RASOR
Fine Plasma
Cutting Technology

RASOR Cutting Machine Specifications

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	Model KCR 12612	Model KCR 12620	Model KCR 12820
Design	Open Bridge	Open Bridge	Open Bridge
Machine Weight	10,000 lbs. (4,536 kgs)	14,500 lbs. (6,577 kgs)	16,500 lbs. (7,484 kgs)
Drive System	All Models Feature Dual Side Rack and Pinion		
Cutting Area	72" x 144" (1,829 mm x 3,658 mm)	72" x 240" (1,829 mm x 6,096 mm)	96" x 240" (2,438mm x 6,096mm)
Floor Space Requirements	17' x 25' (5,182 mm x 7,620 mm)	17' x 33' (5,182 mm x 10,058 mm)	19' x 33' (5,791mm x 10,058mm)
Positioning Accuracy	± .004" (0.1 mm)	± .004" (0.1 mm)	± .004" (0.1 mm)
Mild Steel Cutting Capacity 100% duty cycle	.062" (1.6 mm) to 1.00" (25.4 mm)	.062" (1.6 mm) to 1.00" (25.4 mm)	.062" (1.6 mm) to 1.00" (25.4 mm)
Stainless Steel/Aluminum Cutting Capacity 100% duty cycle	.062" (1.6 mm) to .750" (19 mm)	.062" (1.6 mm) to .750" (19 mm)	.062" (1.6 mm) to .750" (19 mm)
Rapid Traverse Speed	1,200 ipm (30 m/min)	1,200 ipm (30 m/min)	1,200 ipm (300 m/min)
Machine (CNC) Power Requirements	120 volt/single phase 50/60 Hz - 2.4 KVA	120 volt/single phase 50/60 Hz - 2.4 KVA	120 volt/single phase 50/60 Hz - 2.4 KVA
Plasma Power Requirements	230 volts/3 phase 50/60 Hz - 22.0 KVA	230 volt/ phase 50/60 Hz - 22.0 KVA	230 volt/ phase 50/60 Hz - 22.0 KVA
Cutting Current	37-120 Amps	37-120 Amps	37-120 Amps
Minimum Kerf Width	.06" (1.5 mm)	.06" (1.5 mm)	.06" (1.5 mm)
Torch Height Control	All Models Feature KCT control with set-up probe and Hemispherical Collision Detection		

*40 Amp systems available *Other table sizes available

KOMATSU
CUTTING TECHNOLOGIES

265 Ballardvale Street
Wilmington, MA 01887
800-70-RASOR
Fax: 978-658-1655
www.fineplasma.com

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CUTTING TECHNOLOGIES

SLERT008 Rev. 1.0 10/99 Printed in U.S.A

RASOR™ RASOR Cutting Technology for Cost-Effective Production of Accurate High Quality Parts

Reliability • Efficiency • Value

Fine Plasma Power Unit

The Komatsu transistor inverter power unit with programmable controller provides stable and continuous duty D.C. output featuring:

- Variable pilot current control
- Cooling system on demand (operates only when needed)
- Wide amperage range for greater flexibility
- Argon marking capability

Patented Fine Plasma Torch

The Fine Plasma torch construction utilizes a magnetic field to create a plasma arc column with high stability, high energy and high density. Patented plasma chamber geometry and swirling assist gas technology provide high cutting speeds and minimum bevel angle.

Cutting Edge Machine Structure

- Rigid machine frame
- Dual side rack and pinion drive system with THK® linear motion guides
- Brushless AC servo drive motors
- Zoned fume collection system
- Traverse speed of 1200 inch/min
- Small part retrieval drawers

Height Control

The Komatsu torch technology utilizes a set-up probe that establishes precise repeatable pierce height, which helps to ensure consistency of consumable life.
Cutting height is monitored through automatic voltage control, which maintains standoff with irregularities in sheet metal and plate cutting. The torch and height control system is protected by a Hemispherical Collision Detection system that stops machine motion automatically.

State-Of-The-Art Control System

- Reliable Windows NT® based control allows data networking
- Icon-based graphical interface
- Parameter storage for various kinds of cutting conditions
- On-line help message file
- Color touch screen
- NC data editing function
- Remote pendant controller

Tested and Verified Machine Accuracy

RASOR systems are built to meet stringent standards at our manufacturing facility in Wilmington, MA. Each system completes a thorough operational test using a laser interferometer. A certificate of accuracy is provided with each system.

Service and Support

RASOR Systems are fully supported by Komatsu's service network. Operator training and technical support are provided by factory trained field service engineers. Komatsu provides toll free telephone support from our corporate offices as well as regional service offices to support all your requirements after the sale.

Part Edge Quality

The RASOR System provides patented Fine Plasma torch technology to produce precision parts with:

- Close tolerances
- Narrow kerf width and square edges
- Sharp clean cut edges with superior finishes
- High production rates
- Low operating costs

Wide Application

RASOR Fine Plasma Cutting Systems provide superior edge finish, accuracy and cutting speeds that make it the ideal choice for the vast majority of metal cutting applications. If you cut metal parts, you owe it to yourself to investigate how RASOR Fine Plasma Systems meet the widest range of application needs.

RASOR FINE PLASMA CUTTING SPEEDS

Material		Inches Per Minute
Mild Steel	11 ga.	300
	7 ga.	200
	1/4"	170
	3/8"	140
	1/2"	100
	5/8"	80
	3/4"	60
	1"	25
Stainless	1/8"	100
	3/16"	80
	1/4"	70
	3/8"	45
	1/2"	40
	5/8"	40
	3/4"	30
Aluminum	1/8"	150
	3/16"	120
	1/4"	100
	3/8"	60
	1/2"	50
	5/8"	40
	3/4"	30