

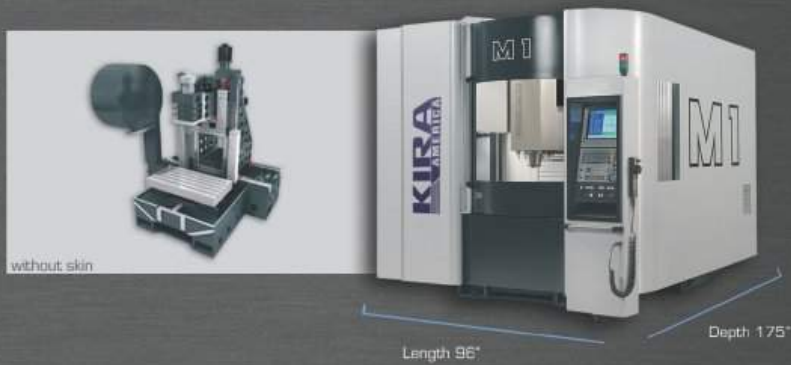
## Innovative Performance

The Kira Heavy-Duty Series is built for speed, precision milling, heavy cutting and superior accuracy



### Kira KM1

1000mm X Travel  
600mm Y Travel  
640mm Z Travel



### Kira KM4

1650mm X Travel  
600mm Y Travel  
640mm Z Travel



### Kira KM5

2200mm X Travel  
600mm Y Travel  
640mm Z Travel



## Kira Heavy-Duty Series

### Applications:

- | Production Machining
- | Molds
- | Long Work Pieces

[www.KiraAmerica.com](http://www.KiraAmerica.com)

## Cutting Capabilities

The Kira Heavy-Duty Series is designed to mill, drill and tap at amazing rates.



### Milling



**1000 cm<sup>3</sup>/min**

Maxmilling removal on C45 Steel  
(Ø 52mm - 5 inserts)

### Drilling



**50 mm**

Max Drilling Capacity on C45 Steel

### Tapping



**M36**

Maxmilling removal on C45 Steel

## Feed Rate

High-speed servo motors provide elevated feed rates on the X, Y and Z axes, while the implementation of roller-pads are used to ensure the stability of extremely heavy loads.

**60 m/min**

X Axis rapid feedrate

**60 m/min**

Y Axis rapid feedrate

**60 m/min**

Z Axis rapid feedrate

**10,000 Nm**

X Axis

**5.8 ms<sup>2</sup>** (0.59 G)

Maximum Acceleration X Axis

**7.5 ms<sup>2</sup>** (0.77 G)

Maximum Acceleration Y Axis

**5.5 ms<sup>2</sup>** (0.56 G)

Maximum Acceleration Z Axis

**3 ms<sup>2</sup>** (0.35 G)

Maximum Acceleration X Axis

## Speed, Power and Capacity

The Kira Heavy-Duty Series is built to operate with world-class speed and power, with the ability to work with extreme load capacities



### Spindle Speed



# 12,000 rpm

Max Electro-spindle Speed

# 35/22.5 kW

Electro-spindle power 30min/continuous

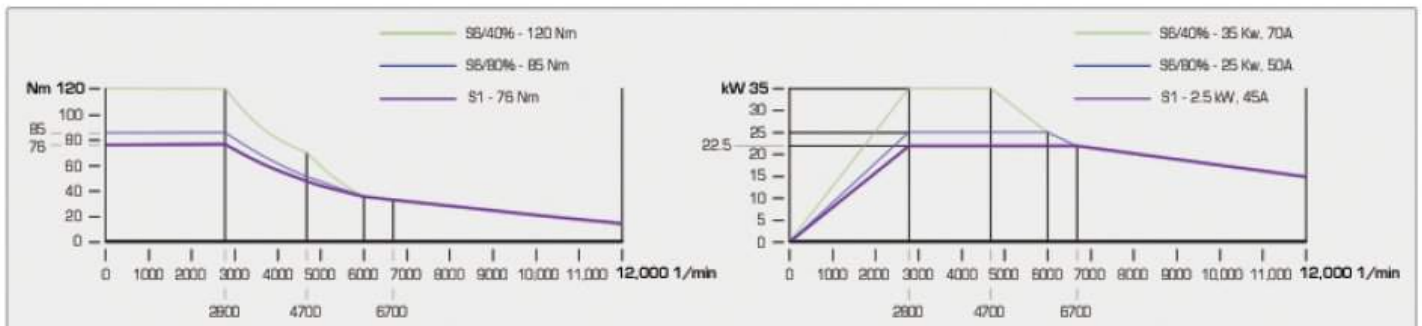
# 1.20 sec

Acceleration time 0 - 12,000 rpm

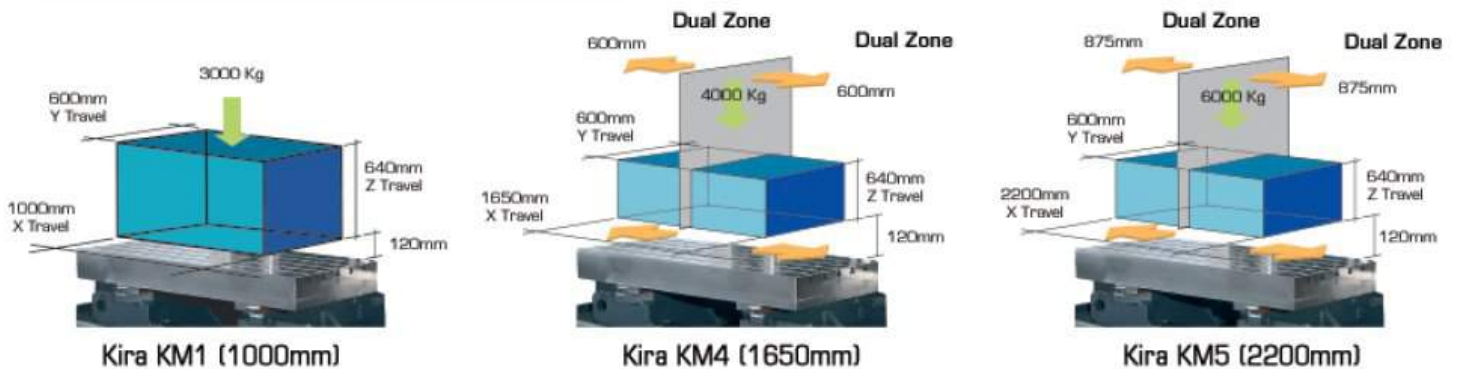
# 0.98 sec

Deceleration time 12,000 - 0 rpm

### Spindle Power



### Working Capacity



## Kira Heavy-Duty Series

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## Technical Specifications

The Kira Heavy-Duty Series is built for speed, precision milling, heavy cutting and superior accuracy



Value of positioning accuracy and repeatability is based on Kira Standard  
Machine shape and specifications subject to change without prior notice for future improvement

		KM1	KM4	KM5
Travels	X Axis	1.000 mm	1.650 mm	2.200 mm
	Y Axis	600 mm	600 mm	600 mm
	Z Axis	640 mm	640 mm	640 mm
Table	Max working surface	1200 x 600 mm	1800 x 600 mm	2400 x 600 mm
	Max loading capacity	3000 Kg	4000 Kg	4000 Kg
	T-slot (number-width-step)	5 x 18 x 100 mm	5 x 18 x 100 mm	5 x 18 x 100 mm
	Working surfaces - Pendular configuration	-	600 x 600 mm	600 x 875 mm
Electro-spindle	Max electro-spindle speed (option)	12.000 rpm (18000-24000)	12.000 rpm (18000-24000)	12.000 rpm (18000-24000)
	Max electro-spindle power S6	35 kW	35 kW	35 kW
	Max electro-spindle torque	120 Nm	120 Nm	120 Nm
	Taper (option)	ISO 40 Din 69871 (HSK-63-A)	ISO 40 Din 69871 (HSK-63-A)	ISO 40 Din 69871 (HSK-63-A)
	Pull-studs	ISO 7388/2 TIPO B	ISO 7388/2 TIPO B	ISO 7388/2 TIPO B
Axes characteristics	Rapid-feed speed (X-Y-Z)	60 m/min	60 m/min	60 m/min
	Feed-working speed (X-Y-Z)	60 m/min	60 m/min	60 m/min
	Measuring system (option)	Encoder (Optical scales)	Encoder (Optical scales)	--
	Measuring system X axis	-	--	Optical scales
	Measuring system Y-Z axis	-	--	Encoder
	X axis motor	30 Nm	30 Nm	Linear 10000 Nm
	Y - Z axis motor	22 - 22 Nm	22 - 22 Nm	22 - 22 Nm
Precision	Positioning precision	± 5 µm	± 5 µm	± 5 µm
	Positioning precision X-Y-Z axes	± 1.8 µm	± 1.8 µm	± 1.5 µm
	Inversion precision	3 µm	3 µm	3 µm
Tool changer	Tool storage capacity (option)	30 posti	30 posti (+30)	30 posti (+30 opz.)
	Max tool diameter (without adjacent tool)	80 mm (150)	80 mm (150)	80 mm (150)
	Max tool length	300 mm	300 mm	300 mm
	Max tool weight	8 Kg	8 Kg	8 Kg
	Tool selection method	random	random	random
	Tool changing time (tool to tool) / (chip to chip)	1,6 / 3,6 sec	1,6 / 3,6 sec	1,6 / 3,2 sec
Tank capacity	Cooling tank	450 Lt	500 Lt	500 Lt
	Chip conveyor	Scraping	Scraping	Scraping
General information	Height - Width - Length	2760 x 2440 x 4445 mm	2760 x 5225 x 3400 mm	2760 x 5225 x 3400 mm
	Total power installed	46 kW	46 kW	75 kW
	Weight	10.000 Kg	14.500 Kg	15.000 Kg

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