英语学习

英语翻译技巧(34)

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1.4.3 RADIAL PLY TYRE CONSTRUCTION

As the terminology implies, the essential difference between the radial ply tyre and the two alternative constructions just described lies in the disposition of the casing ply cords (Fig. 3)①. In the radial ply tyre the cords lie at approximately 90° to the circumference. This results in an extremely flexible sidewall which acts independently of the tread bracing belt②, thus further reducing the distortion which takes place in the belt and the tread block as the tyre passes through the road contact zone. Advantages include increased tread life, improved comfort at high speed, and improved security on cornering.

The belt construction, in general use, comprises four low-angle plies of textile cord; some manufacturers have adopted steel or glass fibre cords for the belt. The choice depends upon performance requirements, practical manufacturing facilities, and economic considerations③.

Table 3 gives casing ply and belt angles typical of those used in the three constructions. To a large extent it is the reorientation of angles and the required differential between the casing ply and belt angles which dictate tyre building procedure④.

Table 3　TYRE CARCASS ANGLES(INCLUDED ANGLE FROM THE CIRCUMFERENTIAL CENTRELINE OF THE TYRE)

Tyre condition	Cross ply		Belted bias		Radial	
	Casing	Belt	Casing	Belt	Casing	Belt
Raw	54°－63°	—	58°－61°	52°	80°－90°	16°－21°
Vulcanised	29°－36°	—	32°	26°	75°－90°	12°－18°

1.5 TYRE COMPONENTS

Before dealing with the detailed operation of raw tyre assembly and ancillary operations, prior to tyre vulcanisation, it is necessary to outline the basic components forming a tyre structure and to indicate their function and method of preparation. Fig. 4 details these for a radial ply tyre.

imply　暗示
disposition　排列方式
circumference　周向
flexible　柔软的，灵活的
tread bracing belt　带束层
tread block　胎面花纹块
casing ply　胎体帘布层
reorientation　重新取向
ancillary　辅助的

生　词

radial ply tyre　子午线轮胎
terminology　名词术语

译　文

1.4.3 子午线轮胎结构

顾名思义，子午线轮胎和上面刚说过的

其它两种结构轮胎的主要区别在于胎体帘线的排列方式不同(图3,略)①。子午线轮胎约与周向成90°角排列。这样使得胎侧极为柔软,而且胎侧屈挠变形不波及带束层②,因而进一步降低了轮胎通过接地部位时带束层和花纹块的变形。子午线轮胎的优点包括提高了轮胎行驶里程、高速行驶的舒适性以及转向安全性。

常用的带束层结构有4层小角度织物帘布;某些生产厂已采用钢丝或玻璃纤维帘布作带束层。选择哪种材料取决于使用性能的要求、实际生产装备条件以及经济性③。

表3列出了3种结构中胎体和带束层所用的典型角度。基本上正是角度的重新取向以及胎体帘布层和带束层角度之间所要求的差异决定了轮胎的成型方法④。

表3 轮胎胎体帘布角度(与轮胎周向中心线的夹角) (°)

轮胎状态	斜交轮胎		带束斜交轮胎		子午线轮胎	
	胎 体	带束层	胎 体	带束层	胎 体	带束层
生 胎	54—63	—	58—61	52	80—90	16—21
硫化胎	29—36	—	32	26	75—90	12—18

1.5 轮胎部件

在论述轮胎硫化前详细的成型操作步骤和辅助工序操作步骤之前,有必要概述一下组成轮胎的主要部件并说明其功能和制备方法。图4为制备子午线轮胎的流程图(略)。

注:①"As the terminology implies"直译为"正如名词术语所暗示的那样",用成语"顾名思义"表示颇为简单而贴切;"described"是过去分词作后置定语修饰"the essential difference…… constructions",而"lies"是谓语动词。

②"which acts independently of the tread bracing belt"直译为"胎侧运动与带束层无关",可意译为"胎侧屈挠变形不波及带束层"。

③"The choice"直译为"选择",根据上文提出的"织物、钢丝和玻璃纤维帘线",在"选择"后面加上"哪一种材料"比较完整,这种添字译法是常用手段。

④此句为强调句型,which引出的不是定语从句。

英译汉常见错误实例

Marked differences have been shown by experiment in the composition and properties of the boundary plies, for instance, of the tread-breaker system, as may be seen from fig. 8, where we give the absolute values of the modulus for the various zones of a vulcanisate in a multi-ply structure.

误:试验组分和边界层性能(如胎面缓冲层体系)表明有显著的不同,从图8可以看出,我们给出多层结构区域硫化胶模量的绝对值。

正:试验表明边界层(如胎面缓冲层)的组分和性能都有如图8所示的明显区别,图8中示出了多层结构不同区域硫化胶定伸应力的绝对值。

注:①"differences in……"不等于"difference between……","in the composition and properties of the boundary plies"是"differences"的定语。

②"as may be seen from fig. 8"为定语从句,修饰"differences"。

③"where"引出的是定语从句,修饰"fig. 8","where"相当于"in which";句中"我们"可以省略;凡用图表作主语(英语中作状语)时,动词"give"不要译作"给出",最好译作"示出"、"列出"、"绘出"等。