英语学习

英语翻译技巧(八)

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Power Input[®]. Checks[®] have indicated very little difference in energy absorption per unit weight of compound mixed, whether mixing is done in a high-speed or low-speed internal mixer, in a small or large mixer, or even on a mill. It follows, therefore, that the greater the compound output arising from increases in rotor speed and ram thrust, the greater must be the energy input into the machine in the same unit of time[®]. Whereas, with low ram thrust machines, of about 200litrecapacity, powerinputs as lowas 7.5kW per revolution per minute of rotor speed are possible, with the higher ram thrusts, a power demand of 15-22kW is normal. Even higher power inputs per revolution per minute of rotor speed are not unknown.

Cooling Arrangements. The principal limitations to power input are the strength of the internal mixer and the rate of cooling which can be achieved. The energy put into the machine has to be dissipated into the compound, the surroundings, or the cooling water, mainly in the form of heat. The greater the energy input, the more important it becomes to remove excess heat, and the more difficult are the design problems to achieve this. It is usually the problem of heat removal which provides the limit to energy input.

At the outgoing end of the internal mixer, other handling equipment is needed, such as mills, a tuber slitter, or roller die, for converting the compound to sheet form.

The sheeted compound must then be cooled as quickly as possible by, for example, forced air, water, or antitach solution, to prevent the compound from scorching or sticking to itself.

生 词

power input 输入功率 it follows that 由此得出,可见 cooling arrangement 冷却装置 dissipate 消耗,耗散 周围环境,周围物体 surroundings 除去,排除 remove 除去,排除 removal outgoing end 排料口,排料端 tuber slitter 挤出压片机 roller die 带辊筒口型的挤出 机 sheeted compound 片状胶料,胶片 antitack solution 隔离剂溶液 焦烧 scorching

译文

输入功率[©] 多次校验证明[©],不管用高速还是低速密炼机,不管用小型还是大型密炼机,甚至用开炼机进行混炼,单位重量混炼胶消耗的能量几乎没有差别。因此可以推断,通过提高转子速度和压砣压力增加的产量越多,在相同的单位时间内输入机器的能量必定越大[©]。容量约 200 升的密炼机,压砣压力低,转子每分钟每转的输入功率可低至7.5 kW,而用较高的压砣压力,通常需要 15~

22kW 的功率,也有用更高输入功率的。

冷却装置 对输入功率的主要限制是密炼机 的强度和所能达到的冷却速度。输入密炼 机的能量必须主要以热的形式消耗在胶料及 其周围环境或冷却水中。输入的能量愈高,散 热就愈重要,而实现这一点的设计也就愈困 难[®]。通常正是散热问题限制了能量输入[®]。

在密炼机的排料口下面需要安排其它加 工设备,如开炼机,挤出压片机,或带辊筒口 型的挤出机,以把胶料制成胶片。

胶料制成胶片后,必须尽可能快地用风、 水或隔离剂溶液等冷却,以防止胶料焦烧或 自粘。

注:①"power!"为多义词,有"力、动力、 电源、幂、功率"等多种含义,此处含义为"功 率"。

- ②"checks"为复数,英语名词大多在后 面加"s"表示复数,而汉语中除少数名词可在 后面加"们"表示复数外,一般要在名词前加 "许多、一些、多次"等词来表示复数。因此,有 时即使在英文名词前没有用"many、much" 等词,中文名词前也要加上"许多、一些、多 次"等词来表示复数。
- ③"it follows"是主句,意为"可以推 断","that"引出的是宾语从句,宾语从句中 曲"the greater..... the greater"引导出比 较状语从句。"arising from increases in rotor speed and ram thrust"为现在分词短语作后 置定语修饰 the compound output。
- ④"to power input"是具有动词性的名 词"limitation"要求的介词宾语。
- ⑤此句由"the greater..... the more important..... the more"引出比较状语从 句。句中"the more important it becomes to remove excess heat"里的"it"为形式主语, "to remove excess heat"为真正主语。
 - ⑥此句为强调句型。

小 词 典

——汽车实用英语

后部活顶式四门 小客车

landau-coupe, landau-limousine, landau

后部有活动顶篷的

小客车 后部活顶式小客车 landau-sedan 两门小客车

sedan-landau two-door car, stationary cabriolet, coupe sedan cabriolet cabrio-

两门篷顶小客车

双门小客车

双门四窗二~

五座厢式小客车 四门敞篷小客车

厢式小客车

厢式四门小客车

厢式两门小客车

厢式车身小客车

四窗篷顶小客车 四窗活顶小客车 敞篷小客车 活动顶篷小客车 斜背式车身小客车 three-quarter coupe four-door convertible car

closed car, saloon car,

let-sedań

two-door car

convertible coupe [美]four-door sedan

「英]four-door saloon 「美]two-door sedan

「英]two-door saloon panel body car

four-light cabriolet four-light cabriolet

convertible car convertible car

英译汉常见错误实例

fast back

Fastcast is currently available in three grades, H-90 and P-90, MOCA containing, clear curing systems, and S-90, a MOCAfree, opaque curing system.

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