

**RASOR Cutting Machine
Specifications**

	Model KCR 0451	Model KCR 1251
Construction	Welded Box Beam	Welded Box Beam
Design	Open Bridge	Open Bridge
Machine Weight	7,000 lbs. (3,175 kgs)	7,000 lbs. (3,175 kgs)
Drive System	All Models Feature Dual Side Rack and Pinion	
Cutting Area	60" x 120" (1,524 mm x 3,048 mm)	60" x 120" (1,524mm x 3,048mm)
Floor Space Requirements	16' x 27' (4,877 mm x 8,230 mm)	16' x 27' (4,877mm x 8,230mm)
Position Accuracy	± .004" (0.1 mm)	± .004" (0.1 mm)
Mild Steel Cutting Capacity 100% duty cycle	.025" (0.6 mm) to .250" (6.4 mm)	.062" (1.5 mm) to .750" (19.0 mm)
30% duty cycle	up to .375" (9.5 mm)	up to 1.00" (25.4 mm)
Rapid Traverse Speed	1,000 ipm	1,000 ipm
Machine (CNC) Power Requirements	120 volt/single phase 50/60 Hz - 2.4 KVA	120 volt/single phase 50/60 Hz - 2.4 KVA
Plasma Power Requirements	208/230 volt/3 phase 50/60 Hz - 8.5 KVA	208/230 volt/3 phase 50/60 Hz - 22.0 KVA
Cutting Current	12-40 Amps	37-120 Amps
Minimum Kerf Width	.03" (0.8 mm)	.06" (1.5 mm)
Torch Height Control	All Models Feature KCT control with set-up probe and Hemispherical Collision Detection	

*Other table sizes available



KOMATSU
Komatsu America Industries LLC
92 Cummings Park
Woburn MA 01801
800-70-RASOR
Fax: 781-782-0506
www.fineplasma.com

KOMATSU

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.



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.

Cutting Edge Machine Structure

- ▶ Welded box beam construction
- ▶ Heavy duty center drive, with dual side rack and pinion
- ▶ Traverse speed of 1000 inch/min
- ▶ Small part retrieval drawers
- ▶ Unitized machine construction for easy installation



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.

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



Tested and Verified Machine Accuracy

RASOR systems are built to meet stringent standards at our manufacturing facility. 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.



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
30% duty cycle	1"	25
Stainless	1/8"	100
	3/16"	80
	1/4"	70
	3/8"	45
	1/2"	40
	5/8"	40
Aluminum	3/4"	30
	1/8"	150
	3/16"	120
	1/4"	100
	3/8"	60
	1/2"	50
	5/8"	40
	3/4"	30