Lake Shore Engineering Company

IRON MOUNTAIN, MICHIGAN

July 20, 1940

Mr. W. A. Schacht
Painesdale, Michigan

Dear Bill:

I am enclosing with this letter a copy of our contract with the Inland Steel Company.

I would appreciate it if you would keep this contract in your own files until you are through with it.

Should you be interested in going into a deal for a hoist of this kind, it certainly would be economical to work it along with the present job that we have.

Please let me hear from you at your convenience.

With kindest personal regards, I am

Very sincerely yours,

LAKE SHORE ENGINEERING COMPANY

F. A. Flodin, President

FAF:J

Encl.

Adams Township, MI

LAKE SHORE ENGINEERING COMPANY

MARQUETTE, MICHIGAN

March 1, 1941

Copper Range Company
Painesdale, Michigan

Attention: Mr. William H. Schacht, President

Dear Mr. Schacht:

During our conversation concerning hoists and cars the other day, I promised you a typed comparison with the Inland Steel Sherwood Mine and the Cleveland-Cliffs Section 2 hoists, but it is impossible for me to fulfill my promise because the only two copies of the specifications in this office were left with you and I would rather not make these comparisons unless they are accurate.

When you get around to it and no longer need the specifications left with you, if you will return them to me, I will fulfill my obligation.

Yours very truly,

LAKE SHORE ENGINEERING COMPANY

Charter

CAC:M

C. A. Charter

Adams Township, MI

Hoisting for Wheel Price.

Ship 9000 lb. Speed of Rope 2000 ft per minute
One 14000 "
Rope 2200 ft 1 1/8" = 6600 lb with 5.7 min factor of safety
29,600 "
Second Ship 9000
Unbalance 20,600 = 41.2 million

CC1.ee has 3000 H.P. motor ÷ 2.6 = 1150 H.P. required W.P.
or 2 - 600 H.P. Smith about here.
111.6 / 41.2 or CC1C. Hoist. = 2.6 times greater Cap.
41.2 / 18.34 = H.P. proportion = 2.25 times greater than Shawnee

Max load for 2500

From Bottom

1400 / 2000 = .7 minute = 42 second
acceleration 12
Loading 12
Unload 12
78 second Max rate.
Allow 12 second leeway. =
Avg working rate say 90 sec or 1½ minute for trip

From 900 ft.
100 / 2000 = .5 min = 30 sec
12
12
12
66 sec
9
75 sec

60 ÷ 1.5 = 40 trips per minute × 7 tons = 280 tons per hour
280 × 8 hours = 2240 tons per hour call
2 shifts = 4480 tons

60 ÷ 1.25 = 48 trips per min × 7 tons = 330 tons
330 × 8 = 2600 tons
2 shifts = 5200 tons

5 units of 1000 tons each for Grinding or 5000 tons total Capacity

2.6 | 3000 H.P. | 1150 H.P. required W.P. will Require 2500 Rope Capacity or 8" Diameter Drum

10 ft Dia = 31.4 ft.
6 ft. × 12 = 72" ÷ 1.375 = 52 turns per rope
50 turns × 31.4 ft = 1570 ft. of Rope

9 ft. = 28.2
6 ft × 12 = 72 ÷ 1.375 = 52 turns
50 turns × 28.2 = 1400 ft.

8 ft = 25 ft.
6 ft = 52 turns.
50 × 25 = 1250 ft.

1.333 / 1.22