TECHNICAL DOCUMENT

LGS(K) and LGS CNC Guillotine shear

1. Machine structure and features

① The frame is a welded steel structure, consisting of left, right side plates, worktable and cross plate as the integral structure. Internal stress is removed by heat treatment process using large heat treatment furnace after welding. The frame is then machined so that the machine frame has good rigidity and high stability.

② The upperbeam is machined steel structure. The beam is secured to the frame by use of guideways and is attached to hydraulic cylinders that provide the cutting action. When cutting stroke is completed, the upperbeam automatically returns quickly. Blade gap adjustment is quick and can be manual or automatic. Blade stroke is programmable.

③ The backgauge is positioned using a ball-screw, guided by linear guide and , driven by digital AC servo motor. It provides accurate positioning, fast and stable movement.

④ The hydraulic system, Rexroth is installed at the top of oil tank. The oil tank is fixed on the frame beam, convenient for servicing.

⑤ The hold-down cylinders are actuated before the upperbeam moves down. The hold down cylinders press down the sheet and secure it during shearing. The hold-down cylinders return to up position after the cutting completed. Machine has safety fence to protect the operator.

⑥ Cybelec DNC 60 is standard control , the DELEM DAC360 as a option.

2. Main purchased parts list

No	Name	Supplier
1	CNC control system	Cybelec Dnc60 or Delem DAC360
2	Servo motor	Panasonic
3	Servo driver	
4	Ball screw	PMI, Taiwan
5	Linear guide	HIWIN, Taiwan
6	Main sealing element in cylinder	NOK, Japan VALQUA, Japan
7	Hydraulic valve	Rexroth- Germany
8	Main motor	Wannan or Shangdong
9	Oil pump	Sumitomo, Japan
10	Main electrical parts and components	Schneider, Omron, Zhejiang Jiuzhou and etc.

3. Standards for design, manufacturing, test and installation:

① GB17120-1997 《Forming Machinery Safety Technology Conditions》

② JB5197-91 《Shear Technology Conditions》

③ GB/T14404-93 《Shear Accuracy》