

# SPREADER BAR

I.D. N<sup>o</sup> 17

COLOR OF BAR : \_\_\_\_\_

LOAD CAPACITY PAINTED

ON BAR 3800 <sup>LBS.</sup> ~~TONS.~~

DATE CAP. & I.D. N<sup>o</sup> PAINTED

ON BAR 3-1-89

DATE OF LAST LOAD

TEST. 3-10-89

TEST LOAD WEIGHT

4790 <sup>LBS.</sup> ~~TONS~~

TEST LOAD %

126%

USE (2) "E"  
BLOCKS &  
(10) LEAD  
PIGS  
(69 LBS/EA)

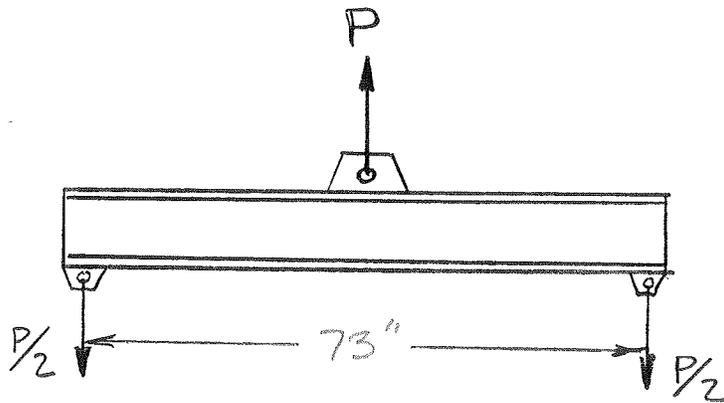
STRESS CALCULATIONS:

DONE BY N. Bosek

DATE 3-1-89

REMARKS :

SPREADER BAR N<sup>o</sup> 17 PAINT COLOR \_\_\_\_\_



BEAM SIZE CHANNEL PAIR 5" x 6.7 1/4"

$$d = \underline{5}$$

$$A_w = 4 \cdot t_w = \underline{1.90}$$

$$L = \underline{73}$$

$$d/A_f = \underline{8.93}$$

$$M = \frac{PL}{4} = \underline{18\frac{1}{4} P}$$

$$S_x = \underline{3.00 \times 2}$$

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

$$t_w = \underline{.190 \times 2}$$

BENDING STRESS:

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

$$\text{OR } F_b \text{ ALLOW} = \frac{12 \times 10^6}{L \cdot d/A_f} = \frac{12 \times 10^6}{73 \times 8.93} = \underline{18408 \text{ psi}}$$

USE THE  
LEAST

$$\therefore f_b \text{ MAX} = \frac{M}{S_x} = 12,000 = \frac{18.25P}{3 \times 2} \quad P = 3945 \text{ LBS.}$$

SHEAR STRESS:

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

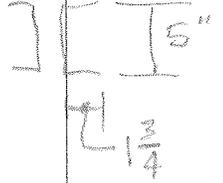
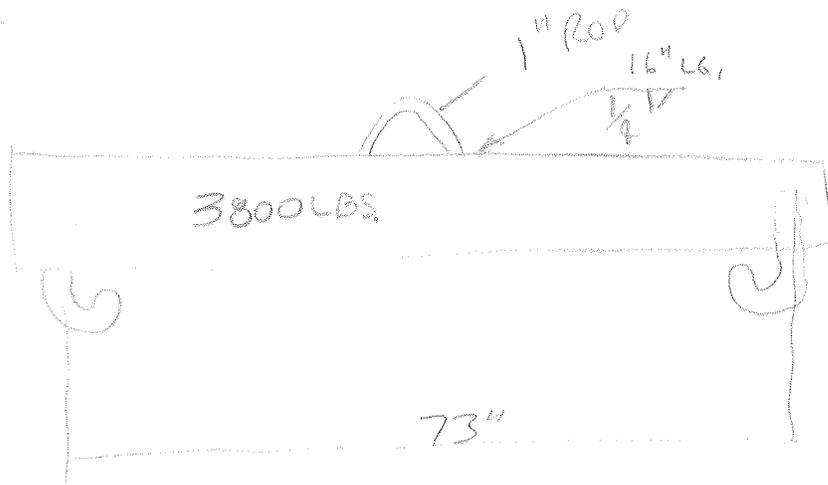
$$\therefore f_v \text{ MAX} = \frac{V}{A_w} = 4800 = \frac{P}{2 \times 1.9} \quad P = 18240 \text{ LBS.}$$

SUMMARY:  $\therefore P = \underline{3945 \text{ LBS.}}$   
TONS

SPREADER BAR #17

N. Borsak

STEEL





I.D. # 17  
TWO-"E"-BLOCKS  
TEN-LEAD INGOTS @ 69#

LOAD: 4,790 #  
RATING: 3,800# 126%

CHARLES PAUL  
#6801 3/10/89



I.D. # 17  
TWO-"E"-BLOCKS  
TEN-LEAD INGOTS @ 69#

LOAD: 4,790 #  
RATING: 3,800# 126%

CHARLES PAUL  
#6801 3/10/89