

Chapter 11 Leadscrew Linear Actuators

*actuator [ˈæktʃu.ətə]n. (名詞 noun)

1. 【機】促動器

*threaded [ˈθreɪdɪd]a. (形容詞 adjective)

1. 帶螺紋的

*shaft [ʃæft]n. (名詞 noun)[C]

1. 箭桿,箭;矛柄,矛

The archers sent their **shafts** through the air.

弓箭手把箭射了出去。

2. (工具的)手柄,把手

3. 【機】軸

the propeller **shaft**

螺旋槳軸

*rotate [ˈrəʊteɪ]vi. (不及物動詞 intransitive verb)

1. 旋轉,轉動[(+around)]

The earth **rotates** from west to east.

地球從西向東旋轉。

2. 循環,輪流

The seasons **rotate**.

四季循環。

*rotary [ˈrɒtəri] a. (形容詞 adjective)[Z]

1. 旋轉的;輪轉的;轉動的

the **rotary** movement of the blades

刀片的旋轉運動

2. (人員)輪流的,輪換的

3. (機械等)有旋轉部件的;旋轉式的

*constrain [kənˈstreɪn] vt. (及物動詞 transitive verb)

1. 強迫,迫使[OZ]

I feel **constrained** to write and protest the decision.

我不得不寫信抗議這一決定。

2. 限制;束縛;拘禁

Our research has been **constrained** by lack of cash.

我們的研究工作因缺少現金而受到限制。

3. 壓制,抑制[+from]

*friction [ˈfrɪkʃən] n. (名詞 noun)

1. 摩擦;摩擦力[U]

Friction causes a rolling ball to stop finally.

摩擦力使得一隻滾動的球最終停了下來。

Constant **friction** wore out the heels of my shoes.

不斷的摩擦磨損了我的鞋跟。

*efficiency [ɪˈfɪʃənsɪ]n. (名詞 noun)[U]

1. 效率;效能;功效

These machines have increased our work **efficiency** many times.

這些機器使我們的工作效率提高了許多倍。

2. 【物】效率

*groove [ɡruːv]n. (名詞 noun)[C]

1. 溝;槽;(車)轍;(唱片)紋(道)

Wheels leave **grooves** in a dirt road.

輪子在泥路上會留下車轍。

*resemble [rɪˈzembəl]vt. (及物動詞 transitive verb)

1. 像,類似[W][(+in)]

She was not beautiful; she did not **resemble** her mother.

她不漂亮;她不像她的母親。

*hydraulic [haɪˈdrɒlɪk]a. (形容詞 adjective)

1. 水力的,液力的;水力學的

a **hydraulic** lift

水力升降機

2. 水壓的,液壓的

a **hydraulic** pump

液壓泵

*A **Hydraulic cylinder** (also called a linear **hydraulic motor**) is a mechanical **actuator** that is used to give a linear **force** through a linear stroke. It has many applications, notably in **engineering vehicles**.

*attached [əˈtætʃt] a. (形容詞 adjective)

1. 歸屬的;附屬的

*feature [fi:tʃə] n. (名詞 noun)[C]

1. 特徵,特色[(+of)]

This is a key **feature** of our society.

這是我們社會的一個主要特點。

*stroke [stro:k] n. (名詞 noun)[C]

1. 打,擊,敲

2. (划船,游泳的)一划,划法;(網球等的)一抽,一擊,打法

*parameter [pəˈræmətə] n. (名詞 noun)

1. 【數】【物】參(變)數,參(變)量[C]

2. 因素,特徵[C]

*A **leadscrew** (or **lead screw**), also known as a **power screw** or **translation screw**, is a **screw** designed to translate **radial motion** into **linear motion**. Common applications are machine slides (such as in **machine tools**), **vises**, **presses**, and **jacks**.