

KRAUSZ USA CASE STUDY

HYMAX GRIP Swivel Joint for Planned Upgrade in Myrtle Beach, SC

The Client

The City of Myrtle Beach has a population of approximately 27,000 and is growing. As a beach resort, this number swells in the summer months. Dean Roughton has 15 years' experience working for the city's Public Works Department, and currently serves as the crew supervisor responsible for repairing all water pipe repairs.

The Situation

A 12 X 6 inch tapping sleeve was being installed with a new valve, along with the replacement of a section of 6 inch AC pipe using new 6 inch C-900 PVC. The 12 inch main was buried at a different height and angle to the new 6 inch pipe creating a connection issue.

The Challenge

The challenge was how to reduce service interruption time to the impacted customers. Up to this point the primary option was to use multiple fittings to connect the pipes or find a better solution.

The Solution

Roughton chose to use the HYMAX Grip Swivel Joint, a fitting that connects and restrains any two pipes at any angle from 0 degrees to 90 degrees. The fitting allows the user to adjust the fitting to suit the angle at hand and then tighten into desired position with an integral bolted connection. HYMAX GRIP Swivel Joint connects and restrains piping materials including PVC, ductile iron and cast iron. Its hydraulic pressure-assisted gasket allows dynamic deflection of up to 4 degrees per end.

Fast and Flexible Installation

It took the Myrtle Beach service crew less than an hour to install the HYMAX GRIP Swivel Joint and return water service to customers. This advanced flexible fitting was attached to the new section of PVC pipe coming out of the newly installed tee and valve on one side and allowed proper swivel positioning to connect new PVC on the other side. Instead of using multiple fittings to accommodate varying angles, Roughton was able to use one HYMAX GRIP Swivel Joint to complete the job in a timely fashion, while minimizing labor costs and water service downtime. In fact, the cost of the HYMAX GRIP Swivel Joint was less than the cost of the multiple fittings that would have been alternatively used.

Durability

The occurrence of a water main failure can be unpredictable. Dynamic deflection should be a consideration when looking at the integrity of a repair. The HYMAX GRIP Swivel Joint can prevent the likelihood of a break happening at this repair point due to the restraint coupling's advanced, hydraulically assisted gasket. This design offers dynamic deflection of up to 4 degrees per side allowing for pipe movement caused by potential ground shift.

Conclusion

HYMAX GRIP Swivel Joint was easy to install allowing for the repair to be completed quickly with minimal downtime for customers resulting in fewer calls to customer care and minimized labor costs. The angle flexibility offered by the swivel meant that fewer fittings had to be installed and the product's dynamic deflection ensured a long-term repair. Finally, a faster repair meant less time in the trench addressing safety concerns.