





供应商开发的同类产品及产品配套介绍

Product Introduction



主要配套福田奥铃超卡等系列



江淮中卡.康玲.帅玲系列均采用我司的功能件，其中四川江淮中卡系列为我司独家供货。



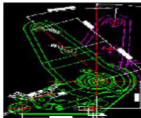
配套东风天龙天锦等等车型。



四川现代重卡采用我司M型滑轨。

设计研发能力

Design and R&D capabilities



采用UG软件对功能件进行建模

采用CAXA软件设计图
形模具

验证合格后批量生产

设计人员15人，主要按照客户要求从事产品的开发和简易设计。其中自主研发齿板调角器滑轨专利权21次，其中汽车座椅角度调节器，包括底壳、小齿板、大齿板，扳手、传动片、盖板，小齿板和传动片一端通过转动销轴安装于底壳上，底壳上设置有约束小齿板摆动角度的约束长孔，大齿板转动安装于底壳上，大齿板和小齿板上均设置有可相互配合的弧形齿，扳手与大齿板同轴转动安装于底壳上，传动片上设置有施力销，扳手上设置有施力腰孔，该施力销约束于到施力腰孔内，盖板固定安装于底壳上，扳手与盖板之间设置拉簧，大齿板上设置有顶推弧面，该顶推弧面的半径大于大齿板上的弧形齿的半径。该角度调节器取消了施力块，采用在大齿板上设置的顶推弧面与小齿板配合，从而可保证大齿板顺畅转动的同时，避免角度调节器出现卡死的现象。

There are 15 designers, mainly engaged in product development and simple design according to customer requirements. Among them, there are 21 patent rights for the independently developed tooth plate angle adjuster slide rail. The automobile seat angle adjuster includes a bottom shell, a small tooth plate, a large tooth plate, a wrench, a transmission plate, and a cover plate. One end of the small tooth plate and the transmission plate is installed on the bottom shell through a rotating pin shaft, and the bottom shell is equipped with a constraint long hole to constrain the swing angle of the small tooth plate. The large tooth plate rotates and is installed on the bottom shell, and both the large tooth plate and the small tooth plate are equipped with arc teeth that can cooperate with each other. The wrench and the large toothed plate rotate coaxially and are installed on the bottom shell. The transmission plate is equipped with a force application pin, and the wrench is equipped with a force application waist hole. The force application pin is constrained to the force application waist hole, and the cover plate is fixed and installed on the bottom shell. A tension spring is set between the wrench and the cover plate. The large toothed plate is equipped with an upward pushing arc surface, and the radius of the upward pushing arc surface is greater than the radius of the arc teeth on the large toothed plate. The angle adjuster eliminates the force application block and adopts a pushing arc surface set on the large tooth plate to cooperate with the small tooth plate, ensuring smooth rotation of the large tooth plate while avoiding the phenomenon of the angle adjuster getting stuck.

产品的功、性能及关键特性分析

Product Introduction

1.滑轨操作性

正常操作顺畅,无阻碍,在任何锁止位置上锁止,左右滑轨都能同时锁止在相同位置,解锁力应在国家标准范围内。C型滑轨上下间隙控制在 $<0.5\text{mm}$,左右间隙控制在 $<0.5\text{mm}$,前后间隙控制在 $<0.35\text{mm}$,不能出现半锁止与锁空现象。

2.调角器性能

调角器正常操作顺畅,无阻碍,在任一角度能锁止无晃动,解锁力应在国家标准内。齿板调角器再均匀施加一水平向后 200N ,S轴交点到向后加载起始点间距离为调角器前后间隙前后间隙应控制在 $<3.5\text{mm}$ 。

单只调角器总成前向静载荷强度应大于 $600\text{N}\cdot\text{m}$,向后应大于 $800\text{N}\cdot\text{m}$ 无断裂过度变形等异常现象。

1. Slide operability

Normal operation is smooth, unobstructed, and can be locked in any locking position. Both the left and right sliding rails can be locked in the same position at the same time, and the unlocking force should be within the range of national standards. The upper and lower clearances of the C-type slide rail should be controlled at $<0.5\text{mm}$, the left and right clearances should be controlled at $<0.5\text{mm}$, and the front and rear clearances should be controlled at $<0.35\text{mm}$. There should be no semi locking or empty locking phenomenon.

2. Angle adjuster performance

The angle adjuster operates smoothly and without obstacles, and can be locked in any locking position. The unlocking force should be within the national standard. Apply a horizontal backward force of 200N to the toothed plate angle adjuster, and the distance between the intersection point of the S-axis and the starting point of backward loading is the gap between the front and rear of the angle adjuster. The gap between the front and rear of the angle adjuster should be controlled within $<3.5\text{mm}$.

The static load strength of a single angle adjuster assembly should be greater than $600\text{N}\cdot\text{m}$ in the forward direction and $800\text{N}\cdot\text{m}$ in the backward direction, without any abnormal phenomena such as fracture or excessive deformation.

零部件工艺方案、工艺保证能力

Product Introduction

剪板

落料

成型检验

冲孔

焊接

除油

电泳或喷涂

齿板淬火

齿板退火

装配

铆接

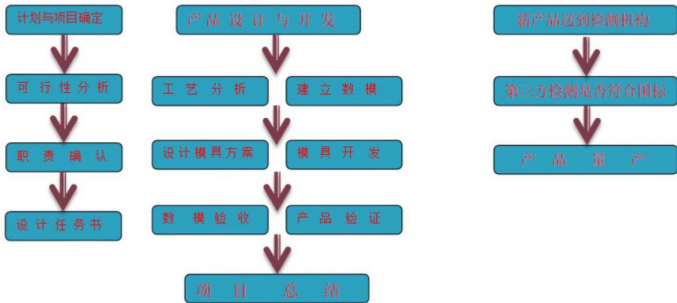
成品检验

装箱

入库

性能、可靠性及开发验证能力

Product Introduction





洛氏硬度计



游标卡尺



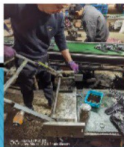
千分尺



塞尺



自制检具



自制检具

生产设备及产能规划说明

Product Introduction



冲床



装配线



高频淬火



喷涂线



点焊机

序号	设备名称	设备数量	年产量(万)
1	冲床	32	150
2	油压机	2	100
3	喷涂线	1	150
4	氩弧焊	2	100
5	焊接机械手	1	50
6	高频淬火	2	
7	点焊机	2	

目前满足年产能300万套

调角器类

Product Introduitor



153左调角器
(包塑手柄)



153左调角器



153右调角器



D310左调角器



D310右调角器



W2左调角器



W2右调角器

调角器类

Product Introduction



1032左调角器-付片

1032左调角器

1032右调角器

1032右调角器-付片

调角器类

Product Introduction



410左调角器-付片

410左调角器

410右调角器

410右调角器-付片