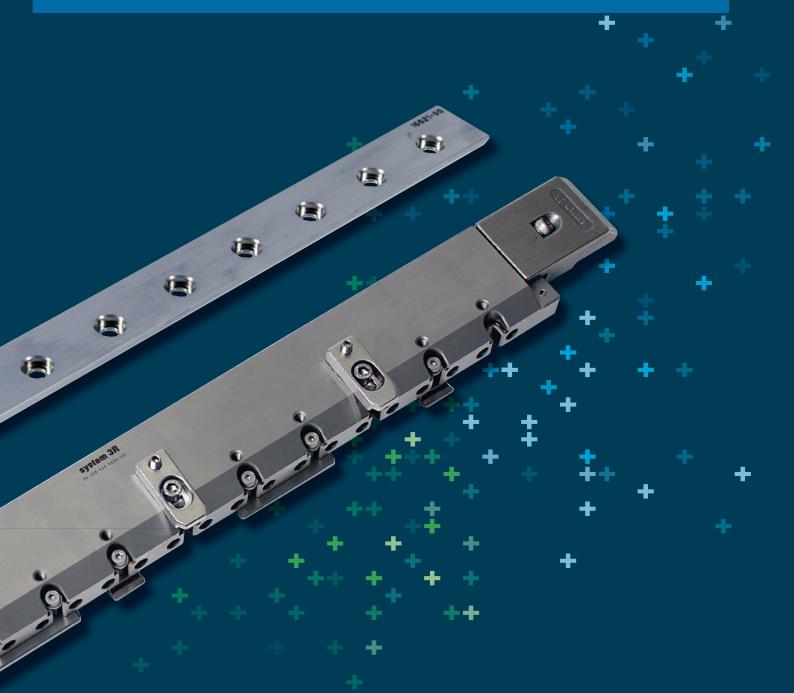


Makino + System 3R tooling

Ledger for Reference elements and 3Rulers



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

IVIANITO	Tooling configur X-axis	Tooling configuration for X-axis		Tooling configuration for Y-axis			.
Model	Ref. element	3R-239-xxx		Ref. element	3R-239-xxx	MIC-xxx	
PX36	3R-200.49J-1	695.86		3R-200.3J-4	525	2854	Page: 3
U3 H.E.A.T. (Square)	3R-200.44J-1	415		3R-200.3J-1	315	2830	Page: 4
U3 (U-shape)	3R-200.44J-1	415		3R-200.3J-1	N.a.	2831	Page: 5
U3i (Square)	3R-200.44J-1	415		3R-200.3J-1	315	2830	Page: 4
U6 H.E.A.T. (Square)	3R-200.6J-1	695.86		3R-200.3J-1	495	2832	Page: 6
U6 (U-shape)	3R-200.6J-1	695.86		3R-200.3J-1	N.a.	2833	Page: 7
U6i (Square)	3R-200.6J-1	695.86		3R-200.3J-1	495	2832	Page: 6
U32j (Square)	3R-200.44J-1	415		3R-200.3J-1	315	2836	Page: 8
U32j (U-shape)	3R-200.44J-1	415		3R-200.3J-1	N.a.	2837	Page: 9
U53j (Square)	3R-200.6J-1	595		3R-200.6J-1	415	2838	Page: 10
U53j (U-shape)	3R-200.6J-1	595		3R-200.6J-1	N.a.	2839	Page: 11
U53Tj (Square)	3R-200.6J-1	595		3R-200.6J-1	415	2838	Page: 10
U53Tj (U-shape)	3R-200.6J-1	595		3R-200.6J-1	N.a.	2839	Page: 11
U86 (L-shape)	3R-200.3J-4	865.86		3R-200.2J-1	N.a.	2840	Page: 12
U1310	3R-200.5J-2	1375***		3R-200.4J-1	N.a.	2842	Page: 13
UP6	3R-200.49J-1	695.86		3R-200.3J-4	525	2854	Page: 14
UP32j (Square)	3R-200.44J-1	415		3R-200.3J-1	315	2836	Page: 8
UP32j (U-shape)	3R-200.44J-1	415		3R-200.3J-1	N.a.	2837	Page: 9
UP53j (Square)	3R-200.6J-1	595		3R-200.6J-1	415	2838	Page: 10
UP53j (U-shape)	3R-200.6J-1	595		3R-200.6J-1	N.a.	2839	Page: 11
UPV-3	3R-200.44J-1	415		3R-200.3J-1	315	2834	Page: 15
UPV-5	3R-200.6J-1	595		3R-200.6J-1	415	2835	Page: 16
W32FB (Square)	3R-200.44J-1	415		3R-200.3J-1	315	2836	Page: 8
W32FB (U-shape)	3R-200.44J-1	415		3R-200.3J-1	N.a.	2837	Page: 9
W53FB (Square)	3R-200.6J-1	595		3R-200.6J-1	415	2838	Page: 10
W53FB (U-shape)	3R-200.6J-1	595		3R-200.6J-1	N.a.	2839	Page: 11

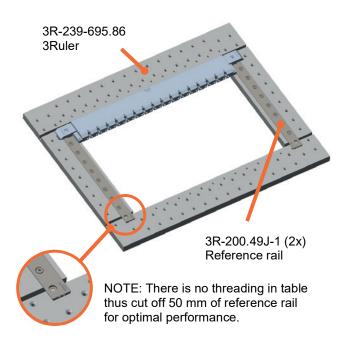
^{*** 3}Ruler is supplied by article no.: D-30227



November 15, 2018

Subject to modifications MIC-2854

Makino - PX36, UP6



Machine table without tooling Working area:

X: 650 mm

Y: 470 mm

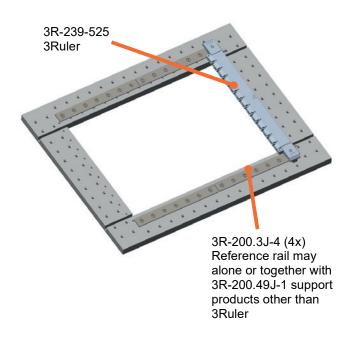
Horizontal configuration

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

Working area:

X: 650 mm

Y: 371 mm



Vertical configuration

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

Working area:

X: 612 mm

Y: 470 mm

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

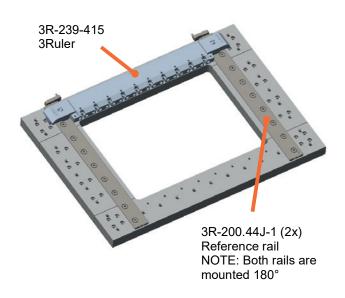


MIC - Machine Interface Configuration

June 2, 2021

Subject to modifications MIC-2830

Makino – U3i, U3 H.E.A.T (Square)



Machine table without tooling Working area:

X: 370 mm

Y: 270 mm

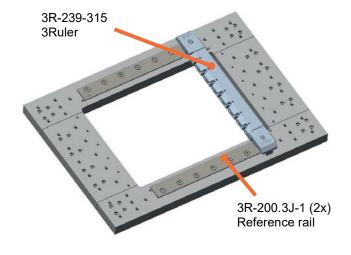
Horizontal configuration

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

Working area:

X: 370 mm

Y: 270 mm



<u>Vertical configuration</u> 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.

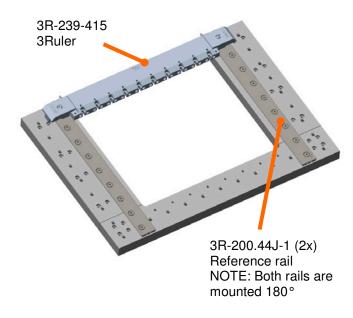


MIC - Machine Interface Configuration

November 11, 2018

Subject to modifications MIC-2831

Makino – U3 (U-shape)



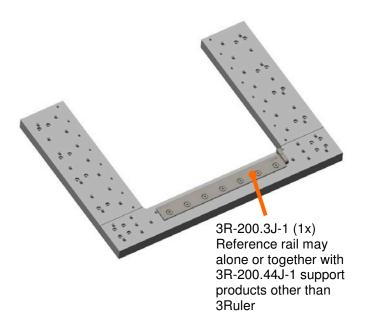
Machine table without tooling Working area:

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

Working area:

X: 370 mm Y: 270 mm

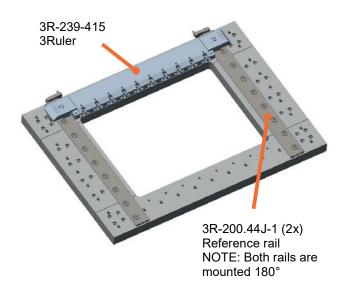
See also TPS-sheet "3R-239-xxx" covering 3Ruler and recommended accessories.



June 2, 2021

Subject to modifications MIC-2830

Makino - U3i, U3 H.E.A.T (Square)



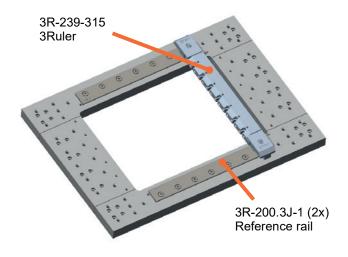
Machine table without tooling Working area:

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



<u>Vertical configuration</u>
This configuration display one 3Ruler, but two cross bars may be used.

Working area:

X: 312 mm Y: 270 mm

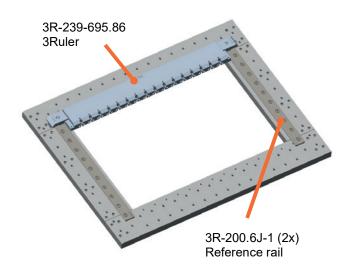
See also TPS-sheet "3R-239-xxx" covering 3Ruler and recommended accessories.



June 2, 2021

Subject to modifications MIC-2832

Makino – U6i, U6 H.E.A.T (Square)



Machine table without tooling Working area:

X: 650 mm

Y: 450 mm

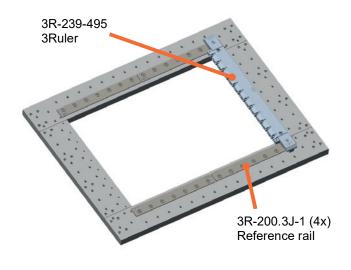
Horizontal configuration

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

Working area:

X: 650 mm

Y: 411 mm



Vertical configuration

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

Working area:

X: 612 mm

Y: 450 mm

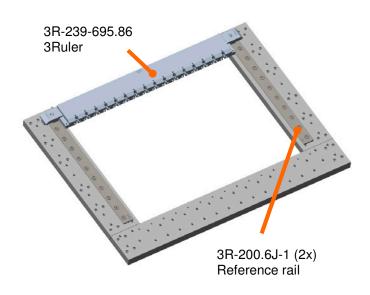
See also TPS-sheet "3R-239-xxx" covering 3Ruler and recommended accessories.



November 11, 2018 Subject to modifications

MIC-2833

Makino – U6 (U-shape)



Machine table without tooling Working area: X: 650 mm

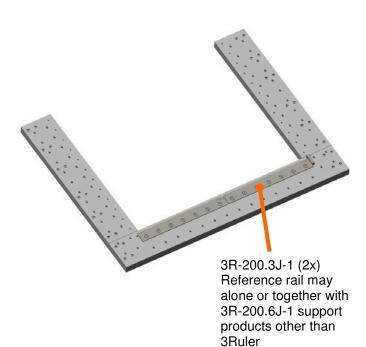
Y: 450 mm

Horizontal configuration

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

Working area:

X: 650 mm Y: 450 mm



Vertical configuration

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

Working area:

X: 650 mm Y: 450 mm

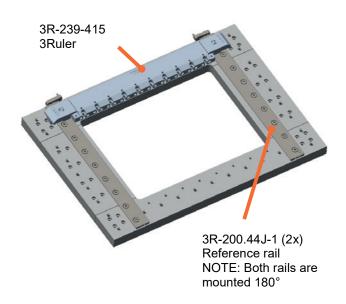
See also TPS-sheet "3R-239-xxx" covering 3Ruler and recommended accessories.



July 10, 2019

Subject to modifications MIC-2836

Makino - U32j, UP32j, W32FB (Square)



Machine table without tooling Working area:

X: 370 mm

Y: 270 mm

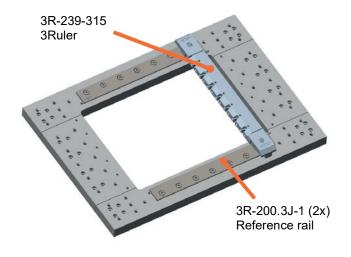
Horizontal configuration

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

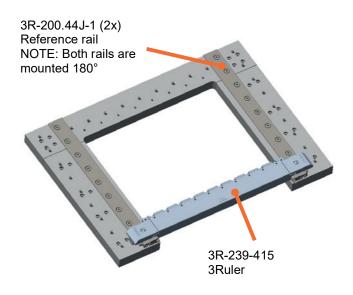
See also TPS-sheet "3R-239-xxx" covering 3Ruler and recommended accessories.



July 10, 2019

Subject to modifications MIC-2837

Makino – U32j, UP32j, W32FB (U-shape)



Machine table without tooling Working area:

X: 370 mm

Y: 270 mm

Horizontal configuration

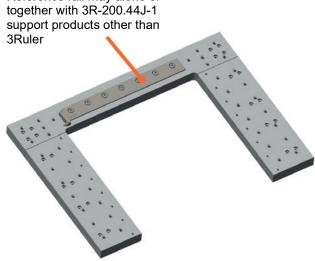
This configuration display one 3Ruler, but two cross bars may be used.

Working area:

X: 370 mm

Y: 270 mm

3R-200.3J-1 (1x) Reference rail may alone or



<u>Vertical configuration</u> This U-shaped machine-table, does not support 3Ruler.

Working area:

X: 370 mm

Y: 270 mm

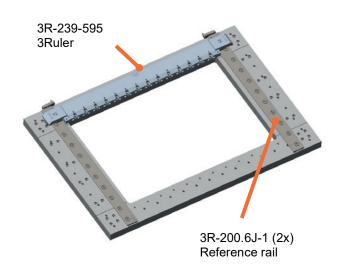
See also TPS-sheet "3R-239-xxx" covering 3Ruler and recommended accessories.



July 10, 2019

Subject to modifications MIC-2838

Makino – U53j, U53Tj, UP53j, W53FB (Square)



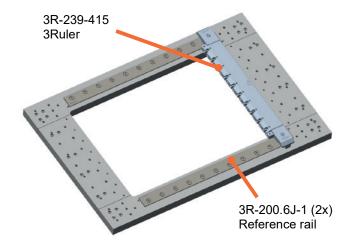
Machine table without tooling Working area:

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

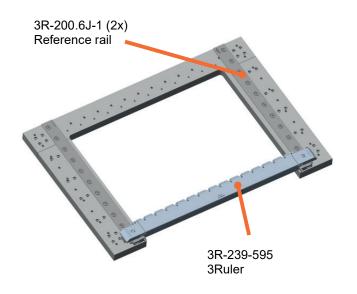
See also TPS-sheet "3R-239-xxx" covering 3Ruler and recommended accessories.



July 10, 2019

Subject to modifications MIC-2839

Makino – U53j, U53Tj, UP53j, W53FB (U-shape)



Machine table without tooling Working area:

X: 550 mm

Y: 370 mm

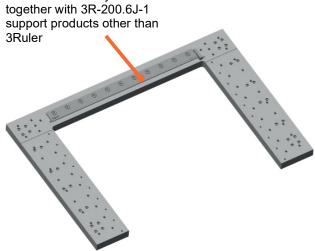
<u>Horizontal configuration</u> This configuration display one 3Ruler, but two cross bars may be used.

Working area:

X: 550 mm

Y: 370 mm

3R-200.6J-1 (1x) Reference rail may alone or together with 3R-200.6J-1 support products other than



Vertical configuration

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

Working area:

X: 550 mm

Y: 370 mm

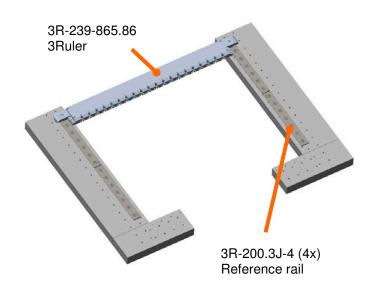
See also TPS-sheet "3R-239-xxx" covering 3Ruler and recommended accessories.



November 12, 2018

Subject to modifications

Makino – U86 (L-shape)



Machine table without tooling Working area:

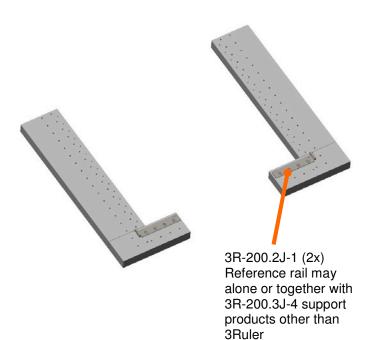
X: 800 mm Y: 600 mm

Horizontal configuration

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

Working area:

X: 800 mm Y: 600 mm



Vertical configuration

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

Working area:

X: 800 mm Y: 600 mm

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

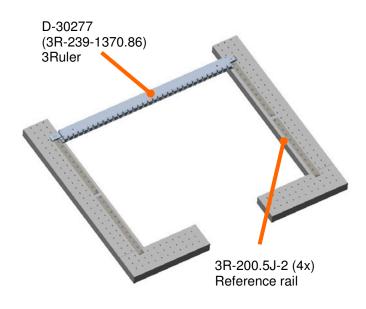


MIC - Machine Interface Configuration

November 12, 2018

Subject to modifications MIC-2842

Makino - U1310 (L-shape)



Machine table without tooling Working area:

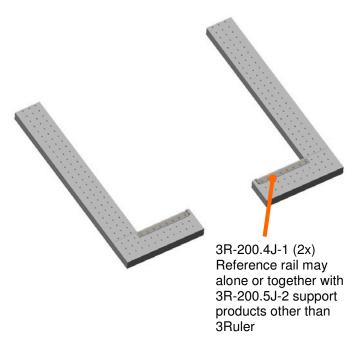
X: 1310 mm Y: 1010 mm

Horizontal configuration

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

Working area:

X: 1310 mm Y: 1010 mm



Vertical configuration

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

Working area:

X: 1310 mm Y: 1010 mm

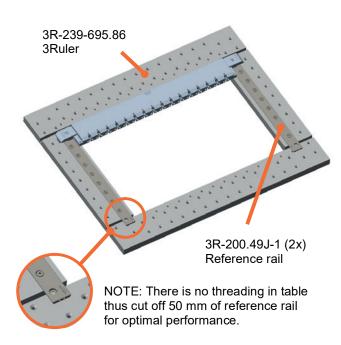
See also TPS-sheet "3R-239-xxx" covering 3Ruler and recommended accessories.



November 15, 2018

Subject to modifications MIC-2854

Makino - PX36, UP6



Machine table without tooling Working area:

X: 650 mm

Y: 470 mm

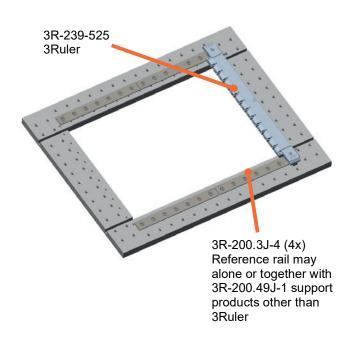
Horizontal configuration

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

Working area:

X: 650 mm

Y: 371 mm



Vertical configuration

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

Working area:

X: 612 mm

Y: 470 mm

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

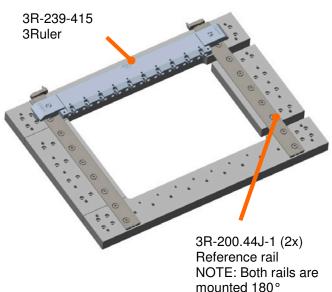


MIC - Machine Interface Configuration

November 12, 2018

Subject to modifications MIC-2834

Makino - UPV-3



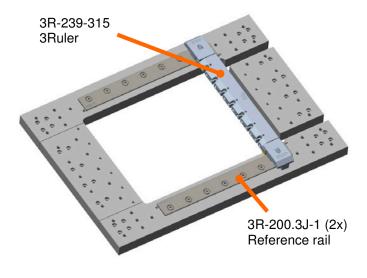
Machine table without tooling Working area:

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



<u>Vertical configuration</u>
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.

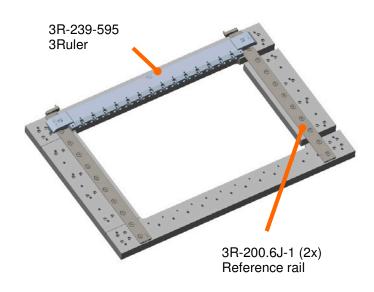


MIC - Machine Interface Configuration

November 12, 2018

Subject to modifications MIC-2835

Makino - UPV-5



Machine table without tooling

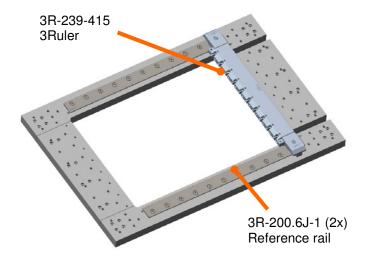
Working area: X: 550 mm Y: 370 mm

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.



