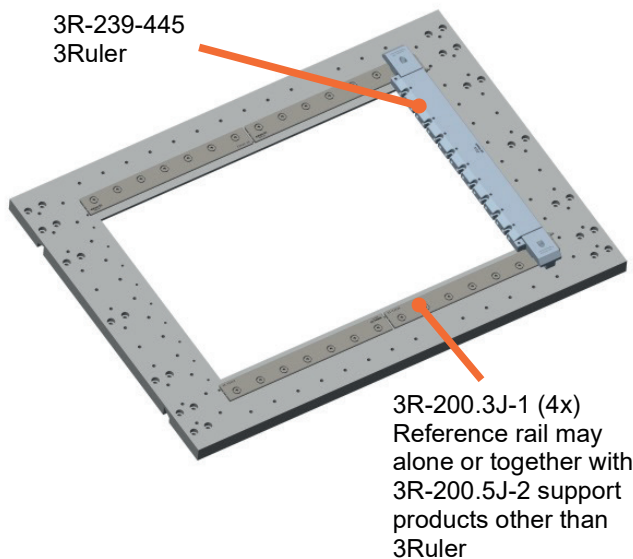
Machine table without tooling

Working area:  
X: 650 mm  
Y: 400 mm

#### Horizontal configuration

This configuration display one 3Ruler, but two cross bars may be used.

Working area:  
X: 650 mm  
Y: 399 mm



#### Vertical configuration

This configuration display one 3Ruler, but two cross bars may be used.

Working area:  
X: 612 mm  
Y: 400 mm

See also TPS-sheet "3R-239-xxx" covering 3Ruler and recommended accessories.

Note: The reference rail also enables the use of other products like: 3R-218-S, 3R-243.2-1 or 3R-272HP.

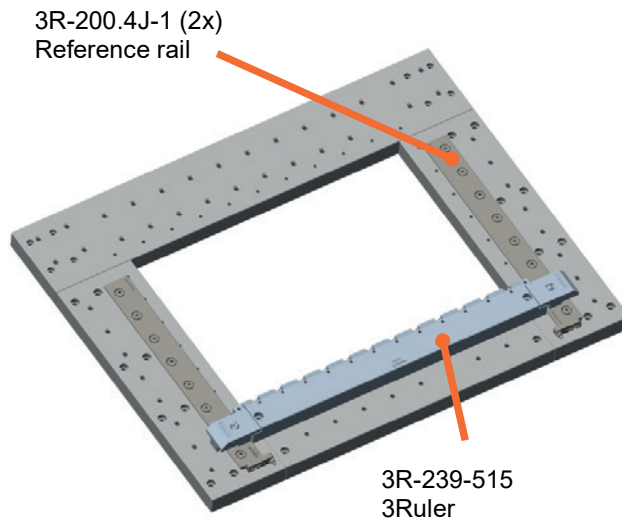
## MIC – Machine Interface Configuration

July 11, 2019

Subject to modifications  
MIC-2917

### Makino – EU43, SP43 (Japan)

Configuration of table is valid year 2005 and later.



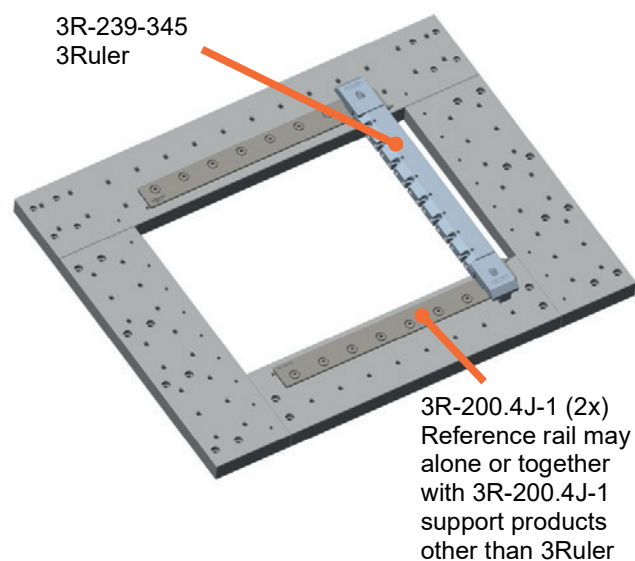
Machine table without tooling

Working area:  
X: 450 mm  
Y: 300 mm

#### Horizontal configuration

This configuration display one 3Ruler,  
but two cross bars may be used.

Working area:  
X: 450 mm  
Y: 300 mm



#### Vertical configuration

This configuration display one 3Ruler,  
but two cross bars may be used.

Working area:  
X: 377 mm  
Y: 300 mm

See also TPS-sheet "3R-239-xxx" covering  
3Ruler and recommended accessories.

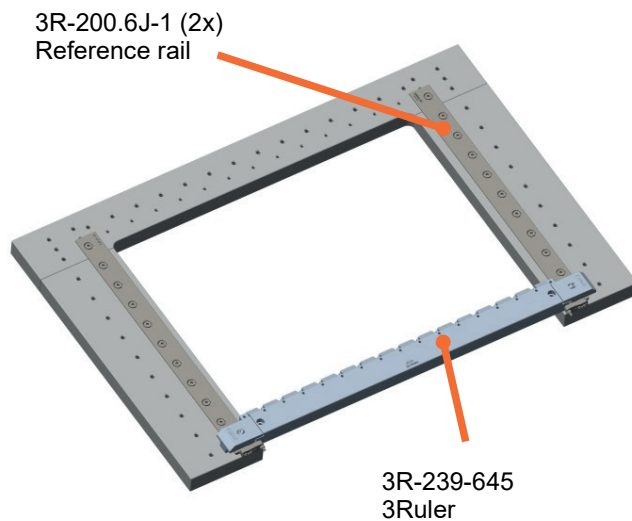
Note: The reference rail also enables the  
use of other products like: 3R-218-S,  
3R-243.2-1 or 3R-272HP.

## MIC – Machine Interface Configuration

July 11, 2019

Subject to modifications  
MIC-2919

### Makino – EU64



Machine table without tooling

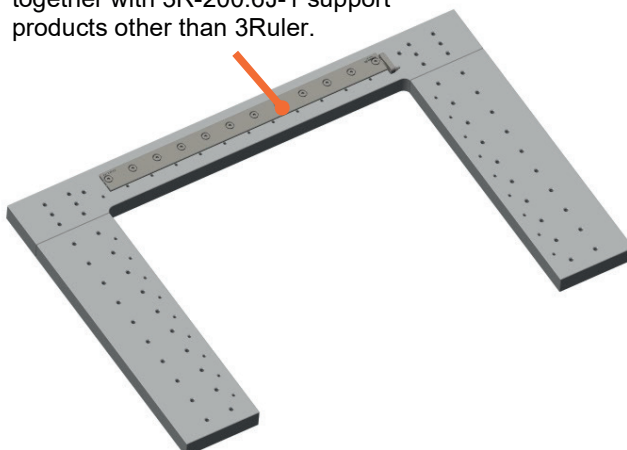
Working area:  
X: 600 mm  
Y: 400 mm

#### Horizontal configuration

This configuration display one 3Ruler, but two cross bars may be used.

Working area:  
X: 600 mm  
Y: 400 mm

3R-200.5J-2 (1x)  
NOTE: The rail is mounted 180°.  
Reference rail may alone or together with 3R-200.6J-1 support products other than 3Ruler.



#### Vertical configuration

This U-shaped machine-table, does not support 3Ruler.

Working area:  
X: 600 mm  
Y: 400 mm

See also TPS-sheet "3R-239-xxx" covering 3Ruler and recommended accessories.

Note: The reference rail also enables the use of other products like: 3R-218-S, 3R-243.2-1 or 3R-272HP.

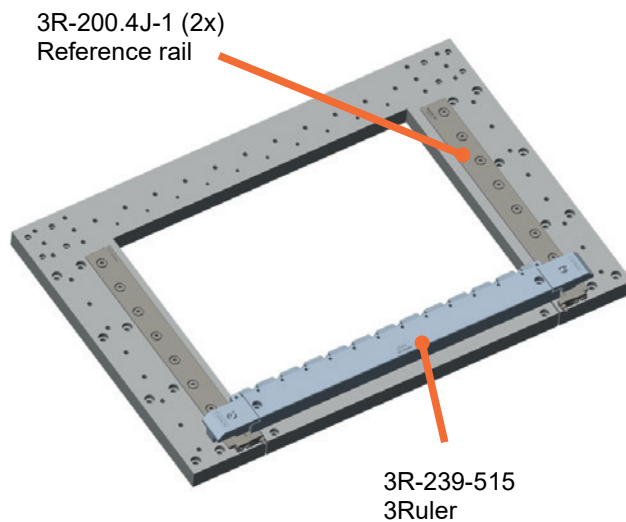
## MIC – Machine Interface Configuration

July 11, 2019

Subject to modifications  
MIC-2920

### Makino – SP43 (USA)

Configuration of table is valid year 2005 and later.



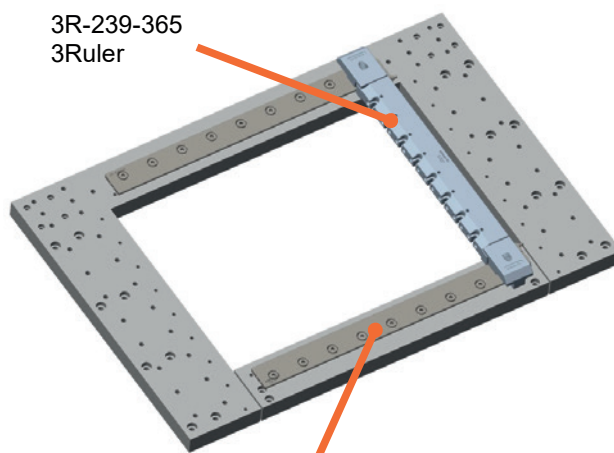
Machine table without tooling

Working area:  
X: 450 mm  
Y: 300 mm

#### Horizontal configuration

This configuration display one 3Ruler, but two cross bars may be used.

Working area:  
X: 450 mm  
Y: 300 mm



NOTE: Both rails are mounted 180°. Reference rail may alone or together with 3R-200.4J-1 support products other than 3Ruler.

#### Vertical configuration

This configuration display one 3Ruler, but two cross bars may be used.

Working area:  
X: 402 mm  
Y: 300 mm

See also TPS-sheet "3R-239-xxx" covering 3Ruler and recommended accessories.

Note: The reference rail also enables the use of other products like: 3R-218-S, 3R-243.2-1 or 3R-272HP.

# System 3R

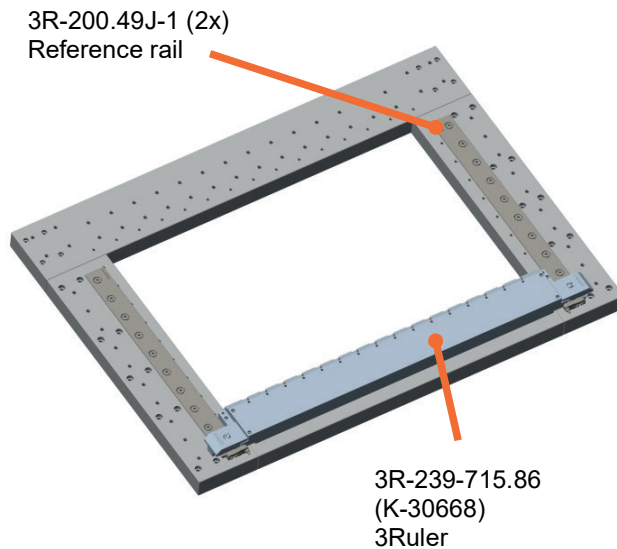
## MIC – Machine Interface Configuration

July 11, 2019

Subject to modifications  
MIC-2918

### Makino – SP64

Configuration of table is valid year 2005 and later.



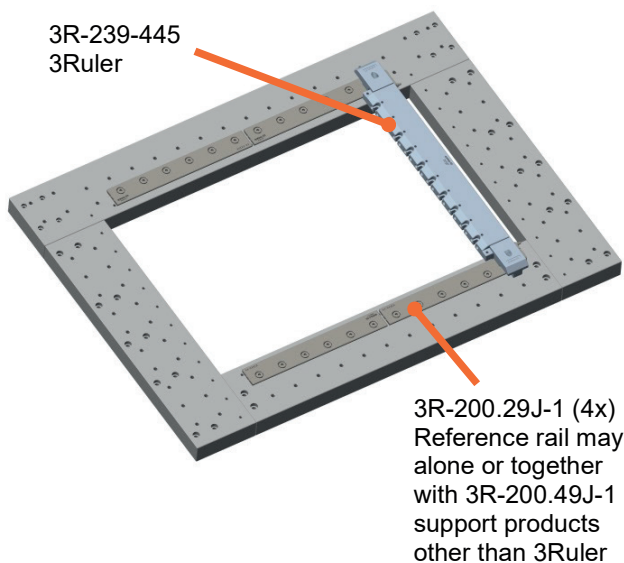
Machine table without tooling

Working area:  
X: 650 mm  
Y: 400 mm

#### Horizontal configuration

This configuration display one 3Ruler,  
but two cross bars may be used.

Working area:  
X: 650 mm  
Y: 400 mm



#### Vertical configuration

This configuration display one 3Ruler,  
but two cross bars may be used.

Working area:  
X: 562 mm  
Y: 400 mm

See also TPS-sheet “3R-239-xxx” covering  
3Ruler and recommended accessories.

Note: The reference rail also enables the  
use of other products like: 3R-218-S,  
3R-243.2-1 or 3R-272HP.

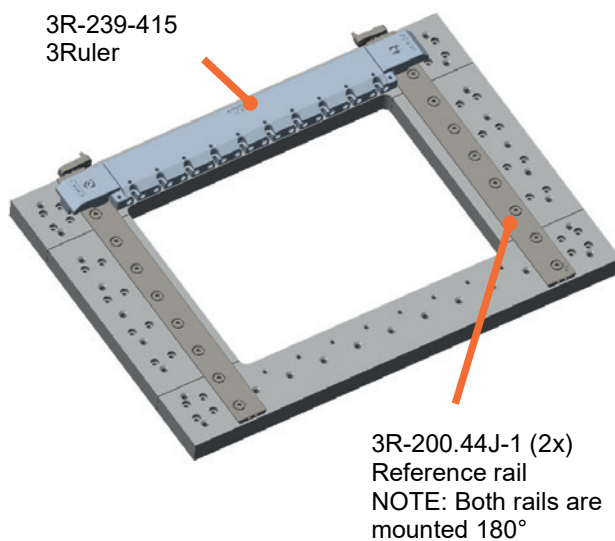


## MIC – Machine Interface Configuration

July 10, 2019

Subject to modifications  
MIC-2909

### Makino – U32, U32i, WB32B (Square)



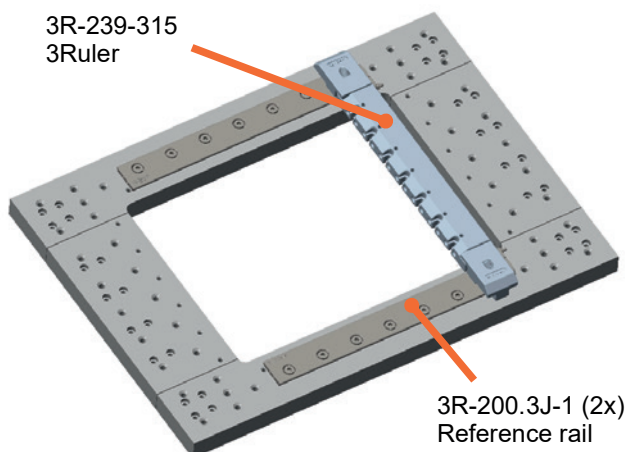
Machine table without tooling

Working area:  
X: 370 mm  
Y: 270 mm

#### Horizontal configuration

This configuration display one 3Ruler, but two cross bars may be used.

Working area:  
X: 370 mm  
Y: 270 mm



#### Vertical configuration

This configuration display one 3Ruler, but two cross bars may be used.

Working area:  
X: 312 mm  
Y: 270 mm

See also TPS-sheet “3R-239-xxx” covering 3Ruler and recommended accessories.

Note: The reference rail also enables the use of other products like: 3R-218-S, 3R-243.2-1 or 3R-272HP.

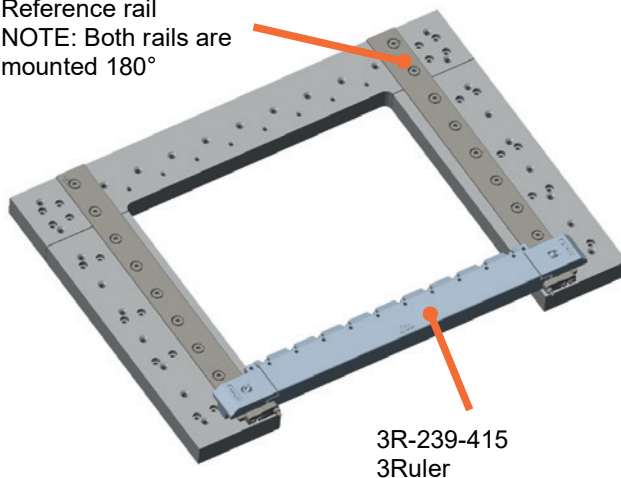
## MIC – Machine Interface Configuration

July 10, 2019

Subject to modifications  
MIC-2910

### Makino – U32, U32i, WB32B (U-shape)

3R-200.44J-1 (2x)  
Reference rail  
NOTE: Both rails are  
mounted 180°



Machine table without tooling

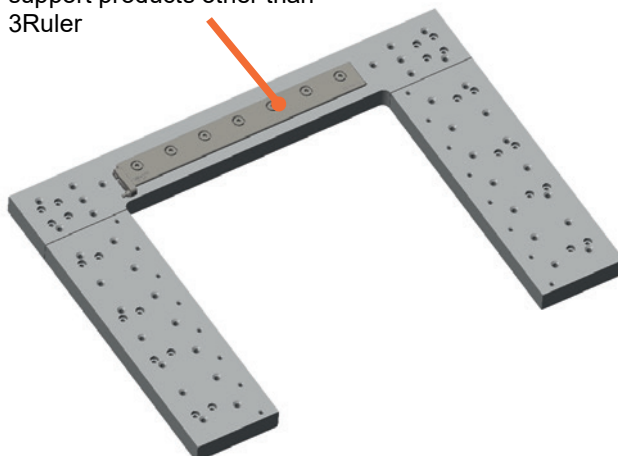
Working area:  
X: 370 mm  
Y: 270 mm

#### Horizontal configuration

This configuration display one 3Ruler, but two cross bars may be used.

Working area:  
X: 370 mm  
Y: 270 mm

3R-200.3J-1 (1x)  
Reference rail may alone or  
together with 3R-200.44J-1  
support products other than  
3Ruler



#### Vertical configuration

This U-shaped machine-table, does not support 3Ruler.

Working area:  
X: 370 mm  
Y: 270 mm

See also TPS-sheet “3R-239-xxx” covering 3Ruler and recommended accessories.

Note: The reference rail also enables the use of other products like: 3R-218-S, 3R-243.2-1 or 3R-272HP.

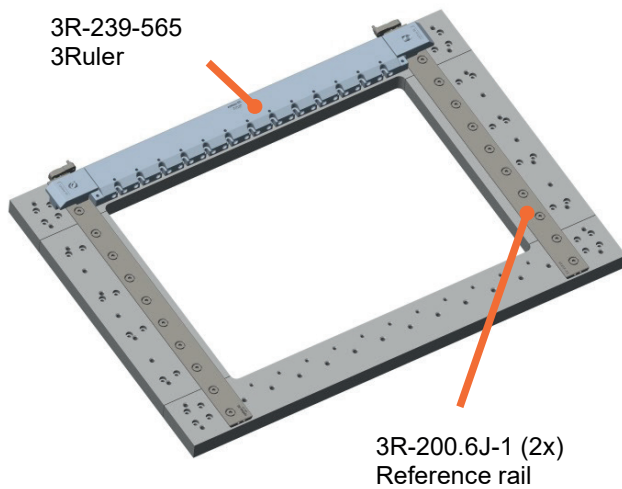
# System 3R

## MIC – Machine Interface Configuration

July 10, 2019

Subject to modifications  
MIC-2911

### Makino – U53, U53i (Square)

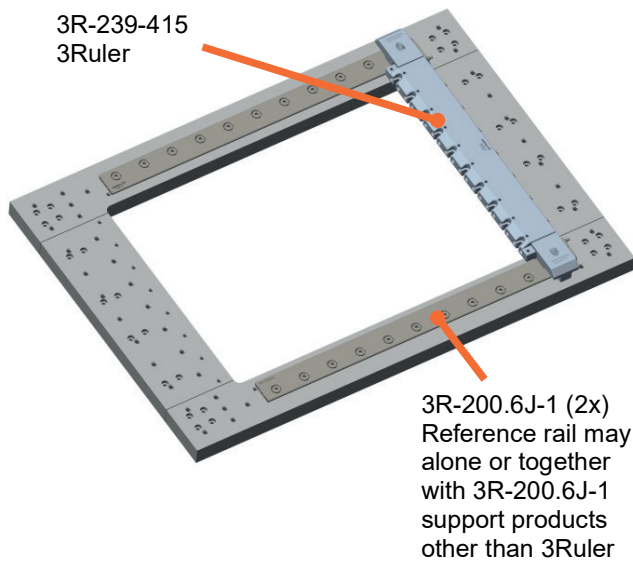


Machine table without tooling  
Working area:  
X: 520 mm  
Y: 370 mm

#### Horizontal configuration

This configuration display one 3Ruler,  
but two cross bars may be used.

Working area:  
X: 520 mm  
Y: 370 mm



#### Vertical configuration

This configuration display one 3Ruler,  
but two cross bars may be used.

Working area:  
X: 497 mm  
Y: 370 mm

See also TPS-sheet "3R-239-xxx" covering  
3Ruler and recommended accessories.

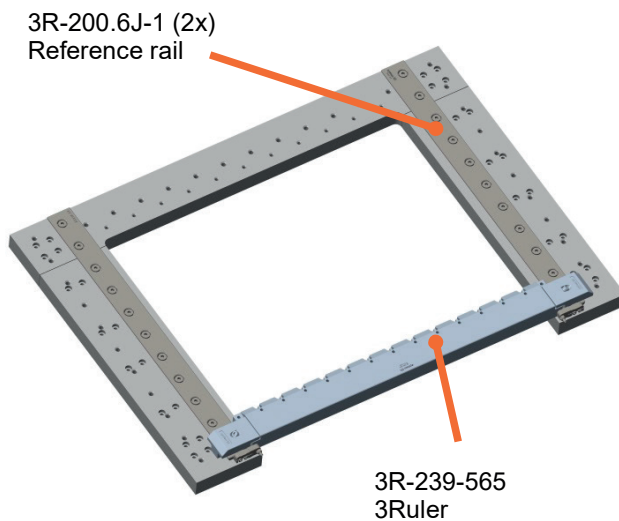
Note: The reference rail also enables the  
use of other products like: 3R-218-S,  
3R-243.2-1 or 3R-272HP.

## MIC – Machine Interface Configuration

July 10, 2019

Subject to modifications  
MIC-2912

### Makino – U53, U53i (U-shape)



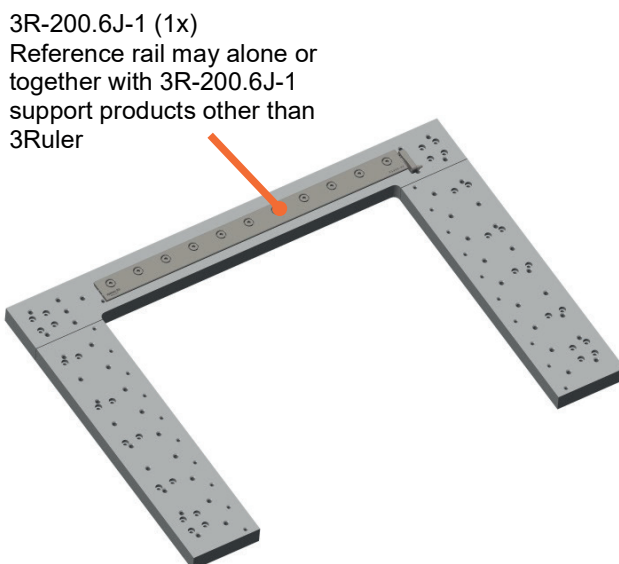
Machine table without tooling

Working area:  
X: 520 mm  
Y: 370 mm

#### Horizontal configuration

This configuration display one 3Ruler, but two cross bars may be used.

Working area:  
X: 520 mm  
Y: 370 mm



#### Vertical configuration

This U-shaped machine-table, does not support 3Ruler.

Working area:  
X: 520 mm  
Y: 370 mm

See also TPS-sheet "3R-239-xxx" covering 3Ruler and recommended accessories.

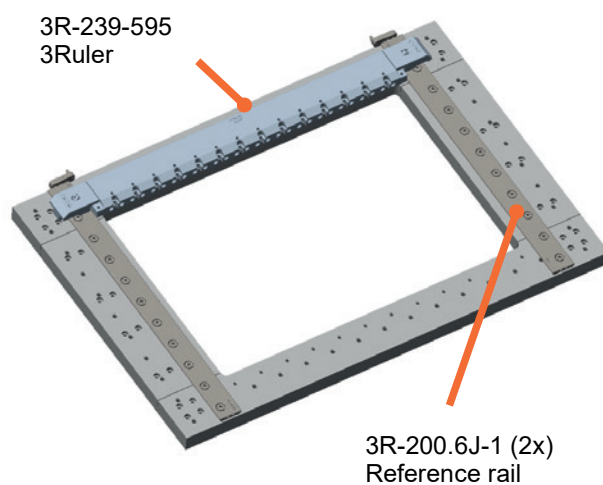
Note: The reference rail also enables the use of other products like: 3R-218-S, 3R-243.2-1 or 3R-272HP.

## MIC – Machine Interface Configuration

July 10, 2019

Subject to modifications  
MIC-2913

### Makino – WB53B (Square)

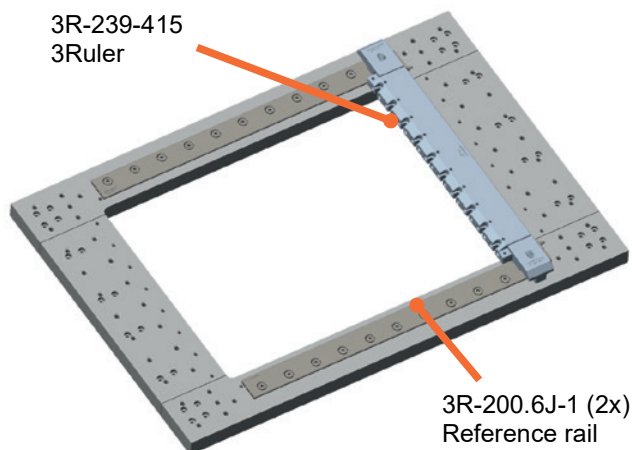


Machine table without tooling  
Working area:  
X: 550 mm  
Y: 370 mm

#### Horizontal configuration

This configuration display one 3Ruler,  
but two cross bars may be used.

Working area:  
X: 550 mm  
Y: 370 mm



#### Vertical configuration

This configuration display one 3Ruler,  
but two cross bars may be used.

Working area:  
X: 487 mm  
Y: 370 mm

See also TPS-sheet "3R-239-xxx" covering  
3Ruler and recommended accessories.

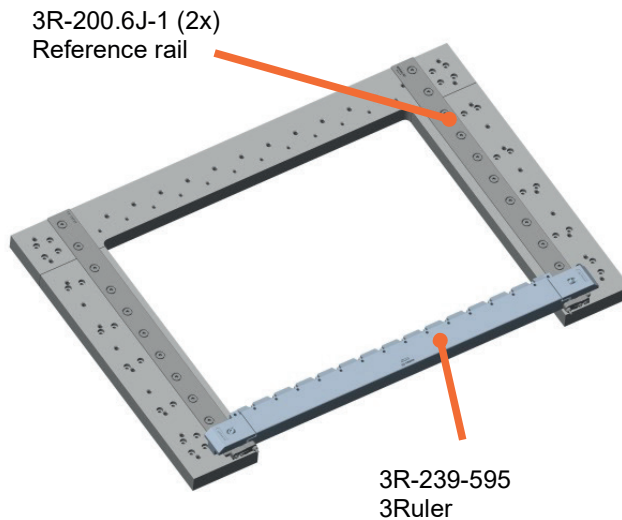
Note: The reference rail also enables the  
use of other products like: 3R-218-S,  
3R-243.2-1 or 3R-272HP.

## MIC – Machine Interface Configuration

July 10, 2019

Subject to modifications  
MIC-2914

### Makino – WB53B (U-shape)

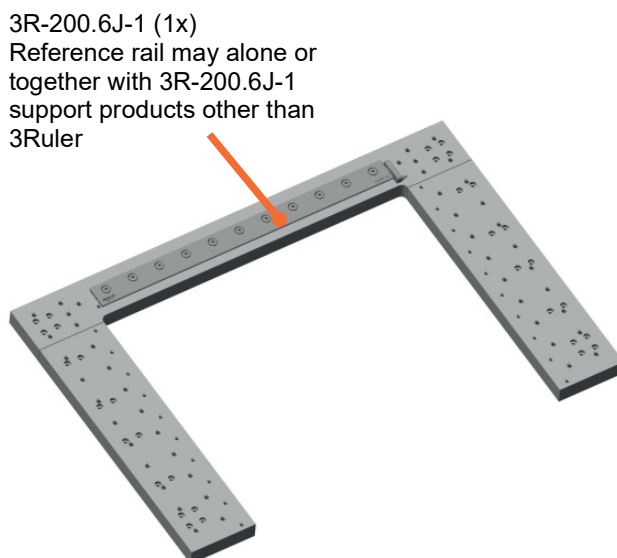


Machine table without tooling  
Working area:  
X: 550 mm  
Y: 370 mm

#### Horizontal configuration

This configuration display one 3Ruler, but two cross bars may be used.

Working area:  
X: 550 mm  
Y: 370 mm



#### Vertical configuration

This U-shaped machine-table, does not support 3Ruler.

Working area:  
X: 550 mm  
Y: 370 mm

See also TPS-sheet “3R-239-xxx” covering 3Ruler and recommended accessories.

Note: The reference rail also enables the use of other products like: 3R-218-S, 3R-243.2-1 or 3R-272HP.

