

# Recommended Practice for Installation, Maintenance, and Lubrication of Pumping Units

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# Recommended Practice for Installation, Maintenance, and Lubrication of Pumping Units

## 1 Scope

This recommended practice provides guidance related to the proper installation, care, and maintenance of surface-mounted beam pumping units, varieties of which are described in API 11E. Information provided in this document is of a general nature and is not intended to replace specific instruction provided by the pumping unit manufacturer. This document further establishes certain minimum requirements intended to promote the safe installation, operation, and servicing of pumping unit equipment.

## 2 Normative References

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

API Specification 11E-2013, *Specification for Pumping Units*

## 3 Terms and Definitions

For the purposes of this document, the following definitions apply.

### 3.1

#### **base**

The basic frame or skid to which a pumping unit is assembled. Typically is the structural element that interfaces with or is clamped to the foundation.

### 3.2

#### **brake**

Component of a pumping unit that is often composed of a disk or drum mounted on the reducer input shaft combined with a mechanism to impart a restraining friction torque and restrain the motion of all rotary joints.

### 3.3

#### **carrier bar**

Part of the pumping unit that supports the load of the sucker rod string through the polished rod clamp.

### 3.4

#### **center bearing**

Structural bearing assembly supporting the walking beam of a class 1 lever design pumping unit.

### 3.5

#### **certified installation print**

Drawing reviewed and approved (stamped) by a licensed professional engineer competent in the areas of site preparation, foundations, and proper mounting requirements of heavy industrial equipment.

### 3.6

#### **cranks**

Driving link in the four-bar linkage of a beam pumping unit that is located between the output shaft of the gear reducer and the pitman link.