

## Work Report

---

**Project:**

Fuller Performance Coatings Pipe Project

**Work Dates:**

Sept. 26th – Sept. 30th, 2022

**Customer Issue:**

Two bends had some buckles on the inside radius. This was within tolerance according to PFI-ES24 however these buckles can present a challenge for rubber lining and significantly increase the time required for the lining.

**Customer Request:**

To apply the Nukote polyurea protective coating HAR for the internal pipe lining application as a replacement to natural rubber lining. Corrugations were to be filled prior to coating application with an epoxy based crack filler.

**Products Utilized:**

Lab Surface Epoxy Crack Filler

Nukote HAR

**Client:**

Fuller Performance Coatings on behalf  
of Barrick Gold

**Material Distributor:**

IMC Distributors Inc.

**Applicator:**

White Falcon Waterproofing

**Engineered By:**

Nukote Coating Systems

**Application Area:**

2 Bends 1418kg each

## Work Report

---

### Project Description:

The purpose of this project was to line 2 bends that had some buckles on the internal radius with the polyurea protective coating Nukote HAR.

Nukote HAR was recommended as it has very high abrasion resistance along with very high tear resistance and is utilized in severe and demanding industrial applications such as mining.

Product was to be applied to the bends at a thickness of 6mm after appropriate surface prep (performed by Fuller) to ensure the proper substrate profile for coating adhesion. Prior to the coating application corrugations on the inside radius were to be filled with epoxy product to level valleys.

### Products Utilized:

**Lab Surface Epoxy Crack Filler** is a two-component gel epoxy crack repair system which is VOC-free, 100% solids (no solvents) and odor free. The product can be easily applied on horizontal and vertical surfaces. It also offers a long pot life and working time but cures very quickly allowing the installation of a base coat minutes after the application. This product possesses superior mechanical and chemical properties suited for commercial and industrial applications.

**Nukote HAR** is a premium modified polyurea available for industrial applications in severe and demanding applications that require very high abrasion resistance, combined with hydrolytic stability, high impact as well as tear resistance. Nukote HAR is a two-component, 100% solids, modified polyurea that significantly outperforms general polyurea elastomers traditionally used particularly in mining and industrial applications. Nukote HAR is suitable in applications which require very high abrasion in dry or wet conditions for lining the plant, conveyors, vehicle, screens, processing vessels, pipes as well as transmission lines. This aromatic Polyurea displays good chemical resistance, thermal stability and UV resistance. Nukote HAR is suitable for application on steel, cement, GRP, FRP and other substrates. This product outperforms 27% chrome iron in a slurry abrasion test and is highly recommended for applications in mineral and ore transportation.

### Application:

- Corrugations on inside radius were filled with the Lab Surface epoxy crack filler to level the valleys.
- Once epoxy dried the Nukote HAR protective coating was spray applied via robotic spray application.
- Thickness of Nukote HAR liner applied was a minimum of 6mm in all areas with a maximum of 8mm in thickness as per DFT measurements.

## Work Report

---

### Project Pictures:



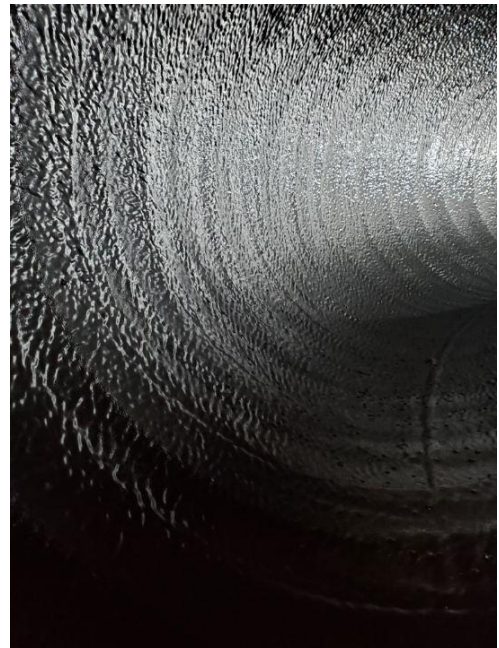
Robot Application 1



Robot Application 2



Liner Installed Bend 1



Liner Installed Bend 1

## Work Report

---



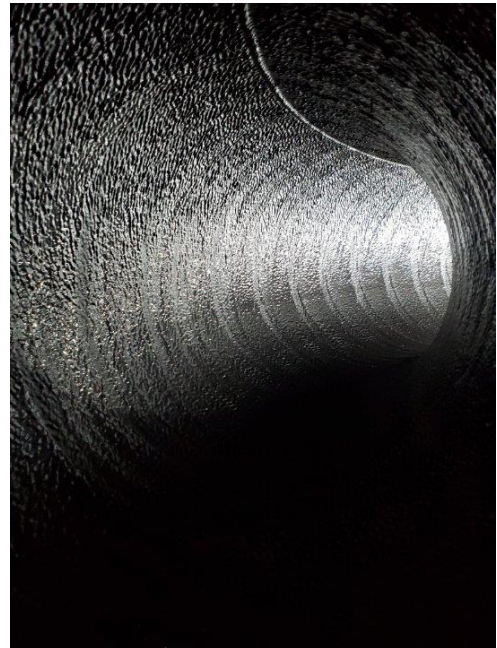
Liner Installed Bend 1



Liner Installed Bend 2



Liner Installed Bend 2



Liner Installed Bend 2

## Work Report

---



Liner Installed



Liner Installed