

英语学习

英语翻译技巧(17)

涂学忠

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If the feed strip to extruder is gradually increased, a point is reached at which the extruder chokes and will not take all the compound, which begins to back up at the feed hopper^①. There is an upper limit to the rate of feed for a particular extruder speed, and usually the best conditions are obtained when compound is fed at about 90% of the amount to choke the machine^②. The choking point increases and decreases as the speed of the screw of the extruder is increased and decreased, respectively, so each compound and screw speed demands its own rate of feed.

The purposes of the head are to equalise the pressure from the screw and barrel and to transport the compound to the die. Again, temperature control is vital. Of all parts of the extruder, the design of the head is one of the most important, and probably receives the least attention^③. Compound must move smoothly to the die, and ideally at equal pressures and speeds. Any points within the head where compound does not move are known as 'dead spots'. Compound vulcanises in these dead spots, then portions break away from time to time to give bits or 'nibs' of scorched compound in the extrudate.

The last stage is the die, which forms the compound into the desired shape^④. It should be pointed out, however, that compounds shrink along their length, so must increase in thickness and perhaps width, depending upon (a) the shape of the head and

the extrudate, (b) the pressures in the head, (c) the head and compound temperatures, and (d) the compound rheological characteristics^⑤. Extruders can be fitted with various attachments, e. g. a T-head or crosshead for mandrel covering (Section 10. 3. 3. 1). If a wire gauze is included in the head to remove nibs or other particles of foreign matter, the machines become known as 'strainers'.

A vacuum device can also be fitted in the barrel of an extruder to remove any trace of entrapped air or other volatile matter from the compound. These vacuum extruders are useful in making articles for open steam, hot air, molten salt, and fluidised bath cures. The absence of the final traces of entrapped air and volatile matter eliminates any chance of porosity or blowing arising from this cause.

生词

choke	堵塞
die	口型, 裁刀, 冲模
dead spot	死角、盲区
bit	一点, 少量
nip	少量
scorched compound	焦烧胶料
rheological characteristics	流变性
attachment	附属装置
T-head	直角机头
crosshead	十字机头
strainer	滤胶机
foreign matter	杂质
entrap	窝存, 夹带

fluidised bath	沸腾床
porosity	气孔
blowing	气泡

译 文

不断增加喂入挤出机的胶条,至一定限度就会使挤出机堵塞而不能容纳所有胶料,胶料开始积滞于进料斗^①。在一特定挤出速度下,挤出机喂料速度有一个上限,通常喂入量约为使机器堵塞时喂入量的 90%,机器的工作状态最良好^②。挤出机螺杆转速升高和降低,会导致堵塞的喂胶量亦随之增加和减少,因此每种胶料和螺杆转速都需要有其自己的喂料速度。

机头的作用是均衡螺杆和机筒产生的压力,并将胶料输入口型。另外,机头的温度控制也很重要。在挤出机所有零部件的设计中,机头设计是最重要的之一,但可能受到的注意最少^③。胶料必须在等压匀速条件下平滑地向口型运动。机头内胶料无法运动的地方叫作“死角”。胶料在死角中硫化后,不时一部分一部分地剥落,在挤出胶料中形成焦烧疙瘩。

最后一部分是口型,它使胶料形成所需形状^④。但是应当指出,胶料在纵向上收缩,根据下列条件不同,其厚度或许还有宽度必定增大:(a)机头和挤出物的形状;(b)机头内的压力;(c)机头和胶料温度;和(d)胶料的流变性能^⑤。

挤出机可安装各种附属装置,例如芯型覆胶用的直角机头或十字机头。如果机头里加一个金属网以除去胶料中的焦烧疙瘩或其它粒状杂质,则该机就成为滤胶机了。

挤出机的机筒里还可安装真空装置,以便从胶料里除去夹带的微量空气或其它挥发性物质。这种真空挤出机适用于制造用直接蒸汽、热空气、熔盐浴和沸腾床等方法硫化的制品。由于除去了夹带的微量空气和挥发性物质,所以消除了由此而产生的气孔和气泡。

注:①“point”常作“时间点”、“地点”、“观点”解,此句中意为“程度”;“take”在此句

作“容纳”解。

②此句中“to choke the machine”为“the amount”的定语,不是句子的状语。

③如按原文直译,此句应为“在挤出机的所有零部件中,机头设计是最重要的之一……”,但逻辑欠通,因此在“零部件”后面加上了“的设计中”。

④定语从句中谓语动词“forms”为使役动词,故“into the desired shape”为宾语补语,与“the compound”一起组成复合宾语。

⑤此句中“must”不能译成“必须”,只能译成“必定”,表示比较肯定的揣测;“depending upon (a)……(b)……”可处理为“根据下列不同条件”,然后再将“a”、“b”……逐条列出。

英译汉常见错误实例

High temperature high speed conditions associated with high speed tires, or high temperature ambient conditions will cause more rapid hardening of SBR compounds.

误:高温高速条件关系到高速轮胎或高温环境条件将引起丁苯胶料更快硬化。

正:与高速轮胎有关的高温高速条件或高温环境条件将引起丁苯胶料更快硬化。

注:“associated……”不是谓语动词,而是过去分词短词作后置定语,“or”后面跟的名词词组是主语的同位语。

国内消息

子午线轮胎专用天然橡胶通过化工 农业两部鉴定

为改变我国子午线轮胎用天然橡胶主要依赖进口的被动局面,加快国产化的进程,1992 年化工部和农业部将子午线轮胎专用天然橡胶列为重点科研项目,组织海南农垦局所属八一农场、华南热作产品加工设计研究所、化工部北京橡胶工业研究设计院、桦林