



英语翻译技巧(41)

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6.2 Diagonal Ply Tyres

Modern building plant, for passenger car tyres, is highly mechanised and constructed for maximum accuracy and productivity^①. For diagonal ply tyres, including the belted bias version, the standard form of building machine is designed specifically for operation with low-crown building drums; the uncured raw tyre is completed in a one-stage operation.

The machine (Fig. 10.7) consists basically of an accurately machined and balanced collapsible segmental metal drum mounted at the end of a driven shaft^②. One bead carrier ring is located on either side, and concentric with the drum. These rings can be traversed inwardly to provide an interference contact with the drum shoulders and thereby transfer and consolidate the tyre beads against the partly built casing structure. Built within the carrier ring frame, spring steel fingers, which form a circle, turn the ply material down the shoulder of the drum immediately before the beads make contact^③. The outer carrier ring is retractable to permit the removal of the uncured tyre.

Attached to the building machine base-plate and to the rear of the drum are two pneumatically operated component consolidating assemblies, each comprising two pairs of shaped disc roller^④. The rollers of one assembly are located on either side of the drum and pivot around the tyre bead area for the pur-

pose of turning and interlocking the various components around the bead. The pair of rollers forming the second assembly traverse laterally, outwards from the centre line of the drum to consolidate the tread-sidewall elements to the carcass.

Mounted at the rear of the machine and on the centre line of the drum is a multi-station component servicer [Fig. 10.7(b)]. This permits the dispensing of continuous length plies, via photocell-controlled festoon loops, guides, and feed trays, to the face of the building drum.

A gravity roller track is incorporated above the ply dispensers and furnished with guides on to which individual pre-cut tread lengths are placed, manually, immediately prior to running on to the carcass^⑤. Facilities are also provided for feeding forward and guiding the two spooled chafer components. The combined building machine and servicer functions are controlled by means of a series of foot-operated pedals and push buttons.

生 词

low-crown building drum	低鼓肩成型鼓
one-stage operation	一次成型法
collapsible	可折叠的
driven shaft	传动轴, 主轴
bead carrierring	扣圈盘
concentric with	与……同心
interference contact	冲撞, 抵触
spring steel fingers	钢弹簧指形器

turn down	向下翻, 正包
retractable	可收缩的, 可退下的
base-plate	底座
pneumatically operated	气动的
consolidating assembly	滚压装置, 压合装置
shaped disc roller	圆盘形压辊
pivot	旋转
multi-station component	
servicer	多工位供料架
festoon loop	蓄布环
feed tray	进料托板
gravity roller track	重力辊道
foot-operated pedal	脚踏开关

译 文

为了获得最高精度和产量, 现代轿车轮胎成型机都已高度机械化和结构合理化^①。斜交胎, 包括带束斜交胎用的标准成型机是专为低鼓肩成型机头设计的; 未硫化生胎用一次成型法制作。

这种成型机的主要部件是装在主轴末端上精密加工和平衡的可折叠金属机头^②。机头每侧都有一个与机头同心的扣圈盘。扣圈盘可向里横向运动冲撞机头肩部, 从而把胎圈传递并固定到部分成型的胎体结构上。在扣圈盘结构内, 有一圈钢弹簧指形器, 它们在胎圈即将接触胎体时, 把帘布翻到机头肩部下面^③。外扣圈是可退下的, 以便取下成型好的未硫化胎坯。

有两个气动滚压装置与成型机底座和机头后面相连, 每个滚压装置与成型机底座和机头后面相连, 每个滚压装置都有一对圆盘形压辊^④。一组滚压装置的压辊位于机头两侧, 环绕胎圈区域旋转, 其用途是翻包和压实包绕胎圈的各个部件。第 2 组滚压装置的压辊从机头中心线向外进行横向运动, 把胎面-胎侧部件压实到胎体上。

成型机头后面、机头中心线上方有一多工位供料架。供料架可把长帘布经由用光电元件控制的蓄布环、导辊和进料托板送到机头上面。

在供布架的上方有一重力滚道, 其上有导辊, 用手工把即将运往胎体的一条条定长胎面搬到导辊上^⑤。还有递送和导入两卷子口包布的装置。成型机和供料架的联合动作是由一系列脚踏开关和按钮控制的。

注: ① 此句中“constructed”原意为“制造”、“创意”等, 前面有“highly”作状语, 与“mechanised”并列, 为与“mechanised”对应, 译作“结构合理化”。

② “accurately machined and balanced”为过去分词短语作前置定语, “mounted at the end of a driven shaft”是过去分词短语作后置定语修饰“metal drum”。

③ “Built within the carrier ring flame”是过去分词短语作定语修饰“spring steel fingers”, 因后面还有一个定语从句“which form a circle”, 共同修饰“spring steel fingers”, 所以把“Built...flame”移到了前面。

④ 此句为倒装句, “Attached to the building machine based-plate and to the rear of the drum”为句子的谓语, 因主语“assembly”前面定语较长, 后面有进一步说明它的分词独立结构, 故将谓语放在了前面。

⑤ 此句中“length”不作长度解, 应作“段”、“节”或“条”解。

致 读 者

“英语学习”栏目已开办 3 年多, 受到一些爱好橡胶专业英语朋友的好评。最近接上级指示, 正规技术刊物不得开办“学习园地”类栏目, 故从下一期起“英语学习”栏目将停办。欢迎爱好橡胶专业英语的朋友在阅读专业英语文献遇到疑难时来信切磋。

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