

## T1 Mold Tear Down Report



Date: 26-Oct-2023 | JG Number: JG23053

Part Name: Blynko Standard Block | Part Number: Blynko Standard Block | No. Of Cavity: 32

Mould Size 模具尺寸: 600.X450.X432.

Resin & Shrinkage 胶料和缩水: ExxonMobilTM HDPE HMA 016; 1.022 shrinkage

No. of Cavity 穴数:

Type of Mold 模具类型: 2 Plate

Part size & Weight 产品尺寸和重量:

Runner System 进胶系统: Hot Runner 热

Date 日期:

Has Customer Requested for Spare Parts: No

Part Image 产品图片



Mold Image 模具图片



Has tool steel dimension report been done by the factory or is planned?

## Mold Component Breakdown Photos 配件拆散照









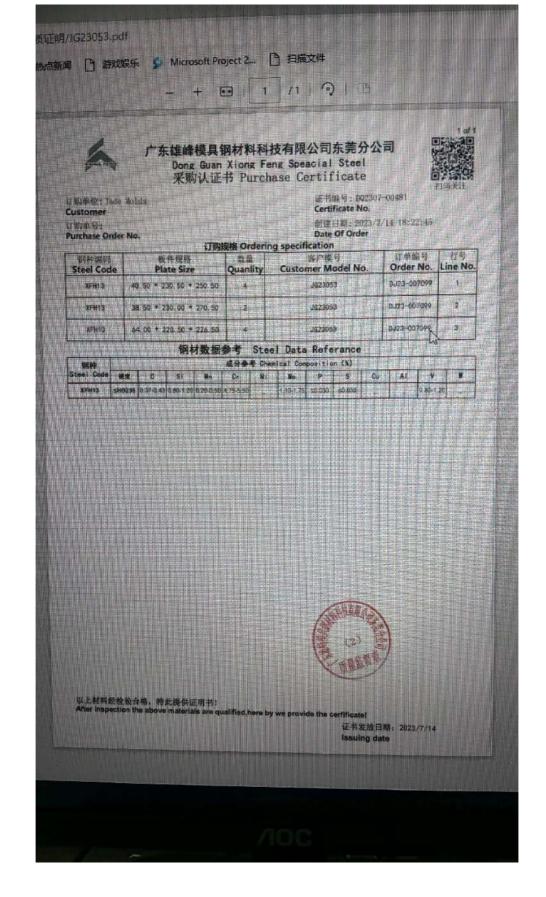


Check core & Cavity Hardness	HRC 50.
Check A and B plate pockets before fitting of core and cavity.	OK
Are all Mounting bolts installed correctly.	ОК
Are component area in cavity protected with protected	ОК
tape or spray.	ОК
Does the core and cavity surface have a good visual appearance free from hammer marks, dents, and	ОК
machining mark.	OK
Are component area parting edges being free from any damage.	ОК
Check all sharp edges of cavity and cores, all sharp edges that have no function requirement must be broken 0.01 radius	
Verify that the gate and runner size is correct according to design; make sure the runner is polished.	
Are Sliders OK? 行位滑动是	N/A
Is there a positive locking method for open position.	N/A
Slides equipped with hydraulics must have limit switch installed. 油缸行位必须要有限位开关	N/A
Do all gibs and wear plate greased. 所有的压块和耐磨 块是否有油槽	N/A
Do the Slider have a good visual appearance free of hammer marks, dints, and machining marks. 行位外观是否ok,无碰伤,无机器加工痕。	N/A
Check all the mechanism; make sure they are all smooth and functional. 检查所有的机械结构,确保他们顺畅及功能性良好。	N/A
Are slider properly blue matched with core. 所有的行位与模仁的蓝丹配合是否ok?	N/A
Is slider movement OK as per design. 行位的滑动是否遵循模具设计,且ok	N/A
Are the molding surfaces free of scratches. 胶位面是 否无刮伤	N/A
Are cutter marks visible in the ribs? 骨位上是否有加工刀纹/火花纹?	N/A

Do the Lifter have a good visual appearance free of hammer marks, dents, and machining marks. 斜顶外观是否ok,无碰伤,无机器加工痕。	N/A
Are Lifter guide bushing installed? 斜顶是否斜顶导向套/块	N/A
Do square lifter have greased. 方形斜顶是否有油槽	N/A
Check all the Lifters; make sure they are all smooth and functional. 检查所有的斜顶,确保他们顺畅及功 能性良好。	N/A
Are the square lifters hardened. 方形斜顶是否有加硬	N/A
Are there gap in between two lifters after ejector fully forward condition. 斜顶完全顶出的情况下,斜顶间距是否足够	N/A
Is there any play in lifter after assembly.	N/A
Please ensure hot runner pockets machining has finished as per design before installation of hot runner. 装模前确保流道槽依照模具设计加工完成。	ОК
Remove any residual anti-corrosion agent used by Hot runner supplier for preservation of the individual system parts using a dry cloth.3	ОК
Check if the paint applied during assembly for sealing reasons is not damaged on the hose connections of the hydraulic system. 检查液压系统的软管连接处是否因密封原因在装配过程中涂上油漆	ОК
Wires need to be bundled and covered by plate to avoid breaking. 线束需要绑在一起,用盖板覆盖避免折断或者损坏	ОК
Is sprue bushing top radius being as per customer requirement. 鸡嘴的SR 是否根据客户的要求	ОК
Please check all the heaters and thermocouples are in working condition. 所有的加热和感温线是否正常工作	ОК
Check if the sprue and nozzle are in correct size. 检查 鸡嘴或者咀头是否尺寸正确	OK
Internal surface of sprue bushing must be polished to drawing standard. 鸡嘴孔必须要按标准要求省模	ОК
In case of cooling from bolster, O-ring pocket provided in mold base plate?	N/A

Water connector type is correct? The hole clearance for the water connector is enough? The out edge of the hole needs chamfered and be constant. 水嘴型号是否正确? 水嘴的运水沉头间隙是否足够? 运水沉头需要倒角,保持一致性。	OK
Ensure the water line is through, marked in and out correctly, make sure the water line tube will not interfere with clamp slots. 确保运水是通的,IN/OUT 标记正确,确保运水管不会与码模槽干涉	ОК
Ensure no water leakage is there. 确保运水不漏水	ОК
Are QRC as per customer Requirement. QRC是否根据客户的求?	N/A
In the block type hydraulic cylinder, ensure to install the O-ring before assembling the hydraulic cylinder.	N/A
Ensure no Oil leakage is there. 确保油缸不会漏油	N/A
Are the cylinders have cushion on both end of stroke. 油缸是有预留的行程余量	N/A
Cylinder is proper guided with mold with dowels Pins. 油缸是否与模具有合适的销钉定位	N/A
Is cylinder properly locked with plate? 油缸是否有板 锁住	N/A
Are the mold faces free from corrosion. 模胚是否无生 锈	ОК
Mold base should have correct markings, pay bar slots b/w parting line, clamp, support and ejector plates, check if lifting holes for each plate is available and mark with correct thread dimension.	ОК
All pins, cores, sleeves must be marked for correct location, check the dimension and fitting clearance include length and head. 所有的顶针,司筒必须正确定位,刻字,检查尺寸和配合的间隙,包括长度和头部。	OK
Ejector elements guide length is proper as per design. 顶出导向的长度适合,根据模图设计。	ОК
All parts, including those parts that are interchangeable, will be identified for position in a way that assures the locations mark is always clearly visible even after assembly.	ОК

All core pins, angle pins, cam locks and guide pins must be greased. 所有后模顶针,斜边,边锁和导向 针都需要打油。	ОК
All limit switches must be orientated properly for wiring and function. 限位开关需要正确的定位安装,接线和功能良好。	ОК
Are there threaded lifting holes in all parts. 所有的零件是否有吊模螺丝	ОК
Are attention plate installed in case of special mechanism. 有特殊机构的模具,是否有警告铭牌	ОК
All the components need be numbered. 所有的配件都需要编号刻字。	ОК
No sharp edge, corner, and burr outside the mold. 模 具的外观不能有利边,毛刺	ОК
Push ejector plate forward and check if all pins, sleeves, lift cores and all other moving components spin freely. 往前推顶针板,检查所有的顶针,司筒,斜顶和其他滑动件是否顺畅。	ОК
Does ejection have noise when moving.	ОК
Check if slides clear ejector pins, lift cores and any other moving parts with sufficient clearance. 在注塑机上开合模,检查早回机构功能是否ok。检查行位,斜顶,顶针和其他活动件是否有足够的间隙。	OK
1. Is mold base as per customer requirement? 模胚是否	ОК
根据客户要求  2. Is size of the mold (length x width x height) correct? 模具长宽高是否正确	OK
3. Are lifting eyebolts fully seated on the mold and not interfering with mold action? 吊环能够完全拧进去而且不干涉其他模具动作	ОК
4 Is any welding used on mold? 是否有烧焊	No
5. The heat treatment certificate and hardness for all applicable mold components? 热处理证书和材料证书 硬度说明	OK



6. Do main pillars or guide bars engage before any other part of the tool.? 合模时导柱导套是否最先合上

ОК

7. Is cavity filling balanced? 各模穴填充是否平衡

OK

8. Is mold axis at center(sprue bushing centre or offset)? 这口套在模目中心还具偏心

Center

offset)? 浇口套在模具中心还是偏心

9. Are K.O. pattern meet with Machine? KO是否符合机 OK 台





10. Is locating Ring size is as per machine requirement? OK 定位圈大小是否符合机台



12. Is sprue bushing top radius is as per injection machine nozzle radius? 浇口套R与机台是否对应

ОК



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15. Sprue bushing,runner turn and gate lead in's properly radiused? 浇口套,水口专司gate lead是否合 适R	ОК
16. Air/Hydraulic cylinder wiring and function checked? 油缸气缸接线和功能是否有问题	N/A
17. Cavities have sufficient steel support to prevent cracking? 模仁有足够支撑	ОК
18. Cavities and cores properly polished? 前后模正确 抛光	ОК





- 19. Bafflers and bubblers are of correct length, shape OK and orientation?
- 20. All cavities & cores have identification? 所有前后模 OK 都有标识





## QC Problems (if Any) 此处输入检查问题点

land length? 排气有效且深度长度位置正确合理





22. No runner are machined on split line? 分型线出无 OK 流道

23. Mold blue off well (shut offs,cams,slider,return OK pins,cavity perimeter etc.? 蓝丹到位,分型面滑块回针 等





25. Does the mold identification tag provided? 模具身 N/A 份铭牌

26. Is cooling balance for each cavity, core & slider? 前 OK 后模滑块冷却是否平衡

27. cooling lines IN, OUT and water manifold are on N/A Non operator side of mold? 运水进出标识以及集水块在非操作测



28. Ensure that all cooling channel, extended nozzles, valves,air fitting are connecting properly? 水嘴堵头气 阀油嘴等是否安装正确

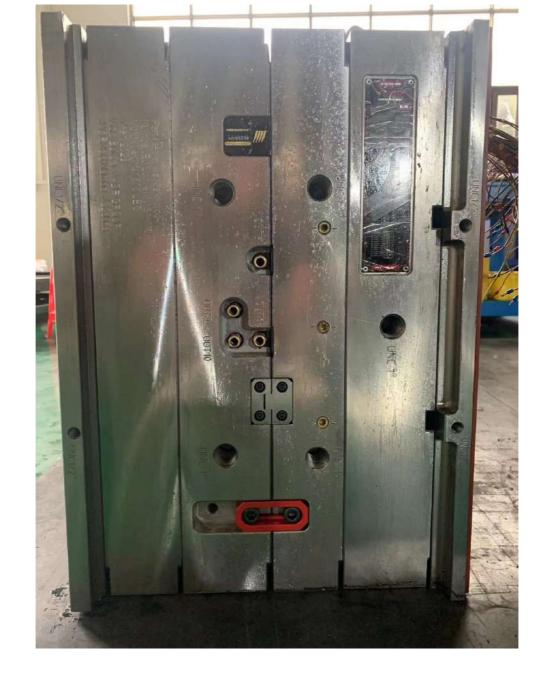
ОК

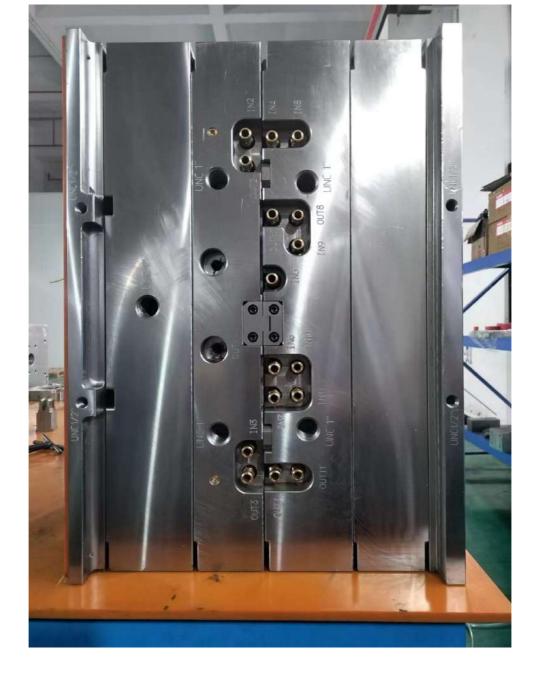
29. Are all waterlines clean, unobstructed and do they permit a full circuit flow? 水路是否无杂物和生锈,水 路正常畅通

ОК

30. Is there water leakage while testing? 漏水测试是否 No 通过

31. Cooling lines numbered & labeled-ex-1-IN, 1-OUT etc? 每组水路进出标识清楚



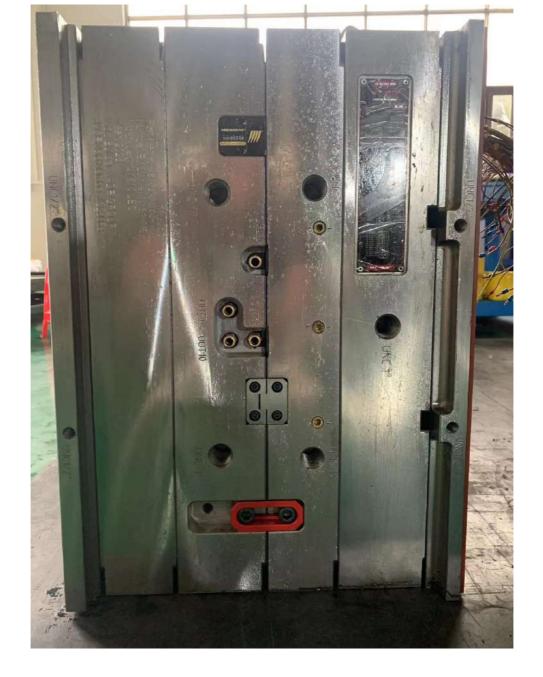


35. Are air vent provided for cold Slug well and runner? OK 冷料井和流道是否都有排气





37. Is mold equipped with parting lock & shot counter? OK (on Core Side) 锁模块和计数器是否安装

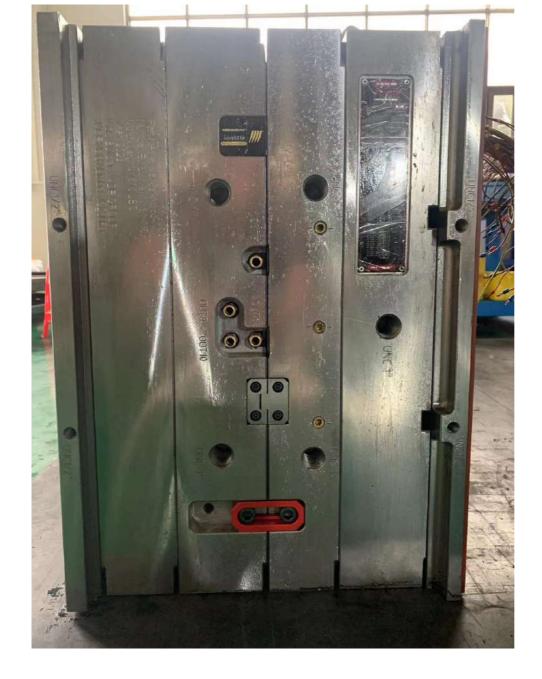


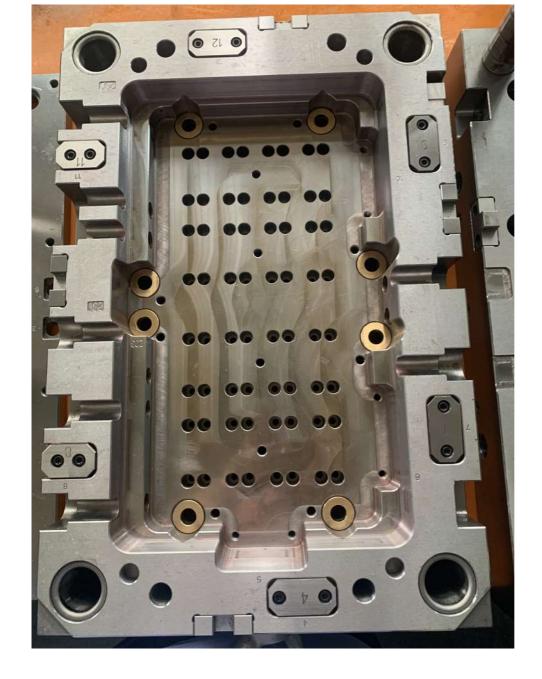
37A. Is parting lock per DME standard?

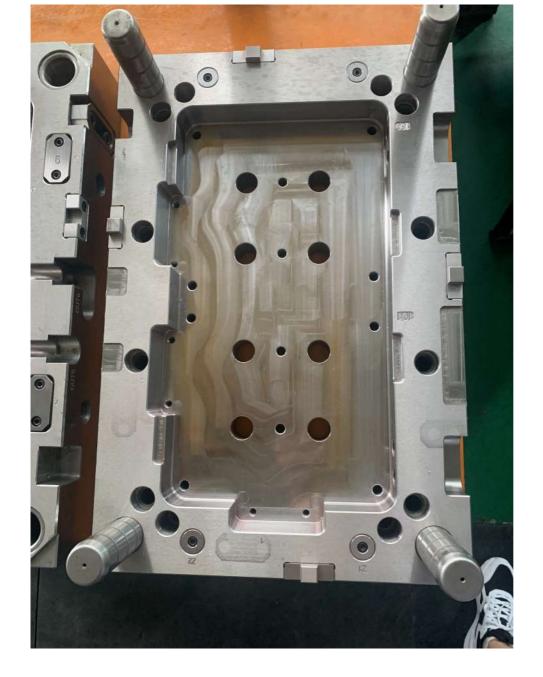
Yes

37B. Is red dye applied on parting lock during bed to check the male and female matching. Matching should be only on top and bottom face of male and female parting locks.

Yes







38. All plates, inserts, and components are clean and free from grit, debris, and chips?所有板镶件配件是否干净清洁无毛刺

ОК

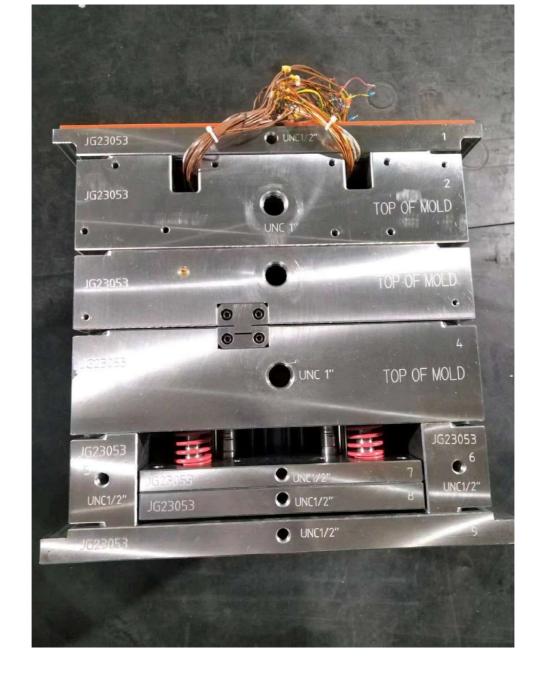


39. Is fill balance acceptable? 每个模穴都有进胶口且大 OK 小一致



## QC Problems (if Any) 此处输入检查问题点

41. All plates have lifting holes per face? 每块板的每个 OK 面都有吊环孔



42. All plate edges are chamfered? 所有利面都有倒角







44. All return and ejector pins, and support pillars are of correct length? 回针顶针撑头长度正确

ОК

45. All pins, sleeves, lift cores and all other moving components spin freely? 所有顶针司筒斜顶避空到位能转动

ОК

47. Is material for insert is specified by customer/approved by customer? 镶件材料是否符合要求

ОК







48. O-ring pockets are provided In mold base plates where cooling is transferred to mold base? 胶圈都有提供在模胚和模仁之间

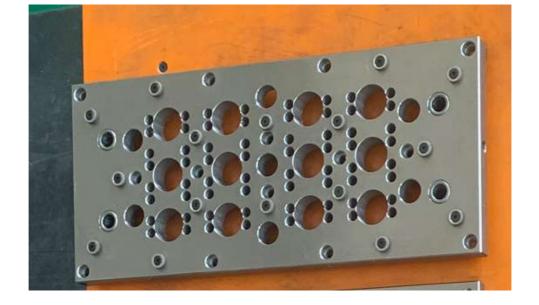
# N/A

#### QCProblems (If Any) 此处输入检查问题点

49. Is locking provided for the profile pins? 销钉锁死 OK

49A. Are the ejector pins at the correct hardness? 所有 Yes 的顶针硬度是否正确?

50. Ejector plate should have a dead stop? 垃圾钉有吗 OK



51. Spring Provided for positive retract of ejector system? 定出系统回针弹簧

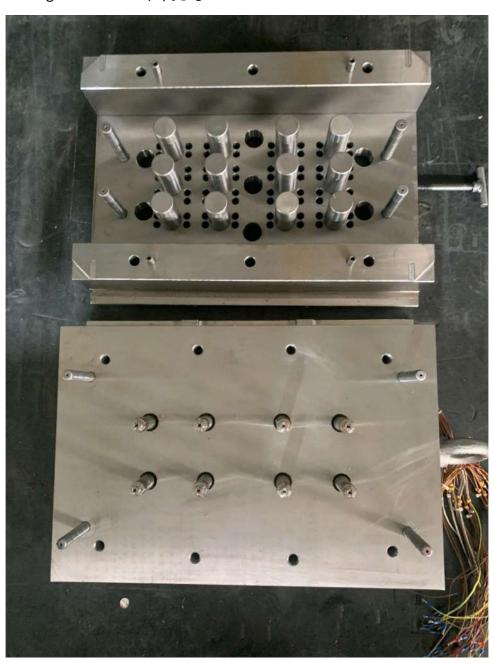
ОК





53. Does ejector elements have sufficient guiding length in insert?(Guide length min 20 mm) 中托司

ОК



56. Is ejector stopper provided? 顶出限位

ОК



No

## QC Problems (If Any) 此处输入检查问题点

Is three plate section applicable to this mold?

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57. Is any positive mechanism Provided in design to ensure 1st opening of mold from runner half? 流道侧开模	N/A
58. Is sufficient gap provided for feed ejection(min. 20 mm more then feed system)? 至少超出进胶20mm	N/A
59. Is guide pillar length is sufficient for mold? 导柱深 度是否够	N/A
60. Is limit bolt/latch provided to restrict opening of cavity and runner stripper plate? 扣机	N/A
61. Are runner pullar pin provided? 流道针	N/A
62. Is mechanism provided for sprue pullar opening, with sufficient opening? 是否有机构	N/A
63. Ensure that sprue bush have taper fitting with runner stripper palte and should not come out during mold opening? 浇口套固定	N/A

#### QC Problems (If Any) 此处输入检查问题点

Is slider section applicable to this mold?	No
64. Is wear plate & guide rail hardened? 耐磨块导轨加 硬	N/A

65. Movement of slider is enough to release undercut

N/A

(min. 5 mm more then undercut) 滑块是否足够脱倒扣至少多5mm出来	
66. All sliding parts have grease grooves, be lubricated, and move easily? 滑块都有油槽且润滑滑动合理	N/A
67. slider do not interfere with ejector pins or other mold components? 滑块与顶针还有其他配件不冲突干涉	N/A
68. Are ball catcher, spring, slider stopper are provided? 波仔,弹簧,铲机都有	N/A
69. Are oil grooves provided on all moving faces? 所有 移动面都有油槽	N/A
70. For slider with more then 200 mm length should have 2 CAM pin. 超过200mm 滑块都有2个斜导柱	N/A
71. Is guide pillar is engage before fingre pin (min 10 mm)? 斜导柱至少10mm出来最先合上	N/A
72. Are springs and DME slide retainers fitted? 弹簧和 行位夹是否安装	N/A
73. Is cooling adequet? 滑块冷却合适吗	N/A
74. Is mechanical/electrical stopper provided (when ejector element present under slider)? 机械和电子限位	N/A
QC Problems (if Any) 此处输入检查问题点	
Is cylinder section applicable to this mold?	No
Is cylinder section applicable to this mold? 75. Is cylinder is projecting outside the mold? Is it protected? 油缸/气缸是否在模具外围且有保护	<b>No</b> N/A
75. Is cylinder is projecting outside the mold? Is it	
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release from lifter? 顶针有效,产品能有效从斜顶脱离	
82. Check cooling for big lifter (avoid cooling from connecting rod)? 大斜顶冷却,避免螺丝等	N/A
83. Check dovel pin diameter in the lifter to avoid breakage (dovel dia. Should be large enough to easy removal)? 斜顶销钉直径检查	N/A
84. Are lifter housing length is enough for lifter movement? 斜顶座长度足够	N/A
85. Check gap between two lifter on fully forward condition 两斜顶间距检查	N/A
QC Problems (If Any) 此处输入检查问题点	
Is Hot Runner section applicable to this mold?	Yes
Is Hot Runner section applicable to this mold?  86. Is insulation sheet provided both side of mold?两位是否都有隔热板	
86. Is insulation sheet provided both side of mold?两值	
86. Is insulation sheet provided both side of mold?两便是否都有隔热板 87. Is all fitting dimension as per provided matching data from HOT runner supplier? 所有安装尺寸跟热流	OK
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86. Is insulation sheet provided both side of mold?两位是否都有隔热板87. Is all fitting dimension as per provided matching data from HOT runner supplier? 所有安装尺寸跟热流道供应商一致88. Is heat expansion clearance considered ?热电偶避空考虑	OK OK

# 热流道板两头冷却 92. Check air/ oil channel are as per hot runner data? N/A 气路油路与规格一致 93. Hot runner have correct connector type? 热流道接 OK

头型号 94. Hot runner wiring checked? 热流道接线检查 OK

95. Are all slots (clamping bolt, knockout etc.) provided OK in insulation sheet? 隔热板KO等孔螺丝检查

96. Is hot runner connector selection is OK? Mention OK zones? 热流道接头合适?

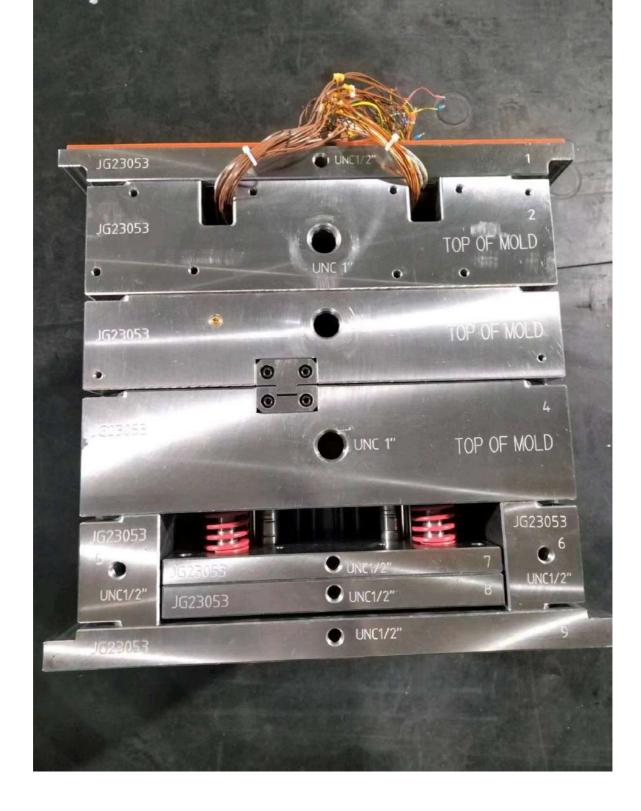
97. Check the diameter of hot tip opening as compared with approved drawing.

Matching

#### QC Problems (If Any) 此处输入检查问题点

Parting line given in core & cavity block with min. 1 mm gap? 前后模分型线最小1mm缝隙

ОК

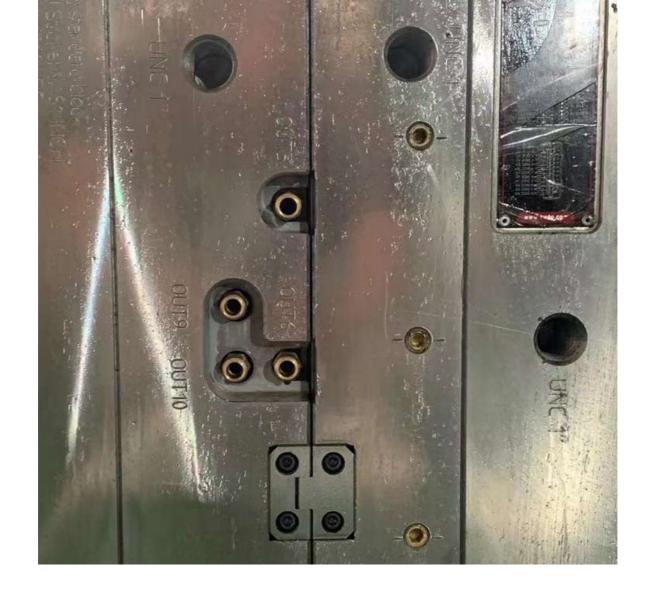




Have pry bar slots are provided on all plates? 所有板都 OK 有撬模坑

Cooling lines recessed? 水嘴没有突出模具

ОК

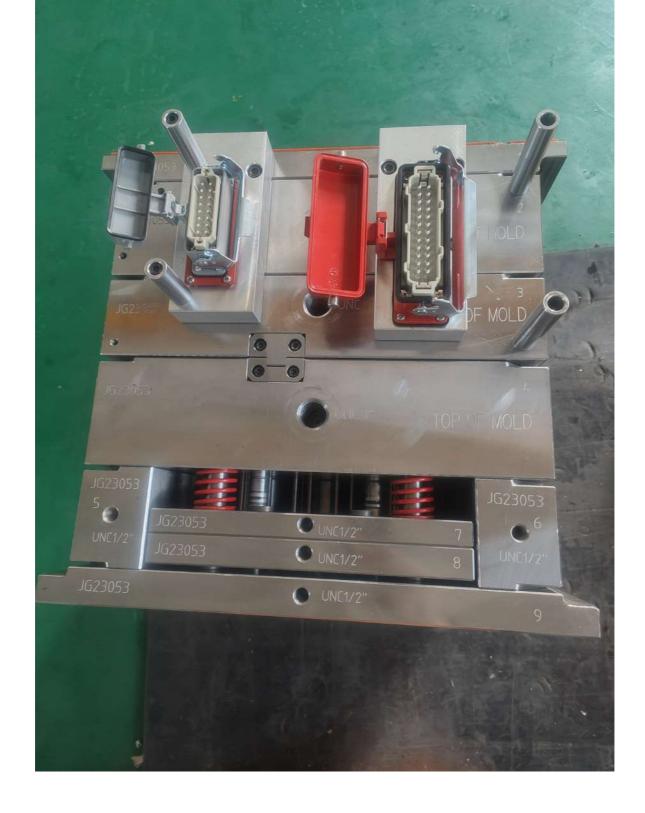




Lifting points are at mold center of gravity? 模具重心在 OK 模具中心

QC Problems (if Any) 此处输入检查问题点

Mold Surface Finish Photos 模具外观照片







## Other Comments (If Any) -其它评论(如有必要)

QC Inspector 模具检查人

LZY

QC Inspector Signature 模具设计批准

LZY

**QC Problems (If Any) Summary** 

