PUBLICATION 749
CIRCULAR 174
ISSUED MAY, 1943

DOMINION OF CANADA, DEPARTMENT OF AGRICULTURE

BASIC COST RATES FOR CUSTOM WORK CHARGES

(For the Prairie Provinces)

The following basic cost rates, which may be used in calculating custom work charges for farm power and machinery, have been approved (January, 1943) by the Western Agricultural Engineering Committee and are offered after careful study as a sound basis upon which uniform and equitable custom charges for farm equipment may be calculated.

It is recognized that local conditions have a decided influence on the cost of field operations and will, therefore, be an important factor in calculating reasonable and equitable custom charges. Some of these local conditions which will influence custom charges are as follows: Topography or roughness of the fields, stoniness, soil texture, moisture conditions and the size of the fields. However, these variable factors will not alter the hourly basic cost figure but come into the picture only when computing the rate on an acreage basis because of the variation in the acreage covered per hour under these varying conditions.

Data and methods offered here are the result of extensive study of a large number of individual machines over a period of 15 years by the Dominion Experimental Station, Swift Current, Sask.

The custom work charge for each machine is made up of three distinct parts: 1st, the Basic Cost Rate, 2nd, Operating Costs and 3rd, Labour Costs. The basic cost rate is relatively constant for any machine under all conditions. Operating cost and labour cost will vary with each locality and working conditions. Therefore, these last two items should be worked out separately for each outfit and season.

BASIC RATES

(Study the examples and explanations below)

Power-Horses .. .. — 6c. per hr. for each horse in the outfit.
Tractors .. .. — 3c. per hr. for each $100 of value when new.
Seeding and Harvesting Machines —17c. per hr. for each $100 of value when new.
Tillage Machines .. .. —12c. per hr. for each $100 of value when new.

All basic rates for use of farm power and machinery include the costs of depreciation, interest, normal repairs and upkeep and a reasonable charge for the risks and other factors involved in doing custom work. Such risks and other factors include: Short moves between jobs, financing fuel and other costs, collections, bad debts and others.

To this basic rate it is necessary to add operating costs per hour in order to arrive at the total custom charge rate per hour.

Operating costs include the cost of fuel, oil, grease (for horses—grain, roughage and pasture) and labour, all of which vary in different districts and the actual costs prevailing for each item in that district should be used when working out operating costs.

The above basic cost rates may be used for the rental of all machines (with the exception of the tractor) with no power or labour supplied. In the case of the tractor the basic cost figure should be increased at least 50 per cent to cover the added risk involved when the owner is not directly responsible for the operation of the tractor.

Published by authority of the Hon. JAMES G. GARDINER, Minister of Agriculture, Ottawa, Canada.

EXAMPLES

A. Calculating Basic Rate Per Hour

Horses—(6 cents per horse per hour).

Outfit	*Method*	*Basic Rate*
8 horse outfit	8 times 6 cents per hour	=48 cents per hour of use
6 horse outfit	6 times 6 cents per hour	=36 cents per hour of use
4 horse outfit	4 times 6 cents per hour	=24 cents per hour of use
2 horse outfit	2 times 6 cents per hour	=12 cents per hour of use

Tractors—(3 cents per hour per $100 new cost).

New Cost	*Method*	*Basic Rate*
$3,000	divided by 100=30 times 3 cents per hour	=90 cents per hour of use
$1,600	divided by 100=16 times 3 cents per hour	=48 cents per hour of use
$1,200	divided by 100=12 times 3 cents per hour	=36 cents per hour of use

Seeding and Harvesting Machines—(17 cents per hour per $100 new cost).

Machine	*New Cost*	*Method*	*Basic Rate*
28-run drill.....	$320÷100=	3·2 x 17 cents hour	=54 cents per hour of use
8-ft. one-way seeder	$525÷100=	5·25 x 17 cents hour	=89 cents per hour of use
10-ft. power binder	$440÷100=	4·40 x 17 cents hour	=75 cents per hour of use
12-ft. combine (Aux. Motor)...	$1,850÷100=	18·5 x 17 cents hour	=$3.14 per hour of use

Tillage Machines—(12 cents per hour per $100 new cost).

Machine	*New Cost*	*Method*	*Basic Rate*
12-ft. cultivator.. ..	$225÷100=	2·25 x 12 cents hour	=27 cents per hour of use
21-ft. disk..	$238÷100=	2·38 x 12 cents hour	=29 cents per hour of use
8-ft. one-way disk.	$435÷100=	4·35 x 12 cents hour	=52 cents per hour of use
4-furrow 14 in. plough	$315÷100=	3·15 x 12 cents hour	=38 cents per hour of use

NOTE.—The cost figures used for the above examples are only approximate and each farmer should use the actual new cost price for his own machine when calculating his individual basic cost rate per hour.

B. Calculating Custom Charge Rate Per Hour

Six-horse outfit

Basic Cost Rate for 6-horse outfit.....		36c. per hour
Operating Cost		
Local feed and pasture costs.....	36c.	
Local labour costs.....	50c.	86c. per hour
Custom charge rate.....		$1.22 per hour of use

Tractor. New Cost $1,600

Basic cost rate.....		48c. per hour
Operating cost		
Local fuel, oil, grease costs.....	57c.	
Local labour costs.....	50c.	1.07 per hour
Custom charge rate.....		$1.55 per hour of use

8-ft. One-way Disk. New Cost $435

Basic cost rate.....		52c. per hour
Operating cost		
Local grease and oil cost.....	1c.	
Labour cost.....	Nil	1c. per hour
Custom charge rate.....		.53c. per hour of use

B. Calculating Custom Charge Rates Per Hour—*Con.*

12-ft. Combine (Aux. Motor). New Cost $1,850		
Basic cost rate		$3.14 per hour
Operating cost		
Local fuel, oil, grease costs	45c.	
Local labour costs	50c.	95c. per hour
Customs charge rate		$4.09 per hour of use

The above operating costs are only estimates for use in these examples. Each farmer should use his own actual local costs for each machine and operating condition when working out custom charge rate per hour.

C. Calculating Total Custom Charge Rate for Outfits

Horses (Outfit of 6) and 9-ft. cultivator ($160 new cost)		
Horse custom charge rate		$1.22 per hour
Cultivator: Basic rate	19c.	
Operating costs	Nil	
Custom charge rate	19c.	.19
Total custom charge rate for outfit..		$1.41 per hour of use
Tractor ($1,600 new cost) and 28-run seed-drill ($320 new cost)		
Tractor custom charge rate		$1.55 per hour
Drill: Basic rate	54c.	
Operating costs	Nil	
Custom charge rate	54c.	.54
Total custom charge rate for outfit..		$2.09 per hour of use
12-ft. combine ($1,850 new cost) and tractor ($1,600 new cost)		
12-ft. combine custom charge rate		$4.09 per hour
Tractor custom charge rate		$1.55 per hour
Total custom charge rate for outfit..		$5.64 per hour of use

D. Calculating Division of Costs for Co-operative Use

Tractor and Combine used jointly by two farmers.
1st farmer owns tractor ($1,600 new cost)
2nd farmer owns combine ($1,850 new cost)
Total custom charge rate for outfit = $5.64 per hour of use

(*a*) When each owner pays his own operating costs the division of the total custom charge rate per hour for the outfit will be:—
Share for 1st farmer = tractor custom rate — $1.55 per hour of use
Share for 2nd farmer = combine custom rate — $4.09 per hour of use

(*b*) When operating costs are pooled or otherwise arranged for the division of the remaining total custom charge rate for the outfit will be directly on the basis of the basic cost rate for each machine.
Share for 1st farmer = tractor basic rate — 48 cents per hour of use
Share for 2nd farmer = combine basic rate $3.14 per hour of use.

If each owner provides his own labour it will be necessary to add this to the basic rate for each machine to secure an equitable division of the total custom charge rate for the outfit.

It is strongly recommended that the hour basis be used for all custom charges as it has been found to be the most uniform and equitable method where wide fluctuations in local cost and operating conditions are common from season to season and year to year. If, for any reason, it is found necessary to convert the above hourly costs into an acreage basis, every operator will be able to do so very quickly. Every farmer knows exactly how many acres his outfit will cover per hour of work. By dividing the number of acres covered per hour into the total custom charge rate per hour for that outfit, the result will be the cost per acre.

OTTAWA: Printed by EDMOND CLOUTIER, Printer to the King's Most Excellent Majesty, 1943.