Airport Solutions

Contech® Engineered Solutions is the nation’s leading provider of bridge, drainage, erosion control, retaining wall, sanitary, soil stabilization and stormwater solutions for the site development and improvement markets. Our products offer effective site solutions for projects with various loading conditions, foundation requirements, soil and water environments as well as varied installation demands, as it relates to bridge, pipe, erosion control, earth stabilization and stormwater applications.

Contech can facilitate the design, development and the construction of cost effective airport applications, including: taxiways and runway extensions; stream crossings; prefabricated bridges; drainage and pipe options; stormwater treatment solutions; erosion control and retaining walls.

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Stream Crossings  Taxiways  Runway Extensions  Road Tunnels  Grade Separation  Pedestrian Overpass  Retaining Walls  Rehabilitation  Luggage Handling  Conveyor Bridges  Skywalks  Culverts  Storm Sewers  Utility Conduits  Stormwater Runoff  Maintenance Areas  Service & Inspection  Hangar Areas  Fueling Areas  Intermodal Facilities  Reinforced Paved Areas  Parking Tunnels  Channel Linings  Soil Stabilization  Maintenance Access  Headwalls and Culvert Outlets  Intermodal Facilities
**Structures**

Contech offers an unparalleled choice of structural plate, precast concrete arch and truss bridges for vehicular and pedestrian needs. Spans range from 5 feet to 300 feet. 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
- Culvert and Stream Crossings

**Precast**

CON/SPAN® and BEBO® structures can be adapted for use in tunnel applications or improving mine entrances.

CON/SPAN – fully engineered, precast modular component systems. The precast arch system, complete with headwalls and wingwalls, delivers fast installation and is accompanied by extensive technical support.

BEBO Arch System – largest precast concrete arch spans in the world. The BEBO system is a combination of precast concrete arch elements, headwalls and wingwalls.

- Complete precast system
- Outstanding span to rise ratio for wide, low crossings
- Four distinct shapes for your site specific needs
- Effective in extreme loading applications
- Spans from 12 feet to 102 feet

**Ease of Installation - Precast modular units allow minimal downtime during construction**

Rochester International Airport - New York
**Plate**

Contech’s steel and aluminum 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.

**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.

**SUPER-SPAN™** structures utilize the same plates as MULTI-PLATE structures but have special features that allow for larger spans and a different family of shapes. SUPER-PLATE® structures are similar to SUPER-SPAN structures but with basic plate material consisting of aluminum rather than steel. Applications include the following:

- High combined live and dead loads
- Deep cover applications
- Railroad loading
- Wetland crossings
- Vehicular tunnels
- Grade separations
- Spans to 52 feet
- River and stream crossings

**Truss**

Long clear spans and small footprints let you cross environmentally sensitive areas and wetlands with little or no impact on the environment. These prefabricated systems promise low maintenance and fast installation.

U.S. Bridge® Vehicular Truss Structures — provide economical solution due in part to the high strength to weight ratio of steel.

- Applications include access roads
- Ability to accommodate skewed alignments
- Roadway widths up to 50 feet
- Vehicular clear spans from 10 feet to 300 feet
- Meets AASHTO design specifications

Continental® Pedestrian Truss Bridges – range from basic structures to unique design.

- Applications vary and include footbridges, pipe support structures and other innovative site solutions
- Pedestrian and pipe support clear spans to 250 feet and more
Wall Solutions and Specialty Products

Bin-Wall

Contech Bin-Wall™ is a system of adjoining, closed-faced, 10-foot wide bins that flex against minor, unforeseen ground movements. The bins are sturdy, lightweight steel that are easily bolted together at the job site and in difficult or restrictive conditions. A fully enclosed face protects against the loss of fill material.

Sheet Pile

Contech Metric Sheeting is a lightweight sheeting that provides an economical and structurally sound solution for several types of temporary and permanent structures. Contech’s wider sheets have fewer interlocks, resulting in less permeability. Also, a higher degree of stiffness provides the industry’s best strength-to-weight ratio and less driving effort. Heavy gage piling products are also available, meeting more rigid applications.

Keystone®

Keystone retaining walls provide an ideal solution to the expansion and reconstruction of roadways, runways and taxiways. Using the KeySteel System, Keystone allows for better accommodations for larger aircrafts and airport development.

Oil Stop Valve

Contech’s Oil Stop Valve reduces the risk of catastrophic oil spills being released from your site. The fully adjustable float accommodates any oil type, oil depth or alarm condition. A simple mechanism, few moving parts and corrosion resistant stainless steel construction ensure a long product life.

• Uses existing storm drains and pipes as secondary containment
• Modular manhole design simplifies installation
• Requires no electrical power to operate, and only periodic inspection
• Stainless steel materials and passive design with only one moving part ensures reliability
• Acts as a standalone structure or works in conjunction with an upstream oil/water separator such as the VortClarex®
• Is virtually maintenance free
Contech provides the largest range of solutions and materials possible so that you can implement the ideal drainage or water conveyance plan for your site.

**Drainage/Wastewater Conveyance**

**CMP**
Contech provides a full range of Corrugated Metal Pipe products for culverts, storm sewers, stormwater detention systems and conduits to withstand severe environmental conditions and high cover. Contech manufactures HEL-COR® and ULTRA-FLO® pipe — which have a 0.012 Manning’s “n” — in galvanized, Aluminized Steel Type 2, polymer coated and aluminum to repeatable and exacting standards, including AREMA.

Features include:
- Lightweight, easy handling
- Fast, economical installation
- Superior strength to weight ratio
- Diameters to 192”
- Pipe and pipe arch shapes
- Lengths to 48’ and more
- Offered in a variety of coatings and gages

**DuroMaxx® Steel Reinforced Polyethylene**
DuroMaxx offers the strength of steel reinforcing ribs and the durability of pressure rated Polyethylene Resin (PE). With a smooth inner wall for outstanding hydraulics, DuroMaxx provides the properties you can count on for long term service and performance in the most demanding environments.

Features include:
- Superior durability
- High strength steel reinforcement
- Lightweight, fast installations
- Smooth interior wall: Manning’s “n” value = 0.012
- Diameters to 120”

**A-2000™**
With the increasing demands on our drainage and storm sewer systems, products designed and proven to provide the best performance over the project life cycle are needed. A-2000 PVC drainage pipe offers all of the initial cost advantages associated with thermoplastic pipe when compared with RCP but without the performance limitations of corrugated M294 HDPE pipe.

Features include:
- Superior pipe stiffness
- Lightweight, easy handling
- Standard watertight joints
**Stormwater Treatment**

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

**VortClarex® Oil Water Separator** - Utilizes coalescing media to efficiently remove freely dispersed oil and other liquid pollutants from runoff.

**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®, Vortechs®, VortSentry® HS** – Widely accepted for effective solids removal. Especially efficient on gross solids, trash and debris.

**Stormwater Detention and 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** - Flexible configurations and coatings for site-specific footprints and condition requirements, with a minimum of 75-year service life for all soil conditions.

**ChamberMaxx®** - Corrugated, open-bottom plastic chamber system can support traffic loading for installation under parking lots and roadways.

**CON/SPAN®, Terre Arch™ and Terre Box™** – Precast concrete systems with a wide range of span and rise combinations available.

**DuroMaxx®** - Available up to 120” diameter; utilizing larger diameters whenever possible reduces storage cost per gallon.

**Rainwater Harvesting**

Stormwater can be economically harvested for many non-potable applications including wash water, toilet flushing and irrigation. We provide turnkey systems that include a variety of storage options, treatment, pressurization, disinfection and programmable controls to reduce or eliminate runoff from your site.
Hard Armor Solutions

ArmorFlex®

ArmorFlex is an engineering alternative to traditional channel reinforcement, such as riprap or cast-in-place concrete. It is a flexible, interlocking matrix of dry-cast concrete blocks of uniform size, shape and weight. The matrix is laced with a series of cables, which allows for the placement of large mats of block. ArmorFlex systems combine porosity, flexibility, vegetation encouragement and habitat enhancement in a hard armor solution.

Erosion Control

Turf Reinforcement Mats

Contech’s Turf Reinforcement Mats (TRMs) are easy to install with no heavy equipment required. They are more cost-effective than riprap and are stabilized against ultraviolet (UV) degradation.

For more information, call Contech Engineered Solutions at 513-645-7000 or visit us on the web at www.ContechES.com/airport.