

### 活塞杆 / Piston rod / Chrome bar / Chrome shaft

活塞杆的材质可分为：轴承钢、45#钢、40Cr、不锈钢几种，产品等级可分为普通杆淬火杆几种。45#钢活塞杆表面经特殊研磨及硬铬电镀技术外理，再经镜面抛光而成。它具有耐磨擦，抗腐蚀等特性，适用于各种气缸、油缸、活塞杆、包装、木工、纺织、印染机械、压铸机、注塑机、及其它机械用导杆、顶杆等。

The piston rod material can be divided into: bearing steel, 45 # steel , 40Cr and stainless steel. We have standard rod, induction hard chrome rod and quenching rod . Surface of 45 # steel piston rods goes through special grinding and hard chrome plating processing, and then mirror polishing. It is applicable to all kinds of air cylinders , hydraulic cylinders, piston rods, packaging , woodworking , textile , printing and dyeing machinery, die casting machine , injection molding machines , guide rod and push rod because of its characteristics of wear resistance and corrosion resistance.



抛光机 / Piston Rod Polishing machine

## 产品参数 / Product parameters

1. 规格 PRODUCT SIZE :  $\phi 6-\phi 250$

2. 交货状态 SUPPLY CONDITION :

标准镀铬, 高频淬火, 调质

Standard chrome plated; induction hard; quenched and tempered

3. 镀铬厚度 CHROME THICKNESS :

标准是2至3丝, 若客户有特殊要求, 可定制。

Standard 20 to 30 microns, special requirement depends on customers

4. 表面粗糙度 SURFACE ROUGHNESS :  $Ra \leq 0.4$  microns

5. 外径公差 TOLERANCES ON DIA : ISO f7 on the diameter

6. 椭圆度 OVALITY : ISO f7 公差的一半 (Half of the tolerance ISO f7)

7. 直线度 STRAIGHTNESS :  $\leq 0.2$ MM/M

8. 表面硬度 SURFACE HARDNESS : 800-1150HV

9. 包装 PACKING :

镀防锈油, 并且每支用纸管独立包装

Anti rust oil to be applied on material and each bar/rod to be packed in paper sleeve

## 化学成分 Chemical Properties

材质 Material	C%	Mn%	Si%	S%	P%	V%	Cr%
Ck45	0.42-0.50	0.50-0.80	0.17-0.37	$\leq 0.035$	$\leq 0.035$	/	$\leq 0.25$
St52	$\leq 0.22$	$\leq 1.6$	$\leq 0.55$	$\leq 0.04$	$\leq 0.04$	/	/
20MnV6	0.16-0.22	1.30-1.70	0.10-0.50	$\leq 0.035$	$\leq 0.035$	0.10-0.20	$\leq 0.30$
42CrMo4	0.38-0.45	0.60-0.90	0.15-0.40	$\leq 0.035$	$\leq 0.035$	0.07-0.12	0.90-1.20
40Cr	0.37-0.45	0.50-0.80	0.17-0.37	$\leq 0.035$	$\leq 0.035$	/	0.80-1.10

## 机械性能 Mechanical Properties

材质 Material	抗拉强度 T.S (MPA)	屈服度 Y.S (MPA)	延伸率 Elongation %	冲击 CHARPY	交货状态 CONDITION
Ck45	$\geq 610$	$\geq 355$	$\geq 15$	>41J	NORMALIZE
Ck45	$\geq 800$	$\geq 540$	$\geq 20$	>41J	Q + T
St52	$\geq 500$	$\geq 355$	$\geq 22$	/	NORMALIZE
20MnV6	$\geq 750$	$\geq 590$	$\geq 12$	>40J	NORMALIZE
42CrMo4	$\geq 980$	$\geq 850$	$\geq 14$	>47J	Q + T
40Cr	$\geq 1000$	$\geq 800$	$\geq 10$	/	Q + T