

CAPACITY CHART

Machine Serial: M-8514.

Machine Size: #18, 18 1/2" x 17'2".

Owned by: Euclid Division, G. M. C.
Cleveland, Ohio
Order #574598

A heavier bending load is required to form a given plate to small diameter for pipe duty than is required to form the same plate to medium or large diameter for boiler duty. In view of this, both boiler duty and pipe duty ratings are given for this machine in the capacity charts below when rolling 17'2" or full length wide plates.

The bending load will also vary with the physical characteristics of the grade of material being handled. In view of this, capacity charts are being given below for both mild steel and also for 1040 carbon steel plates, which we understand are the two materials you will be required to handle.

In addition to the full length or 17'2" wide capacities for both mild steel and Grade 1040 carbon steel plates to both boiler duty and pipe duty diameters, we are also giving the capacities when rolling thicker but narrower plates for both of these materials. These short thick capacities have been calculated for the boiler duty diameters only. We especially emphasize each of these short thick capacities has been calculated, and each results in the same internal strain in the roll forgings as the full length work for which this machine is designed. For this reason, none of these short thick capacities should be exceeded.

Chart #1 - Mild Steel Capacities, Having 60,000 PSI or Lower Ultimate Tensile -
3/4" x 17'2" to 96" and larger dia. in one pass,

7/8"	x 112"	Ditto
1"	x 76"	"
1-1/8"	x 57"	"
1-1/4"	x 45"	"
1-3/8"	x 36"	"
1-1/2"	x 30"	"
1-3/4"	x 21"	"
2"	x 16"	"
2-1/4"	x 12"	"
2-1/2"	x 10"	"
2-3/4"	x 9"	"

Any of the above from 96" to 24 1/2" I.D. in several passes,
5/8" x 17'2" and lighter to 20" I.D. and larger in one pass.

BERTSCH & COMPANY
CAPACITY CHART
Page 1 of 2
#18, 18-1/2" x 17'2" Roll

CAPACITY CHART

Machine Serial: M-8514

Machine Size: #18, 18-1/2" x 17'2"

For: Euclid Div., G. M. C.

Chart #2 - Grade SAE-1040 Steel Capacities, in the annealed condition:
9/16" x 17'2" to 96" and larger dia. in one pass,

5/8" x 148" Ditto

3/4" x 84" "

7/8" x 57" "

1" x 42" "

1-1/8" x 32" "

1-1/4" x 25" "

1-3/8" x 21" "

1-1/2" x 17" "

1-3/4" x 12" "

2" x 9" "

2-1/4" x 7" "

2-1/2" x 6" "

2-3/4" x 5" "

Any of the above from 96" to 26 1/2" I.D. in several passes,
7/16" x 17'2" and lighter to 22" I.D. and larger in one pass.

BERTSCH & COMPANY

CAPACITY CHART

Page 2 of 2

#18, 18 1/2" x 17'2" Roll