

# **INNOVATION & ENTREPRENEURSHIP CHALLENGE**

**DETAIL OF CHALLENGE** **PROBLEM 1**

**Name of Company:** Sandtinel Technology Inc.

**Website:** <https://sandtinel.com/> and <https://www.radix-ic.com/sandtinel/>

## **ABOUT SANDTINEL TECHNOLOGY INC.**

Sandtinel Technology is reformatting the future of sand separation through their Solutions, Defender (Spherical sand separation) and Commander (Vertical sand separation) Series. The vision of the company has always been to create a core technology from the ground up that supports a varied fleet of sand separators, no matter the size, shape or form. Bound by a passion for pragmatic problem-solving, their team truly believes in the transformative power of technology and design. And their ability to simplify products, elevate performance, and inspire change. Sandtinel's roots are in Grande Prairie, Alberta, Canada. Situated in the heart of the Western Canadian Sedimentary Basin, it is home to some of Canada's key, yet most challenging oil and gas plays.

## **CHALLENGE PROBLEM**

To design an engineering alternatives to lift and move a heavy piece of equipment from a stationary position to ultimately onto the bed of a tractor trailer

## **BACKGROUND**

- Sand separation skid package per attached general arrangement
- Includes high pressure sphere, blowdown tank, associated piping and skid frame
- All components are carbon steel based
- All skid packages are minimum of 25,000 lbs with the sphere at 12,000 lbs
- There are multiple model variations and weights. **Further details will be provided.**

## **PROJECT**

- Identify options to move skid packages around the yard and into a shop bay
  - Forklifts, dolly wheels, other?
- Design additional components to the skid to allow handling and movement
- Options should consider the most cost effective solution and minimize size of handling equipment such as fork lift or skid steer

**N.B: Please see diagram on the next page** – This is a generic diagram that outlines Sandtinel's units. One spherical separator and 1 blow down vessel. The 1500 class units weigh approximately 21,000 lbs. The 2500 class units weigh approximately 25,000 lbs

