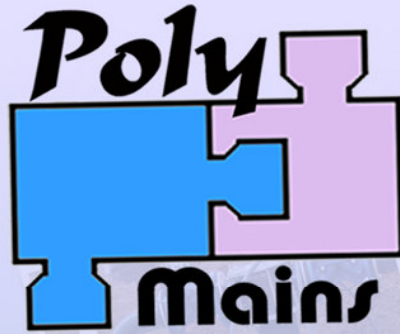




**Rodney Industries**

A Division of Vinidex



HDPE RUBBER RING JOINT (RRJ) MAINLINE FITTINGS  
TO SUIT UPVC PRESSURE PIPELINES



# 'Made From One of The World's Most Versatile'

## Material of Choice: High Density Polyethylene (HDPE)

- Extreme life expectancy in most conditions
- Able to be repaired and welded during the life of the product
- Materials conform to AS/NZS 4131

## The Method

- Manufacture oversized hollow section billets
- Ultra-sound check for voids and flaws
- Machine and mill into RRJ Socket Ends and Junction Centre Modules
- Combine with existing HDPE Butt-weld Pipes and Fittings to create the *PolyMains* Range

## Accurate and Consistent

- Machining HDPE is Fast, Clean and Accurate
- Manufacturing tolerances exceed industry requirements
- Design not dictated by patterns, dies or moulds

## Warranted Pressure Ratings

- Total manufacturing control of component diameters and wall thickness
- Fully rated machine butt-welds throughout the *PolyMains* range - by design

## Styles and Sizes

- 3 to 15 inch *PolyMains* Junctions are fabricated modular style to requirements
- Few limits to the possible Junctions, Repair Joints and Hydrants

## Ease of Use

- Close but sensible tolerances on the lead-in to sockets combined with the low friction qualities of polyethylene
- Provide accurate alignment during "pipe setting" and easy, low force engagement of the seal

## Seal of Confidence

- Machined recess matched to the profile of the Dual Hardness Rubber Lip Seal
- 5 years field use supports designer's opinion that accidentally 'Rolling' seal extremely unlikely

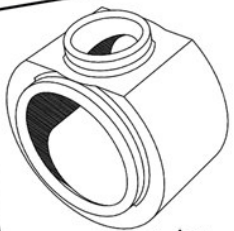
## Toughness

- No epoxy, paint or nylon coatings to chip, cut, or embrittle with age
- No stainless steel to scratch, abrade or dent
- No cast iron to fracture

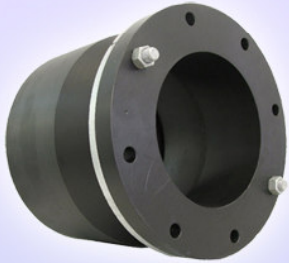
## Thrust Blocking

- Generously sized and designed for easy thrust blocking options, well clear of fitting points

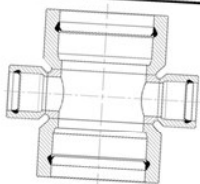
'Made Better By Design, Made Better for Performance'



PolyMains  
Junction Centre



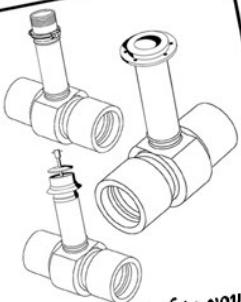
Socket to Flange



Reducing  
RRJ Cross

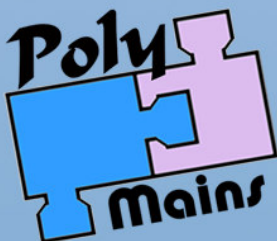


Flanged Reducers



Risers finished to your  
requirements

Pressure Ratings to  
Globally Accepted Standards,  
Without Guess Work.



# ersatile, Reliable and Trusted Polymers'

## Nominal Bore Sizing

- Achieved correct nominal bore specifications by up-sizing

### Example

- 8 inch RRJ tee junction or 90° sweep bend would be constructed with 250mm PN16 Pipe
- 6 inch riser uses 200mm PN16

## The Challenge

- To match Flanges to their optimum bore sizes, across the range

## Maxi-Stub is the Result

- Full nominal bore at high PN or Class Ratings on any flange size or table
- No spacers required for butterfly valve function
- Full size sealing face with full backing flange support
- No warping backing rings or deformed stubs

## Poly Hydrant Bases / Riser Combinations

- All welded poly construction
- No threads, no assembly
- 'Southern Cross compatible' hydrant valves with a victaulic style ring on base
- Fully pressure rated to suit Class 12 PVC RRJ pipe and utilize low force 'lip seal' for ease of installation
- BSPM/Victaulic adaptors to suit all other hydrant styles

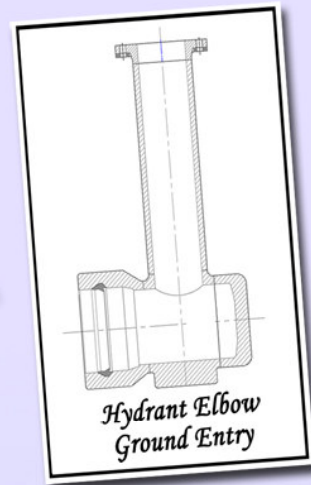
## "Victaulic" Versus Pipe Threads

When coupled to the mating poly riser with a standard shouldered coupling, the resulting hydrant riser tee assembly has;

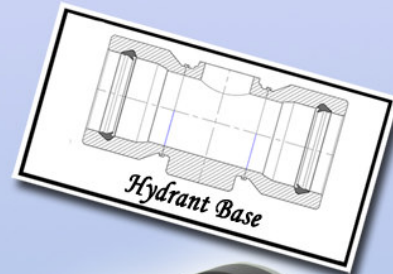
- No threaded joint (weak link) in ground
- No threads to corrode, seize, or leak
- Easy maintenance removal of hydrant valve
- Minimise your in-house labour content

## Destructive Testing

- Riser to Hydrant Base Joint sustained repeated side flexing without damage
- Extreme side force at Hydrant Valve/Outlet such as impact by farm equipment or irrigator malfunction will cause the release of valve and clamp from victaulic shoulder with minimal damage - Now field proven
- Same valve and victaulic clamp were refitted and pressure tested to 186psi for 72 hours with no leaks or material creep
- No stress or damage was transferred to the poly riser base
- Field incidents have confirmed the toughness of the PolyMains Bases



RRJ Reducing Cross Socket



Gibault Joint



ormance, Made Better By Rodney Industries'

Due to the modular nature of the PolyMains concept, quick, easy, lightweight solutions to seemingly impossible problems are achievable. Any combination of Tees, Crosses and Reducers are possible within the available size range.



12" Cut in / Repair tee - Utilising one piece flange socket connectors



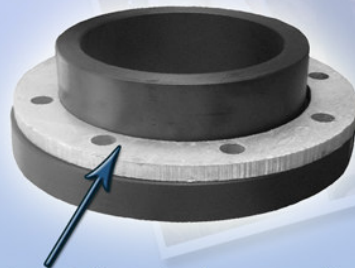
Flow Dividers allow 360° rotation as well as bolt-on upgrades



Large bore socket to flange tees using Maxi Stub to allow valve opening without the need for spacers



Flanged Tee to riser shows versatility not available from traditional products



Maxi Stub / Maxi Flange Combination  
Eg. 200mm Stub / 160mm Backing Ring

Why steel 90° bends on PolyMains ground entries?

Steel bends above the ground are:

- Fire Proof
- Standard bore sizes suit valve function
- Rotatable 360°
- BSP sockets for air release valves easy option on steel
- Less expensive overall than butt welded poly bends in these application
- Polyethylene coatings for corrosion resistance if required (Red Seal)



**Rodney Industries**  
A Division of Vinidex

**Vinidex**  
Systems & Solutions

19 Valente Close Chermside QLD 4032  
Phone: 07 3624 0300 Fax: 07 3624 0399  
Website: [www.rodneyind.com.au](http://www.rodneyind.com.au) Email: [sales@rodneyind.com.au](mailto:sales@rodneyind.com.au)