Fracture due to bending

\[ E(x, y) = \frac{R(x)}{2} \]

\[ F(x, y) = \frac{p(x)}{2} \]

Fracture limit 1st

5

unacceptable

bending beams

\[ H4 \ 12 \ 16 \ 20 \ 20 \ 20 \]
Stress are found at residues, allow excess stress to be relaxed.

Stress at one handle, stress is released.

Stress Stressed

stress 2 layers, 1 unstressed, the

stress released

\[ E = \frac{F}{A} = \frac{150 \text{ dynes}}{150 \text{ cm}^2} = 1 \text{ dynes/cm}^2 \]

\[ E = 100 \text{ MPa, residual stress, pulse in red} \]
1984: Process/Rectangular

1989 25g N.P. Resers, Home "Guaranteed B.M."
1988 Fun, Tail, Pierce, Rocky Water
1984 Greywater Reservoir Reservoir Gate
1987 Reservoir Reservoir Gate
1986 Reservoir Reservoir Gate
1985 Reservoir Reservoir Gate
1984 Reservoir Reservoir Gate
1983 Reservoir Reservoir Gate
1982 Reservoir Reservoir Gate
1981-82 Reservoir Reservoir Gate

88° E
8K

0° E
4K

Parallel
content ~1000°C for ~60 seconds is enough.

between oxides with similar phosphorus

Just right! The bottom line: anneal poly

More compressive on top

More tensile on top

Stress Gradients
A bad day at MCNC (1996)

Residual Stress Gradients