

Bearing Adjustment

BPW Hub Systems

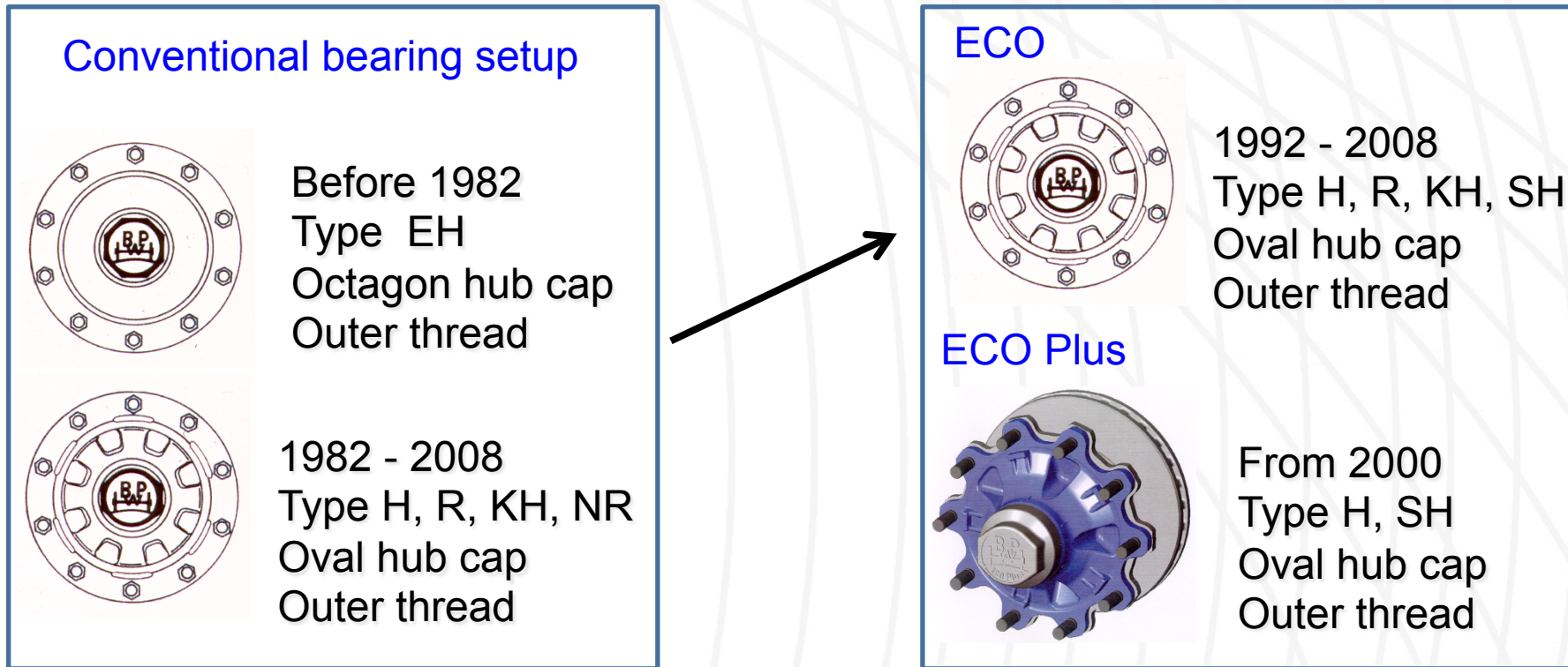
Karl Marek

BPW Transpec Pty Ltd



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BPW Hub Systems



Common denominators for all BPW axles: Standard DIN ISO taper roller type bearings.

Adjustment methods are similar, but not the same

The simplest things are the most logical things

Simple principal: A taper roller bearing is properly adjusted when the tapered rollers have contact with the rear rib face of the cone.

To achieve that one needs to spin the hub while adjusting the bearing setting.

Simple logic: The rollers will seat when in operation as the wheels turn, so in the workshop to get repeatable reliable adjustment the hub must be turned as well when setting the bearings.



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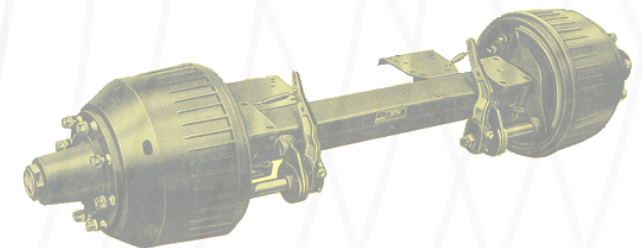
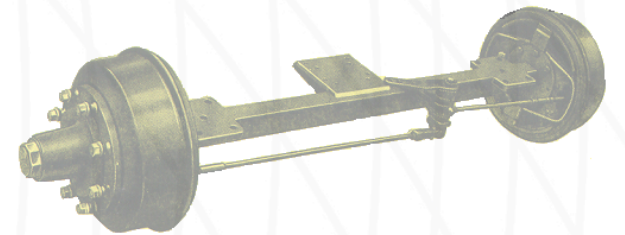


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BPW Conventional Type Hubs

Bearing adjustment: Tighten Axle Nut to 150 Nm whilst rotating hub, then back off the axle nut to the next available split-pin location, which may be up to 30 degrees.

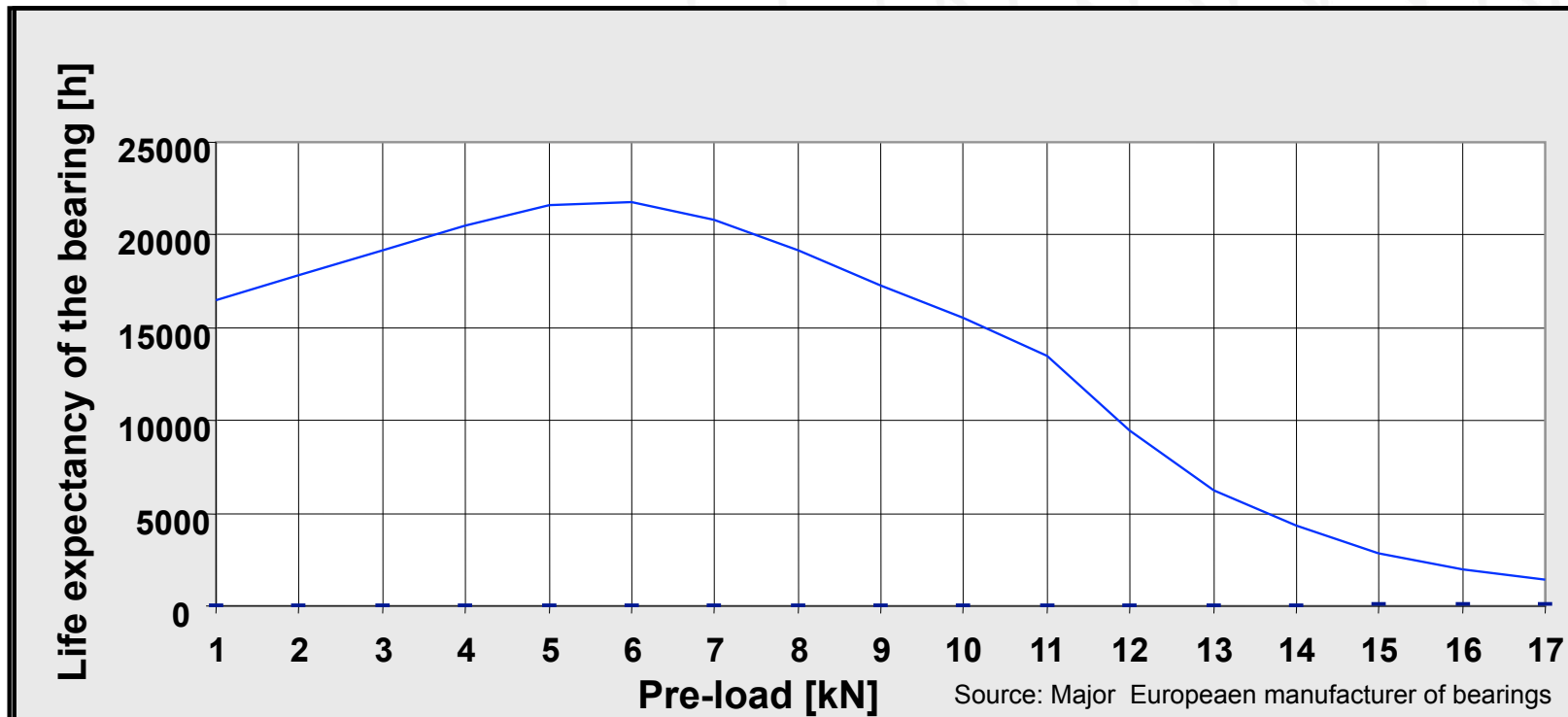
Achievement: Repeatable Adjustment, results in preload with most axles.



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Logical Progression: to get closer to the ideal Bearing Adjustment

Bearing Life versus Bearing Setting at Operating Conditions



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BPW - ECO System

Hub, bearings, drum, wheel and tyre removed in one operation.

Bearing adjustment: Tighten Axle Nut to 150 Nm whilst rotating hub, then back off the axle nut to the next available lock-pin location, which may be up to 15 degrees.

Achievement: Repeatable Adjustment, results in preload with all axles, tighter adjustment range, closer to ideal bearing setting.



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BPW ECO Plus System

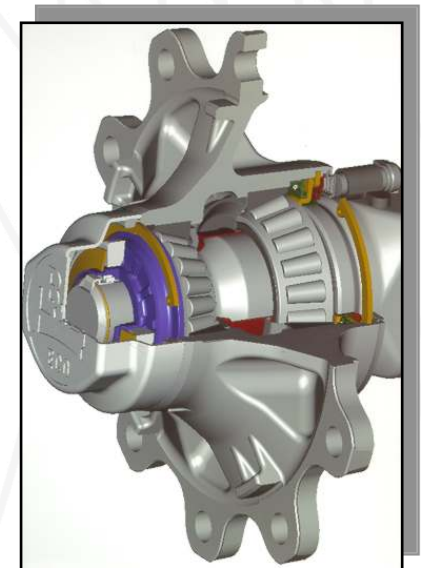
Hub, bearings, drum, wheel and tyre removed in one operation.

Bearing adjustment: Tighten Axle Nut whilst rotating hub, until the in-built torque prevailing mechanism in the nut 'clicks'.

Do not back off from this setting, then fit the locking wedge.

Achievement: Repeatable Adjustment, results in preload with all axles, even tighter adjustment range, and optimised bearing setting.

The ECO-Plus Axle Nut's in-built torque prevailing mechanism prevents the bearing from being over-tightened, and helps to achieve uniform adjustment techniques without the need of a torque wrench.



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Thank You For Your Attention

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