

## GB WSE 3P and GB HBE 3P - "Drilling with Casing" Connection

(GB WSE 3P – Wear Sleeve Enhanced with GB 3P Thread)

(GB HBE 3P – Hardbanded Enhanced with GB 3P Thread)

### Applications

- **Running** Standard Large OD Downhole Casing Applications.
- **Rotating** To Aid String Advancement.
- **Drilling** with Casing/**Drilling** with Liners.
- **Driving**

*For use in abrasive environments.*

### Description

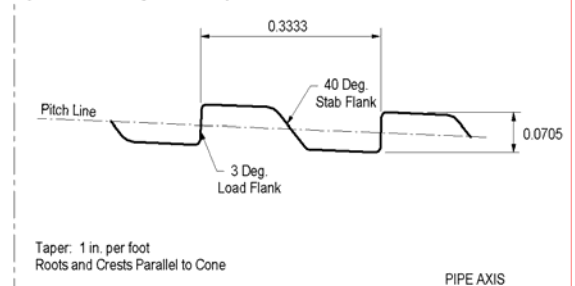
Specialty semi-premium connection machined from heavy-wall coupling stock. Like the **GB CDE 3P**, both the **GB WSE 3P** and **GB HBE 3P** Connections exceed pipe body performance properties under all load combinations and are gas tight. Connection designed with 3-Pitch threadform for easy-stabbing, fast makeup without cross-threading. Innovative, triple taper thread design (box only) reduces localized bearing stresses in critical areas for improved fatigue resistance. Pin noses engage shoulders in the coupling center for positive indication of proper field makeup. Pin noses, designed for **maximum bearing face area**, provide high torque resistance.

**GB WSE 3P** has integral, sacrificial wear sleeve to protect the leading edge and critical areas of the connection that commonly wear during drilling operations. For the most abrasive environments the wear sleeve can be furnished with hard-facing (**GB HBE 3P**).

### Features

- Uses GB 3P threads.
- Easy-stabbing, fast makeup without cross-threading.
- Meets API Coupling OD and Drift Diameter Specifications.
- Field proven in a variety of static and dynamic applications.
- Excellent make/break repeatability under field conditions.
- Enhanced fatigue life.
- Can be inspected with standard API Thread Gauges by any properly trained/experienced Third Party (special setting standards required).
- Positive makeup indication with pin nose engagement in center of connection. Also, has API Triangle Stamp on Pin for secondary makeup verification.
- Innovative Triple Taper Design reduces localized bearing stresses for enhanced fatigue resistance and reduced galling potential.
- Heavy cross-section at center of coupling provides hoop stability for enhanced leak resistance and reduced jump-out potential.
- High torque resistance.
- Drive-able.

### GB 3P Thread (3 Threads per inch)



Wear Sleeve with Optional Hardfacing (GB HBE 3P)  
Sacrificial Wear Sleeve (GB WSE 3P)



**GB WSE 3P**  
**GB HBE 3P**

US Patent 7,347,459

### Available

- Casing sizes 16" OD to 20" OD.
- All API Casing Grades and 16" OD through 20" OD Line Pipe; Grades X-56 and X-80.

### Hard-Banding Options

- Tesco Fusion-clad