

# Airfield Solutions by Contech

The combination of aging infrastructure and increased passenger and air cargo is driving the need for airfield expansion and upgrades. These projects have unique needs such as FAA approvals, long design cycles, high loading, local environmental regulations, and security and safety restrictions.

Contech has a decades-long history of successful airfield projects, including airfield drainage improvements, glycol/AFFF storage, stormwater detention and treatment, and bridge and culvert systems. If you are searching for a partner with the knowledge, experience, and products to meet the distinct project needs of airfield design, we've got you covered.

Designing, manufacturing and installing airfield improvement projects requires expert engineering, planning, and logistical support to manage costs and keep the project on schedule and under budget. When you need a proven solution for runway extensions, surface runoff solutions, service tunnels and more, please reach out to Contech. We can help!

#### **AIRFIELD SOLUTIONS INCLUDE:**

- Airport Expansion & New Construction
- Containment & Treatment Solutions
- Rehabilitation & Protection Solutions

# FOR AIRPORT AUTHORITIES & DOTS

We work as a collaborative partner, providing education on solution development and product training for inspectors and other airport personnel.

### **FOR ENGINEERS**

Our FAA-approved products, knowledge of local environmental regulations, and robust engineering support provide convenience and increase design efficiency.

### FOR CONTRACTORS

Our logistical and installation support will help you meet airport security requirements and ensure projects stay on schedule and on budget.







Contech provides the largest range of solutions and materials possible for your airport construction projects | www.conteches.com/airfields

# Pipe Solutions

### HEL-COR® AND ULTRA FLO® CMP

Contech provides a full range of corrugated metal pipe (CMP) products for culverts, storm sewers, stormwater detention systems and conduits to withstand severe environmental conditions and high cover. Contech manufactures helically corrugated **HEL-COR®** and spiral wound **ULTRA-FLO®** pipe (which has a 0.012 Manning's "n") — in galvanized, Aluminized Steel Type 2, and polymer coated to repeatable and exacting standards, including AREMA. Features include:

- Lightweight, easy handling
- Fast, economical installation
- Superior strength to weight ratio
- Diameters up to 192"
- Pipe and pipe arch shapes
- Lengths to 48' and more
- Variety of coatings and gages available

#### **DUROMAXX® SRPE**

**DuroMaxx®** offers the strength of steel reinforcing (SR) ribs and the durability of pressure rated polyethylene resin (PE). With a smooth inner wall for outstanding hydraulics, DuroMaxx provides long-term service and performance in the most demanding environments. Offering welded coupler (WC) joints capable of a 30 psi, watertight connection conforming with ASTM D3212 joint requirements, DuroMaxx is an ideal solution for glycol storage containment. Features include:

- Superior durability
- Light weight, long lengths for fast installations
- Smooth interior wall: Manning's "n" value = 0.012
- Diameters up to 120"
- 10.8 psi QuikJoint® with UHP Technology for in-ground air testing

## SLOTTED DRAIN™ SURFACE RUNOFF COLLECTION SYSTEM

Slotted Drain pipe removes sheet flow from aprons, runways, taxiways and deicing areas without multiple grades or water channeling devices. Replacing curbs and drain basins with continuous lengths of Slotted Drain opens up an obstruction-free and single grade runway that greatly enhances the effectiveness of the shoulder to improve safety. Features include:

- Structurally superior, supports H-20 loading
- FAA approved
- Lightweight, easy handling
- Improved drainage efficiency (easily handles snow melt)
- Improved safety



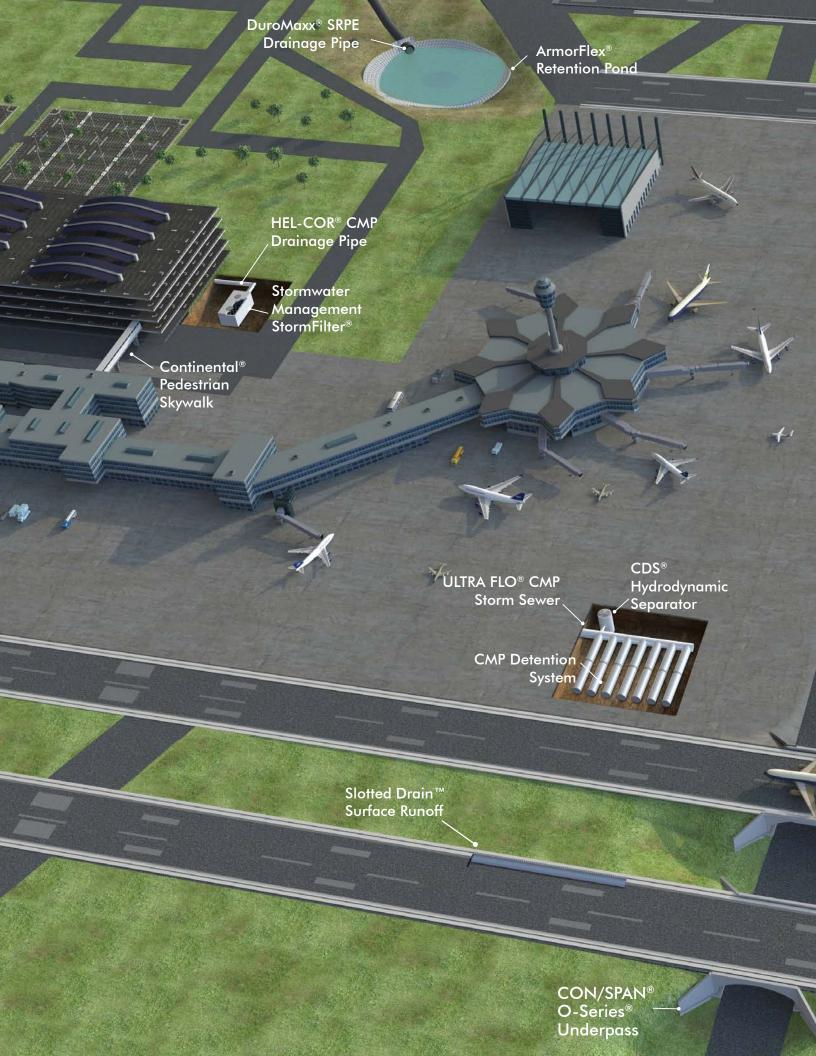
ULTRA FLO®, a pipe with a smooth interior, is the material of choice for storm sewer applications and a lower cost alternative to reinforced concrete pipe.



DuroMaxx® SRPE is an extremely efficient solution for glycol storage able to handle the heavy live-loading of an Airbus A380.



Slotted Drain $^{\rm TM}$  surface runoff collection system is ideal for aprons, runways, taxiways and deicing areas.





# **Stormwater Solutions**

#### **TREATMENT**

Meet NPDES stormwater and SPCC requirements, reduce risks and avoid costly fines with our expansive product line of stormwater treatment products.

- The Stormwater Management StormFilter® Meets the most stringent regulatory requirements using a variety of media that can target fine particulates, heavy metals, oil and grease. Siphon-actuated filter surface cleaning extends maintenance intervals.
- CDS®, Cascade Separator®, Vortechs® Choose from a variety of hydrodynamic separation solutions to provide effective solids removal, especially efficient on gross solids, trash and debris.



CDS® can be designed to withstand aircraft loading while the flexible configurations allow for efficient handling and treatment of stormwater runoff.

George Bush Intercontinental Airport - Texas

### **DETENTION & INFILTRATION**

Control and reduce runoff from maintenance, service, washing, fueling and inspection areas with our underground stormwater detention and infiltration systems. With a variety of materials, our suite of products provides economical storage options that can accommodate any footprint need.

- CMP Detention & Infiltration Flexible configurations and coatings for site-specific footprints and condition requirements, with a minimum of 75-year service life for all soil conditions.
- CON/SPAN® Concrete Detention & Infiltration A
  modular, precast concrete arch system designed to
  provide economical, large volume stormwater detention or
  infiltration below grade.
- DuroMaxx® Available up to 120" diameter; utilizing larger diameters whenever possible reduces storage cost per gallon.



CMP Detention System provides the perfect solution for FAA's requirements to remove any ponded water adjacent to a runway.

Manchester Airport - New Hampshire

# **Hard Armor Solutions**

**Armortec® Hard Armor Solutions** provide an efficient solution to address safety issues and enhance safe airport operations as outlined in the Runway Safety Area Program (RSAP).

- ArmorFlex® articulating concrete blocks an engineering alternative to traditional channel reinforcement, such as riprap or cast-in-place concrete. Ideal for erosion control, shoreline protection, and retention ponds.
- A-Jacks® concrete armor units are designed to interlock into a flexible, highly permeable matrix. A-Jacks dissipates energy and resists the erosive forces of flowing water allows it to protect against scour and erosion.



ArmorFlex® closed-cell blocks are ideal for retention ponds as they prohibit vegetation and discourage wildlife and waterfowl from gathering to increase safety for runways and taxiways.

### Structure Solutions

Contech offers an unparalleled choice of structural plate, precast concrete arch and truss bridges for vehicular and pedestrian needs. Our innovative prefabricated structures minimize or eliminate track closure, saving both time and money. The arch shape is also ideal for supporting heavy loads and can be designed for aircraft loading. Aviation applications include:

- Taxiways and Runway Extensions
- Grade Separations
- Pedestrian Traffic Separation
- Stream Crossings

### **PRECAST**

**CON/SPAN®** and **BEBO®** structures can be adapted for use in tunnel applications or grade separations. They are fully engineered, precast modular system, complete with headwalls and wingwalls.

- Complete precast system
- Outstanding span to rise ratio for wide, low crossings
- Effective in extreme loading applications
- Spans from 12 feet to 102 feet

#### **PLATE**

Contech's structural plate offerings have a long history of strength, durability and economy. These structures meet a wide range of site-specific challenges with a variety of sizes and shapes available.

**BridgeCor®** and **MULTI-PLATE®** structures consist of field-bolted galvanized steel plates. Aluminum Structural Plate structures are similar to MULTI-PLATE but with basic plate material consisting of aluminum instead of steel. Features include:

- Deep cover applications
- Spans to 60 feet
- Stream Crossing

#### **TRUSS**

Long clear spans and small footprints guarantee safe, reliable bridges for everyday use. These prefabricated systems promise low maintenance and fast installation.

**Steadfast Bridges**® Vehicular Truss Structures — provide economical solution due in part to the high strength to weight ratio of steel.

- Access roads
- Ability to accommodate skewed alignments
- Roadway widths up to 50 feet & spans from 10' to 300'
- Meets AASHTO design specifications

**Continental**® Pedestrian Truss Bridges – range from basic structures to unique, custom designs, including pedestrian walkways, footbridges, pipe support structures and other innovative site solutions.



Airport Runway — Precast arch units provide a perfect solution to airplane runway extensions

George Bush Intercontinental Airport - Texas



Structural Plate offers a wide range of shapes and sizes for specific site considerations and deep cover applications

Telluride Regional Airport - Colorado



Continental® pedestrian truss structures can be used as walkways to connect

Mark Center Walkway - Illinois



Contech® Engineered Solutions provides innovative, cost-effective site solutions to engineers, contractors and developers on projects across North America. Our portfolio includes bridges, drainage, erosion control, retaining wall, sanitary sewer and stormwater management products.

STORMWATER SOLUTIONS



STRUCTURE SOLUTIONS

### FOR MORE INFORMATION CALL:

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