

CANRACK

METAL CENTER SYSTEMS

ACCU-CUT SHEAR FEED TABLES



A quality product must start at the shear

High productivity plus consistent accuracy is the goal of every shearing operation. However, the constant involvement of the operator, both physically and mentally, effectively eliminates the possibility of simultaneously achieving speed with consistent accuracy when using the older back and front gauging systems.

The Canrack Accu-Cut Feed Table is an outstanding example of how state-of-the-art engineering can dramatically increase the productivity of an existing shear, and at the same time cut consistently accurate blanks. The feed table inherently lends itself to handling methods whereby the loading crew can be reduced to one operator with no special skills. The responsibility for productivity plus accuracy has been transferred from the person to the machine.

Consistently accurate blanks

The measurement baseline is automatically standardized whenever a new program is started, a drive fault detected, or on demand. Thereafter, the sheet is positioned to within 0.002" (0.1mm) of each length demanded.

Programs

Canrack programming is remarkably simple and yet includes more program versatility than any other available. Entry is fully supervised to guarantee a runnable program, and includes such niceties as automatic calculation of the maximum number of a specific blank width available from the sheet, and display of uncut length available. Even dead-time may be entered between moves if desirable for sorting. Each sheet loading position is automatically calculated to ensure least wasted travel while retaining sufficient leeway for sheet manipulation. A scrap door interface command can open and close the scrap door automatically on a shear conveyor to separate trims and programmed scrap cuts.

Versatility

The operator's obligation is limited to clamping the material and pushing the GO button. From that point, the sheet is accurately positioned and sheared as directed by the program. The program could for instance, include cutting a series of different blank widths - an impractical job using the older back-gauging technique. This feature plus the ability to cycle several previous instructions, opens the door to separation of pre-punched blanks. The overall cost reduction created by this procedure alone, has frequently justified installation of a shear feed table.

Canrack Storage Systems Inc.
5048 Dundas St West, Toronto, ON M9A 1B9
Tel: (905) 564-6250
E-mail: info@canrack.com Website: www.canrack.com

Specifications

Program travel distance	Accu-Cut 10 126" (3200mm)	Electric power required	120VAC, 15 Amp. 50-60 HZ
	Accu-Cut 12 146" (3708mm)	Air pressure required	80 PSI at machine inlet
Maximum sheet thickness	1/4" (6mm)	Machine weight	Accu-Cut 10 Approx. 2500lbs. Accu-Cut 12 Approx. 2800lbs.
Maximum sheet weight	560lbs. (255kgs.)	Machine dimensions	Accu-Cut 10 Length 166', width 52" Accu-Cut 12 Length 186', width 52"
Carriage speeds	High 1100"/min. Low 800"/min.	Memory capacity	400 programs standard Expandable to 800 programs
Accuracy	+ or - .005" (.1mm)		

Table Top: Single piece construction fully protects all the precision running gear. Sheet marking is practically eliminated by cushion mounted ball transfers. Friction is reduced to the point that one operator can handle 560 pound sheets on the table.

Carriage: Fabricated from 1" thick aluminum plate with 3/4" steel clamp rail running the full width. Four Thomson linear bearings ensure constant carriage alignment.

Frame: A solid 1/2" steel plate in combination with a heavy-duty steel pan forms a modern box beam to ensure absolute dimensional stability plus strength. Two centerless ground ways are fastidiously aligned, then permanently locked to continuous rail supports to assure accurate tracking.

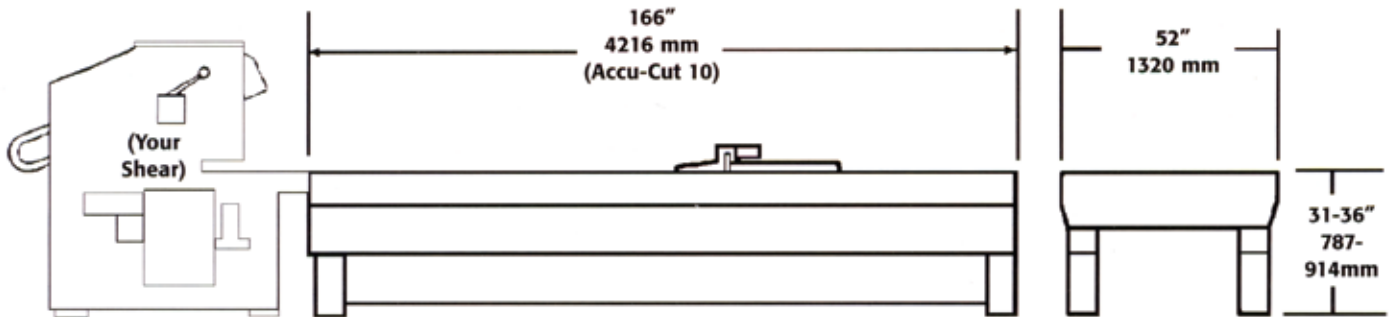
Motor Drive Unit: It contains the motor drive unit, the motor controller board and the power supply. It is mounted under the back end of the feed tables.

Clamps: Three pneumatic self-adjusting work clamps solidly lock the material being cut. Clamping is initiated by one-touch pressure mat. The clamps can be readily moved to any position on the full width clamp rail. An outlet manifold permits installation of one additional clamp for double blank shearing.

Control Center: Contains the control panel and computer. Simple push-button entry permits programs to be entered in either inches or millimeters. Programs may be permanently stored in memory and recalled for review or editing at any time by keying in the desired program number. The Control Center is mounted on the side of the shear that is most convenient to the operator.

Drive Train: A heavy-duty stepping motor drives a precision ball screw through a special coupling. All bearings are permanently lubricated. The carriage is coupled to the ball screw by a pre-loaded ball nut with "0" backlash. The entire drive train is calibrated using precision measuring techniques.

Shear Automation: Maximum productivity plus superior quality and improved safety can be achieved by combining the Accu-Cut feed table with a sheet handler for loading, a scratch-free outfeed belt conveyor and various styles of stackers.



Typical Canrack productivity

Times based on raw 48" x 120" sheets, gauge irrelevant. One operator

Blank size	pcs./sheet	pcs./hour
6" x 2"	66	840
10" x 10"	44	650
20" x 20"	10	310

How does this compare with your present productivity with consistent accuracy?

An actual Canrack comparison

Requirement:

From 50 sheets, 48" x 96" ga. CRS, cut 50 pcs. of each of the following:

45.580" x 36.357"	33.500" x 26.590"
30.840" x 14.840"	26.240" x 10.840"
27.740" x 12.690"	26.240" x 9.340"

Total Production times:

- A) Using backgauge, two-man crew. **6.75 hrs**
- B) Using Canrack Accu-Cut 10 Feed Table, one operator. **3.25 hrs**

Savings:

Machine time: **3.5 hrs**
Labour time: **10.25 hrs**

Details available upon request.