

## GB WS 3P and GB HB 3P - "Drilling with Casing" Connection

(GB WS 3P – Wear Sleeve with GB 3P Thread)

(GB HB 3P – Hardbanded 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

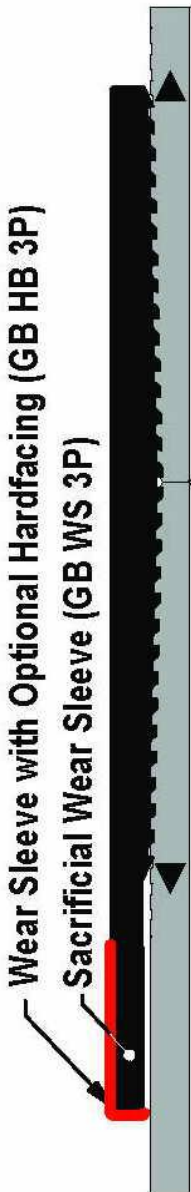
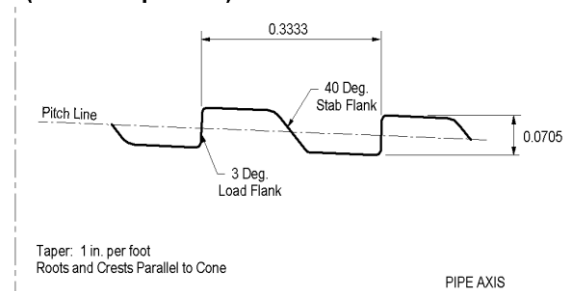
Specialty semi-premium connection machined from API Coupling Stock. Like the **GB CD 3P**, both the **GB WS 3P** and **GB HB 3P** Connections exceed pipe body performance properties under all load combinations and are gas tight. Connection designed with 3-Pitch threadform for easy-stabbing, fast makeup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

**GB WS 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 HB 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.
- High torque resistance.
- Drive-able.

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



**GB WS 3P**  
**GB HB 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