



鲍尔浦

# ShandDong Buoy&Pipe Industry Co.Ltd.

Australia Distributor PBA CASE STUDY – RESOURCE EQUIPMENT LIMITED/PEABODY

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## UHMWPE(ultra high molecular weight pe)pipe project cases



### Client Details

Client:	Resource Equipment Limited / Peabody
Location:	Coppabella CHPP
Pipe Size:	250 ID WT30
Qty:	~1.5km – 2 lines
Connection Type:	Stub flange – Table E
Date of Purchase:	August 2014
Date of Install:	October 2014

### Process Details

Process Type / Service:	Co-disposal tailings slurry
Solid Size:	30% of solids > 50mm, up to 200mm
Density / Composition:	50% w/w
Flow / Velocity rate:	4.2 m/s
Total Dynamic Head:	10 - 14 bar at pumps
Wall thickness:	Testing 3 - 4 mm net wear loss per month (tested fortnightly) in straight sections. 8mm net wear loss per month (tested fortnightly) in sweeps 12mm net wear loss per month (tested fortnightly) in bends. Average of 1.5 - 2mm per line for straight section. Minimum of 450 points of testing per visit.

### Summary

The wear loss exhibited is similar to that of Hardened Steel. Our product being 30mm thick and the “extra strong” 250ID Steel being 12.7mm means we have a lot more wall thickness to play with prior to requiring rolling. Both being similarly priced.

Should this be managed properly, the average lifespan of pipe will be 3 years (for both lines) – rather than the 1.5 years attributed to Steel.

### Comments

The wear rate is exacerbated greatly in areas of severe misalignment