

# Penn Resilient Wheels - Bochum 54

*Penn Machine Company is a major supplier of solid and resilient wheels. Included in our product line are solid wheels, the original PCC resilient and super resilient wheels, Penn Super Cushion wheels and Bochum 54, 84 and 2000 resilient wheels licensed by Bochumer Verein Verkehrstechnik.*

## Advantages of Resilient Wheels:

- Improved ride quality
- Noise reduction
- Reduced unsprung mass
- Tire and track wear reduced
- Only tire and rubber blocks require replacement at end of lifecycle
- Reduces ground-borne vibration

## Design/Construction Features:

All Penn/Bochum resilient wheels have an elastic layer between the steel tire and wheel center. This elastic layer is comprised of a number of individual rubber or ring elements with precisely matched elasticity and damping properties. These wheels have the required conductive continuity. The divided wheel body facilitates dismantling and refitting of the wheel tire and can even be performed under the vehicle in the appropriate installation situation.



PENN MACHINE COMPANY



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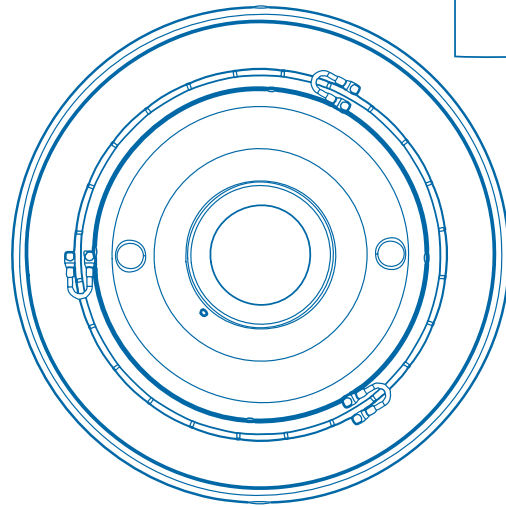
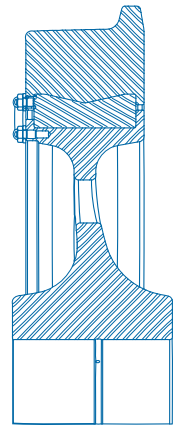
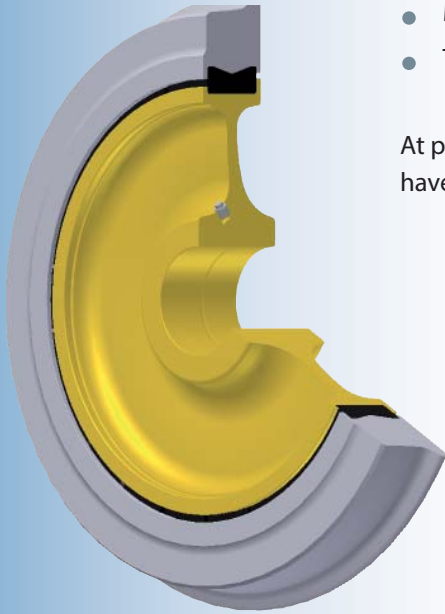
## Advantages of Bochum 54 Resilient Wheels:

- Straight forward design
- Two components (Tire and Center)
- Most cost-effective Bochum Resilient Wheel
- Can be custom designed for wheels from 26-inch diameter and larger.

## Technical Data:

- Radial Spring Rate: 430,000 lbs/inch (75 kN/mm)
- Axial Spring Rate: 46,000 lbs/inch (8 kN/mm)
- Deflection at 5 Ton Wheel Load: 0.023-inch (0.6 mm)
- Max Torque Experienced:  $\approx$  8,000 ft-lbs (11 kN-m)
- Torque Carrying Capability:  $>$  22,000 ft-lbs (30 kN-m)

At present, Penn Machine Company and Bochumer Verein have over 300,000 resilient wheels in service worldwide.



## PENN MACHINE COMPANY

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