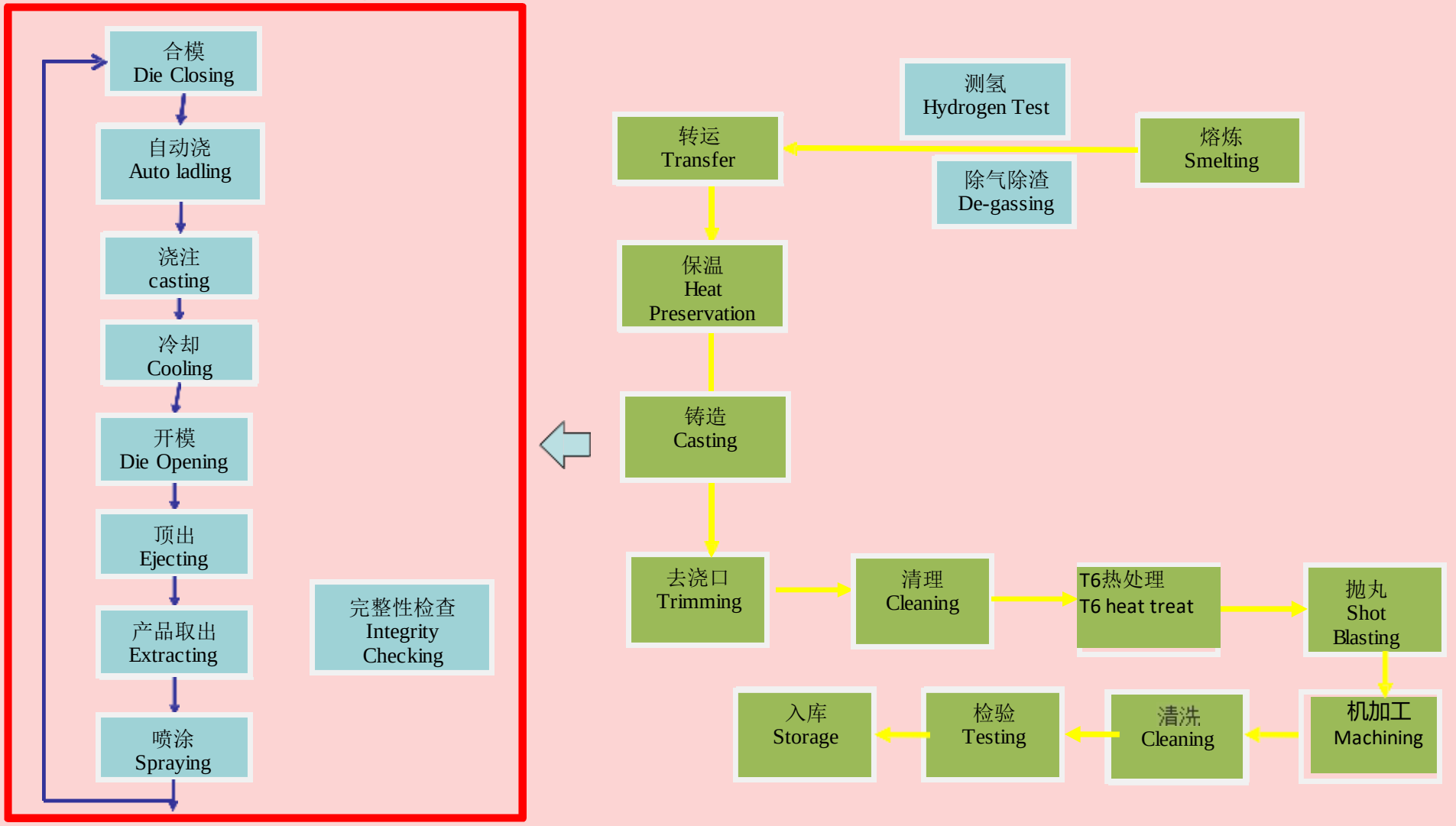
Content

一、产品信息 Part Information

件号P/N	重量（Kg）weight	数量 Qty	材料 Material	最大尺寸(mm) Dimension	备注 Remarks
9681090780	0.83	1	AlSi7Mg0.6		

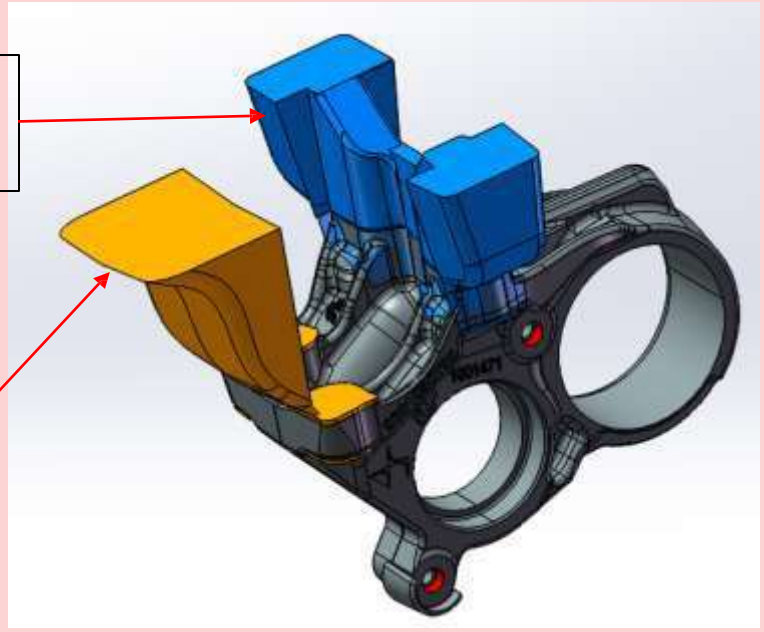
工艺过程 Technological Process：



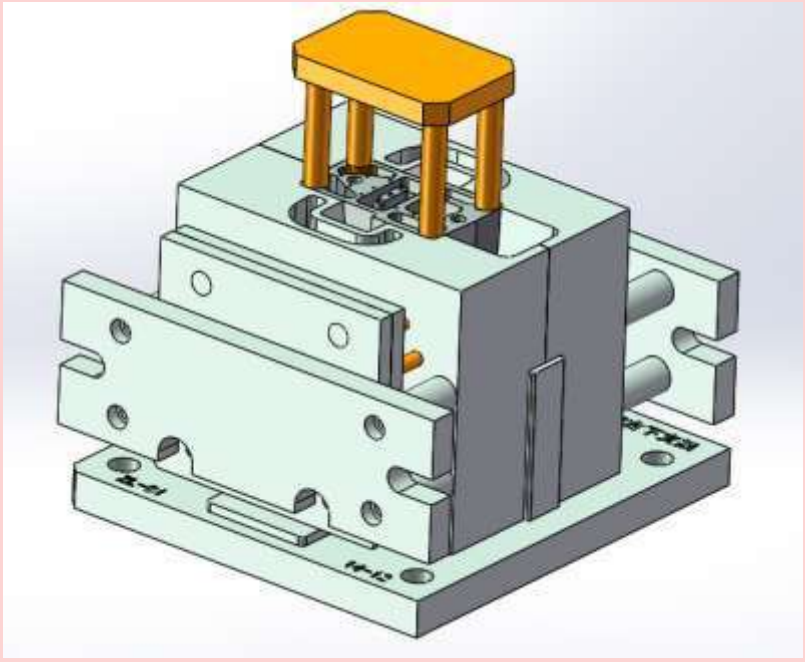
一、制造方案 Manufacturing Solutions

9681090780

1. 浇排系统Gating System



模具 Mold



一、制造方案 Manufacturing Solutions

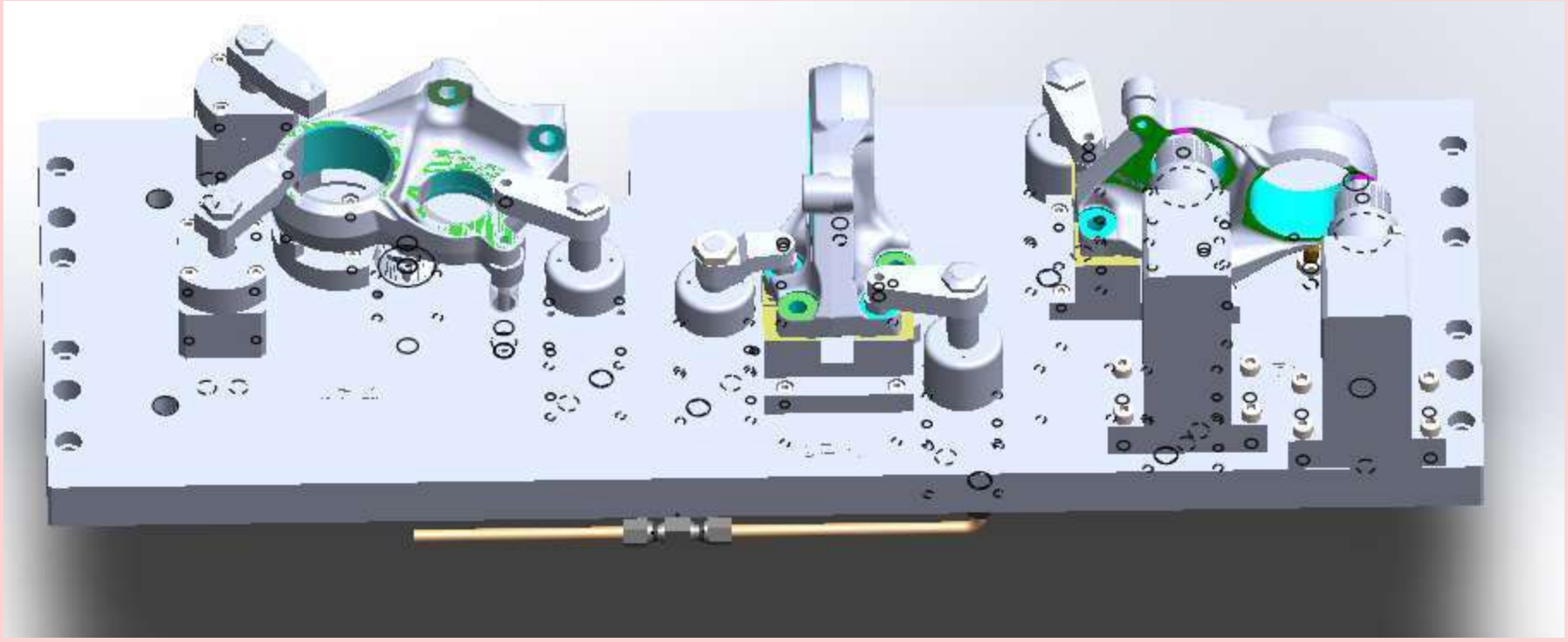
3. 铸造工艺方案 Casting Process Program

	机型 Model	参数 parameter
模具温度 the temperature of mold	DY200	350±20℃
浇注温度 pouring temperature	DY200	710±10℃
浇注时间 pouring time	DY200	20±5S
水冷时间 Water Cooling time	DY200	35±5S
凝固时间 Cooling time	DY200	120±10s
减压氮气压力 press compressive stress	DY200	0.1-0.2Mpa
氮气流量 flux	DY200	5-10mL/min

一、制造方案 Manufacturing Solutions

981245241A

4. 机加工工艺方案 Machining Process



一、制造方案 Manufacturing Solutions

981245241A

4. 机加工工艺方案 Machining Process

工序号 process NO.	内容 Content
工序1 First	铣P1、P2基准面，钻铰A、B基准孔、4×ϕ11.8孔。 MachiningP1、P2 base face, drillingA、B base hole、4×ϕ11.8
工序2 Second	铣ϕ11.8孔两平面。 Machiningϕ11.8 end face.
工序3 Third	铣ϕ11.8孔剩余两端面，钻镗ϕ69.89孔、ϕ48.6孔、ϕ55台阶孔。 Machiningthe other ϕ11.8 end face, drillingϕ69.89、ϕ48.6、ϕ48.6.

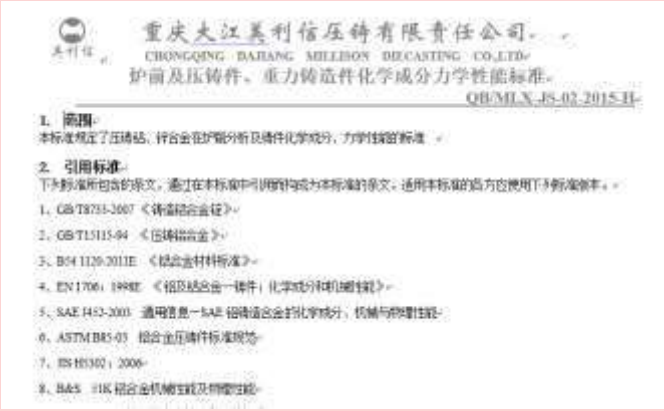
铝合金检验Aluminum alloy inspection

1）MLX-9 铝合金化学成分Aluminum alloy chemical composition

在标准中，MLX按GB和其他客户的要求制定了铝的化学成分和机械性能。

The following picture was cut from MLX Aluminum chemical composition standards. In the standard, MLX formulated the aluminum chemical composition and mechanical performance according to GB and other customers' requirements.

MLX铝合金化学成分标准
Aluminum alloy chemical composition standards


重庆大江美利信压铸有限责任公司
CHONGQING DAJIANG MELLIHON DIECASTING CO.,LTD
护盾及压铸件、重力铸造件化学成分力学性能标准
QB/MLX.JS-02-2015.H

Alloy code	Chemical composition											
	Si	Cu	Mg	Mn	Fe	Zn	Pb	Ti	Sn	Ni	Cr	Other impurities
AlSi7Mg0.6 (B54 1120)	6.5～7.5%	≤0.1%	0.45~0.7%	≤0.1%	≤0.2%	≤0.1%	≤0.05	0.08~0.20%	≤0.05%	≤0.05%	—	≤0.1%
MLX-9	6.5～7.5%	≤0.1%	0.45~0.7%	≤0.1%	≤0.2%	≤0.1%	≤0.05%	0.08~0.20%	≤0.05%	≤0.05%	—	≤0.1%

铝合金检验Aluminum alloy inspection

2）MLX-1力学性能 Mechanical property

铝合金力学性能Aluminum alloy mechanical property

牌号 Aluminum code	机械性能Mechanical performance			
	抗拉强度tensile strength	屈服强度yield strength	延伸率Percentage of elongation	硬度 Brinell hardness
AlSi7Mg0.6	B≥290N/mm2	≥255Rp0.2	δ≥4%	≥90HB
MLX-9	B≥290N/mm2	≥255Rp0.2	δ≥3%	≥90HB

万能试验机Universal testing machine

最大试验力maximum force：100kN

布氏硬度计Brinell hardness tester

熔炼Melting

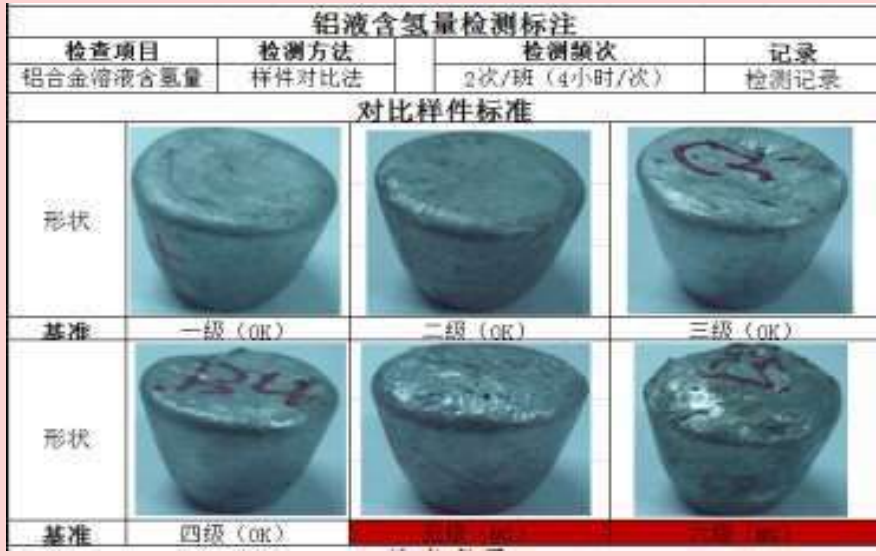
Equipment	Qty.	Model	Inspection item	
			Annual fee return into furnace and temperature	Mechanical performance
熔炼炉 Melting furnace	1	NHII-N6000/3000G-eg	Annual fee return into furnace ＜40%， Temperature: 700-750℃	mechanical performance： tensile strength B≥240N/mm2, yield strength≥140Rp0.2， Percentage of elongation δ≥1%， Brinell hardness ≥80HB

采购符合标准的铝锭，铝锭入场时每个批次均进行化学成分及断面检查；熔炼是每班取样进行化学成分及机械性能检查。

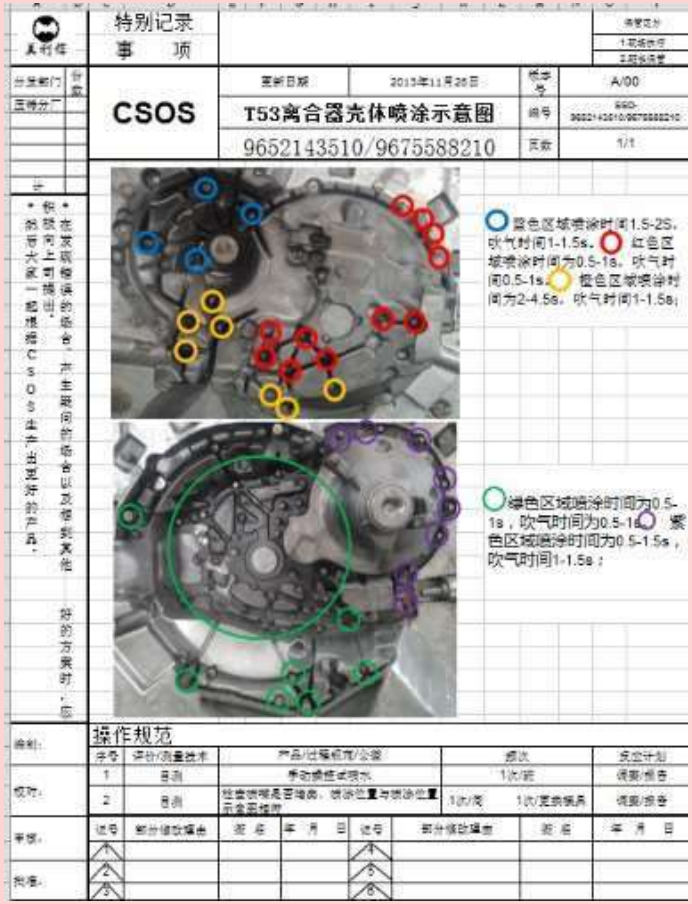
Purchasing standard aluminum ingots, each batch was checked for chemical composition and cross-section; smelting process take sample in each shift to inspect chemical composition and mechanical properties.

除气Degasing

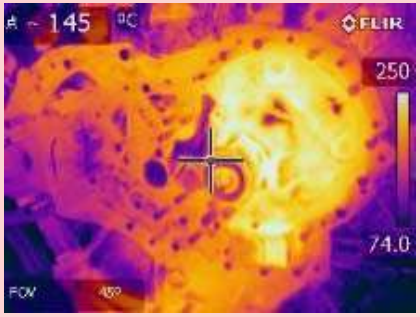
Equipment	Qty.	Model	Manufacture factory	Inspection
旋转除气机 Rotary degassing machine	1	TE272SI	IDECO	除去铝液中杂质及气体 Remove impurities in liquid aluminum and gases
测氢仪 Hydrogen tester	1	CQY-01	Ji'nan head thermal Co. Ltd.	检测铝液中的含氢量 Detection of hydrogen content in liquid aluminum

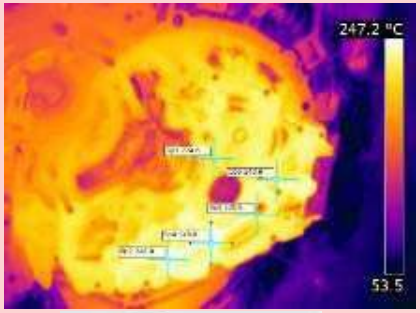


2）喷涂及模具温度控制Spraying and mold temperature control


特别记录
事　项
CSOS
T53离合器壳体喷涂示意图
9652143510/9675588210
操作规范

红外线测温仪　1次/班
Infrared thermometer once / shift





热成像仪 1次/周
Thermal imager 1time/week

热电偶（实时监控）
Thermocouple
(real-time monitoring)

4）压铸件的气孔率的控制 Die casting porosity control

实时X射线无损检测机
X-ray nondestructive testing machine

丹东奥龙X射线数字实时成像探伤机
动态灵敏度优于1.6～2.0% 动态灵敏度优于1.6～2.0% 系统分辨率：≥38LP/cm
最大穿透能力(A1)：140mm(实时成像状态下)
灵敏度1.5%（50mmAL）分辨率14LP/cm
可进行X射线拍片和实时成像显示两种方式工作

X-ray NDT machine using the X - ray transmission the parts, and the attenuation between the internal defects and parts is not the same, so the defect can be exposed in the film.
The sensibility of the machine is 1.5%, and it can identify ø0.5 pore .
Inspection frequency, 3 times per shift (start, middle end of shift), and 3pcs per time.