

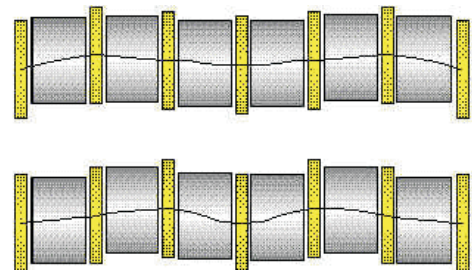
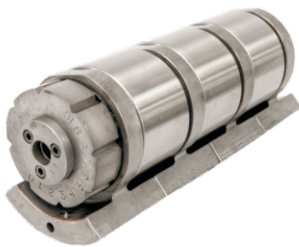
Flexible Shaft Backing Assemblies

INNOVATION BY DESIGN

Design, Fabrication, Installation, Maintenance

Advantages of the FSBA include:

- Significant improvement in strip shape.
- Optimized RSF distribution. The shafts' flexibility gives better distribution of roll separating forces, even during rolling acceleration and deceleration, when used in conjunction with a closed-loop shape control system.
- Better response to the As-U-Roll system. The segmented shaft can react more quickly to As-URoll corrections.
- Elimination of quarter buckle. M and W shapes can be ordered by the As-U-Roll system and created by the segmented shafts.
- Reduction in the number of passes. If the number of passes is dictated by flatness considerations, and not by roll separating force or rolling torque, then greater pass reductions can be achieved and fewer passes required.
- Reduction in rolling breakdowns because force distribution errors are minimized.
- Consistent change times and handling methods. The time needed to change FSBA shafts B and C is the same as that required to change conventional shafts. Handling devices and methods are also the same.
- Ease of use. FSBA users have reported significant improvements in rolling conditions. "Previously, without the FSBA shafts, we could never have controlled strip shape this easily"



The Segmented Idler Roll (SIR)

The rigidity of the second intermediate roll is also important, and a new design the Segmented Idler Roll is now available. The SIR consists of a series of rings, mounted on a central shaft, that concentrate deflections in the FSBA in corresponding areas of the strip, thus maximizing control of strip flatness.