VanHearron The Greatest Care and Maintenance Products on Earth!

# VanHearron Inc. Maintenance & Protection in Harsh Environments

ICRI Spring Convention • March 16, 2016

## **Case Studies Presentation**

- Presenter, John VanGorder
- 3 case studies detailing:
  - Non-invasive concrete floor preparation
  - Application of chemical resistant coatings in harsh environments

# What is a harsh environment?

- Food processing plants- oils and fats
- Dairy processing facilities- lactic acids
- Breweries- yeasts and sugars
- Other plants that use sugars

# What is a harsh environment?

- Factories with petroleum product exposure
- Chemical processing plants
- Sewage and water treatment plants
- Plants with heavy traffic and abrasion

Project:Cooling TowerArea:2,500 sq. ft

#### **Problems:**



Chemical deterioration of concrete

Concrete movement from thermal cycles



# Existing concrete surface conditions...





Preparation of concrete surface

- Apply concrete surface prep solution
- Cleanup & removal of residual material
- Apply deep penetrating sealer
- Prepare surface for coatings application

- Surface coated with penetrating MVB
- Polyurea primer applied to surface
- Polyurea coating (120 mils) spray applied





# Completed surfaces with polyurea coating....



**Project:** Manufacturing plant industrial floor

**Area:** 33,000 sq. ft

#### **Problems:**

Concrete floor required resurfacing

Concrete cleanup & preparation

Existing industrial factory floor prep:

- Dirt, grease, bond breakers on surface
- Surface needs cleaning
- Surface needs profiling to accept coating





Preparation of concrete surface

- Apply concrete surface prep solution
- Cleanup & removal of residual material
- Apply deep penetrating sealer
- Prepare surface for coatings application

#### Case #2: Industrial Floor Apply concrete surface prep solution



#### Case #2: Industrial Floor Product scrubbed into concrete surface





Surface prepped for coatings with:

- NO scarifying
- NO intensive labor
- NO dust

# Completed floor with new floor coating



# Case #3: Waste Treatment Plant

- Project: New sewage plant
- Area: 195,000 sq. ft

#### **Problems:**



- SRB growth chemical attack of concrete
- Hydrogen sulfide gas permeating concrete
- Concrete movement from thermal cycles



## Case #3: Waste Treatment Plant

- Surface coated with penetrating MVB
- Polyurea primer applied to surface
- Polyurea coating (120 mils) spray applied







#### Case #3: Waste Treatment Plant Completed tanks with polyurea coating



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#### **Questions?**

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