

SPREADER BAR

I.D. N^o 15

COLOR OF BAR :

ALUMINIUM

LOAD CAPACITY PAINTED

ON BAR 3300 ~~TONS~~ LBS.

DATE CAP. & I.D. N^o PAINTED

ON BAR 3-1-89

DATE OF LAST LOAD

TEST. 3-10-89

TEST LOAD WEIGHT 2 TONS (2 6" Buckles)

TEST LOAD %

124%

STRESS CALCULATIONS:

DONE BY N. BOJER

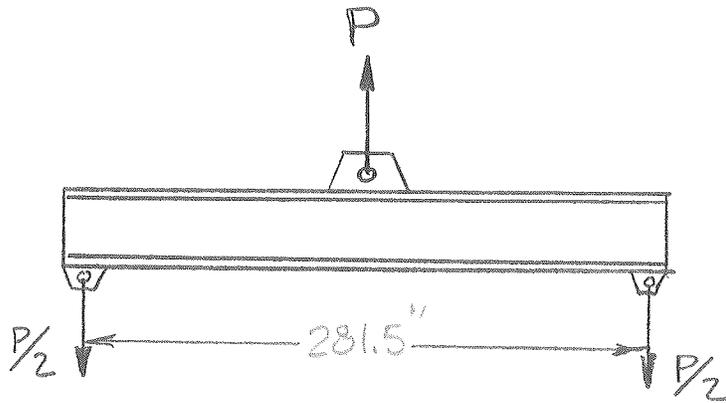
DATE

2-17-89

REMARKS :

SPREADER BAR N^o _____

PAINT COLOR _____

BEAM SIZE CHANNEL PAIR $10'' \times 2\frac{5}{8}''$ FLANGE ALUMINUM

$$d = \underline{10.}$$

$$A_w = 4 \cdot t_w = \underline{2.4 \times 2}$$

$$L = \underline{281.5}$$

$$d/A_f = \underline{8.81 \times 2}$$

$$M = \frac{PL}{4} = \underline{70,375 P}$$

$$S_x = \underline{13.5 \times 2}$$

$$V = \frac{P}{2}$$

$$t_w = \underline{.240 \times 2}$$

BENDING STRESS:

$$F_b \text{ ALLOW} = 12,000 \text{ psi}$$

$$\text{OR } F_b \text{ ALLOW} = \frac{12 \times 10^6}{L \cdot d/A_f} = \frac{12 \times 10^6 \times 2}{281.5 \times 8.81} = \underline{9677 \text{ psi}}$$

} USE THE
LEAST

$$\therefore f_b \text{ MAX} = \frac{M}{S_x} = 9677 = \frac{70,375 P}{13.5 \times 2} \quad P = 3712.8 \text{ LBS.}$$

SHEAR STRESS:

$$F_v \text{ ALLOW} = \frac{.4 F_y}{3} = 4800 \text{ psi}$$

$$\therefore f_v \text{ MAX} = \frac{V}{A_w} = 4800 = \frac{P}{2 \times 2.4 \times 2} \quad P = 46080 \text{ lb.}$$

SUMMARY:

$$\therefore P = \underline{3700} \text{ LBS.}$$

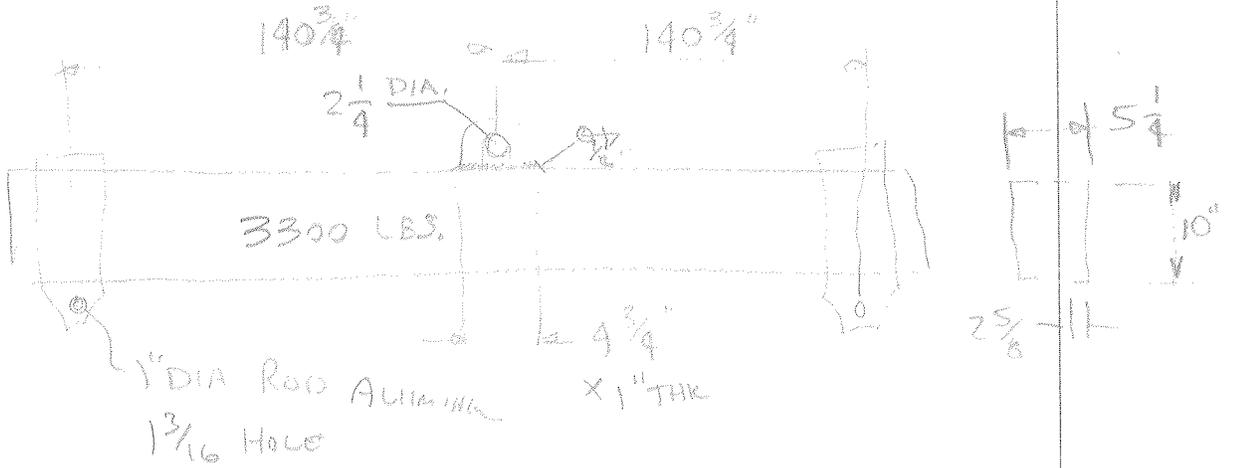
MAKE 3300 LBS BECAUSE OF TEST INCREASE

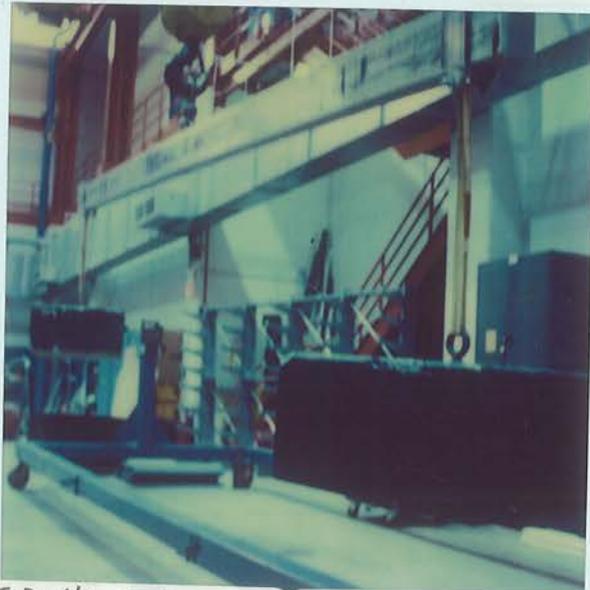
BAR N^o 15

NB

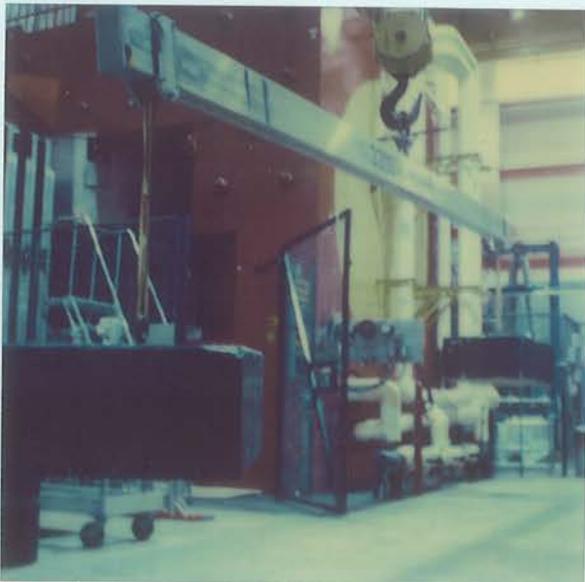
ALUMINUM

1-15-89





I.D.# 15 LOAD: 4,100#
TWO-"E"-BLOCKS RATING: 3,300# 124%
CHARLES PAUL
#6801 3/10/89



I.D.# 15 LOAD: 4,100#
TWO-"E"-BLOCKS RATING: 3,300# 124%
CHARLES PAUL
#6801 3/10/89