

## YLL/YGL 型立式 生物质有机热载体炉

YLL/YGL type vertical combustion  
biomass organic heat carrier furnace



### »» 产品范围 Scope of product

供热量:  $(60 - 300) \times 10^4$  kcal/h  
Heat output:  $(60 - 300) \times 10^4$  kcal/h  
设计压力: 1.1 MPa  
Design pressure: 1.1 MPa

### »» 性能优势

#### 1 高效节能

- 炉本体换热面采用密排盘管结构, 烟气 S 型多回程换热, 换热系数高, 热效率高。
- 锅炉尾部布置高效空器预热器, 吸收热量, 降低排烟温度。
- 锅炉采用优质保温材料 and 特殊施工工艺, 热损失小。
- 炉排炉拱特殊设计, 风量独立调节, 煤燃烧均匀充分, 煤种适应性广。
- 鼓风机、引风等采用变频控制。

#### 2 安全可靠

- 本体受热面采用密排盘管, 受热面布置充足, 有效降低管子表面热负荷, 导热油介质使用更安全。
- 介质流程合理, 导热油由低(进口)到高(出口), 运行中产生的介质气体很难在炉内停留, 可方便排出系统。
- 炉顶布置密排盘管, 吸收热量, 能更好保护炉顶, 避免炉顶烧坏。
- 锅炉运行采用远程和近地多参数监控, 自动控制和监测仪表齐全。

#### 3 环保

- 烟气通过高效除尘器后排放。

### Performance advantages

#### 1 Energy-efficient

- Furnace body heat exchange surface using close tray tube structure, flue gas S type multipass heat transfer, heat transfer coefficient is high, high thermal efficiency.
- Boiler tail layout efficient air unit preheater, absorb heat, reduce the smoke temperature.
- Boiler is made of high quality thermal insulation material and special construction process, the heat loss is small.
- Grate furnace arch special design, air volume independent regulation, coal combustion, coal even fully wide adaptability.
- Fan adopts frequency conversion control.

#### 2 Safe and reliable

- Body surface using close tray tube, heating surface layout enough, effectively reduce the pipe surface heat load, heat conduction oil medium use more safety.
- Medium flow is reasonable, the heat conduction oil from low(import)to high (export), running from medium gas in furnace, it is difficult to stay to discharge system.
- Top arrangement tight row of coil, the absorption quantity of heat, can better protect throat, avoid top burn out.
- The boiler operation distance and near earth multiparameter monitoring, automatic control and monitoring instrument is complete.

#### 3 Environmental protection

- Smoke through the high efficiency filter after discharge.

### »» 结构特点

- YGL 型系列有机热载体炉为组装式强制循环链条炉排 / 固定炉排锅炉。锅炉由上部本体和下部链条 / 固定炉排组成, 工地现场组合。
- 锅炉本体受热面采用密排圆形盘管, 由内、中、外多层密排圆盘管组成。
- 锅炉结构紧凑, 占地面积小, 组装程度高, 安装周期短。

### Structural features

- YGL type series organic heat carrier furnace for packaged forced circulation chain grate / fixed furnace boiler. Boiler by upper body and lower grate/fixed furnace composition, jobsite combination.
- Boiler heating surface using dense row circular coil, by inside and outside, multilayer tight row circular tube composition.
- Boiler structure is compact, cover an area of an area small, high degree of assembly, installation period is short.

### »» 产品参数 Product parameters

锅炉型号 Model	YLL/ YGL -180SCl	YLL/ YGL -300SCl	YLL/ YGL -350SCl	YLL/ YGL -480SCl	YLL/ YGL -700SCl	YLL/ YGL -1000SCl	YLL/ YGL -1200SCl	YLL/ YGL -1400SCl	YLL/ YGL -1600SCl	YLL/ YGL -1900SCl	YLL/ YGL -2300SCl	YLL/ YGL -2900SCl	YLL/ YGL -3500SCl
供热量 $\times 10^4$ (kCal/h) Delivered heat $\times 10^4$ (kCal/h)	15	25	30	40	60	80	100	120	140	160	200	250	300
系统效率 (%) System heating efficiency (%)	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$
设计压力 (MPa) Design pressure (MPa)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
最高工作温度 (°C) Max.working temperature (°C)	320	320	320	320	320	320	320	320	320	320	320	320	320
介质循环量 (m <sup>3</sup> /h) Medium circulation (m <sup>3</sup> /h)	12.5	40	40	60	60	100	100	100	100	160	160	200	200
主管口径 (DN) Diameter of main pipe (DN)	40	80	80	100	100	125	125	125	125	150	150	200	200
装机容量 (kW) Installation capacity (kW)	8.5	15	15	20	25	40	48	55	60	73	77	100	100
适用燃料 Applicable fuel	生物质 / biomass												

注: 由于公司产品不断改进, 以上产品参数将不断更新, 本页所列仅供参考。Parameters listed herein are just for reference are those are subject to continuous modification with product upgrading.  
注: 生物质炉热效率 86%。The heat efficiency of biomass furnace is 86%.

## YLW/YGW 型卧式 燃煤 / 生物质 有机热载体炉

Model YLW/YGW horizontal  
coal-fired/Biomass organic heat  
carrier furnace



### »» 产品范围

供热量:  $(160 - 2000) \times 10^4$  kCal / h  
设计压力: 1.1 MPa

### »» 性能优势

#### 1 高效节能

- 辐射换热段采用双密排盘管结构, 对流换热段 S 型多回程换热, 尾部设置空气预热器。
- 锅炉尾部布置余热炉、空气预热器, 吸收热量, 降低排烟温度, 提高产品热效率。
- 炉排炉拱特殊设计, 风室独立调节风量, 煤燃烧均匀充分, 煤种适应性广。
- 锅炉采用优质保温材料 and 特殊施工工艺, 热损失小。
- 风机等采用变频控制。

#### 2 安全可靠

- 介质流程合理, 导热油由低 (进口) 到高 (出口), 运行中产生的介质气体很难在炉内停留, 可方便排出系统。
- 炉膛换热面采用双密排盘管, 受热面布置充足, 有效降低管子表面热负荷, 导热油介质使用更安全。
- 锅炉运行采用远程和近地多参数监控, 自动控制 and 监测仪表齐全。

#### 3 环保

- 烟气通过高效除尘器后排放, 保证达到国家规定环保要求。
- 尾部对流换热段采用特殊结构, 并配置吹灰装置, 运行不积灰, 换热效率高。

### Scope of product

Heat output:  $(160 - 2000) \times 10^4$  kCal / h  
Design pressure: 1.1 MPa

### Performance advantages

#### 1 Energy-efficient

- Radiation heat transfer section adopts double row of coil structure, convective heat transfer was more than s return heat exchange, the tail set air preheater.
- Boiler tail arrangement of waste heat furnace, air preheater, absorbing heat and reduce exhaust smoke temperature.High thermal efficiency.
- Grate furnace arch of special design, the wind room independent adjust air flow, coal burning evenly, wide adaptability of coal.
- The boiler is made of high quality thermal insulation material and special construction craft, small heat loss.
- Fan etc. Adopt frequency conversion control.

#### 2 Safe and reliable

- Medium process reasonable, heat conduction oil (imports) from low to high (export), produced in the operation of the gas medium is difficult to stay within the furnace, can be convenient to discharge system.
- Furnace heat exchange with double row of coil, heating surface arrangement is sufficient, effectively reduce the tube surface heat load, heat conduction oil medium use safer.
- Boiler adopts remote and near multi-parameter monitor, automatic control and monitoring instrument is complete.

#### 3 Environmental protection

- Flue gas emissions after through efficient dust catcher, ensure that meet the requirements of environmental protection of the provisions of the state.
- Tail convective heat transfer section adopts special structure, and configure the blowing device, running is not heavy, high thermal efficiency.

### »» 结构特点

- YLW/YGW 型系列有机热载体炉为组装式强制循环链条炉排 / 固定炉排锅炉。锅炉由上部本体和下部炉排组成, 工地现场组合。
- 锅炉本体辐射受热面采用单炉膛或密排双方形盘管, 后部为蛇形对流换热管。空气预热器布置在锅炉尾部。
- 结构紧凑, 占地面积小, 组装程度高, 安装周期短。

### Structural features

- YLW/YGW Type series organic heat carrier furnace for packaged forced circulation chain grate/fix fire grate boiler. Boiler is composed of upper body and lower grate, site combination.
- Boiler heating surface using single furnace or close double fanxingpan tube, back to serpentine convection heat exchange tube. Air preheater in boiler tail.
- Compact structure, cover an area of an area small, high degree of assembly, short installation period.

### »» 产品参数 Product parameters

锅炉型号 Model	YLW/YGW -1900MA(SCI)	YLW/YGW -2300MA(SCI)	YLW/YGW -2900MA(SCI)	YLW/YGW -3500MA(SCI)	YLW/YGW -4100MA(SCI)	YLW/YGW -4700MA(SCI)	YLW/YGW -5900MA(SCI)	YLW/YGW -7000MA(SCI)
供热量 $\times 10^4$ (kCal / h) Delivered heat $\times 10^4$ (kCal / h)	160	200	250	300	350	400	500	600
系统热效率 (%) System heating efficiency (%)	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$
设计压力 (MPa) Design pressure (MPa)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
最高工作温度 (°C) Max.working temperature (°C)	320	320	320	320	320	320	320	320
介质循环量 (m³/h) Medium circulation (m³/h)	160	160	200	200	200	260	300	340
主管口径 (DN) Diameter of main pipe (DN)	150	150	200	200	200	200	250	250
装机容量 (kW) Installation capacity (kW)	75	77	100	100	120	140	175	215
适用燃料 Applicable fuel	II、III类烟煤 Soft coal,class II and III / 生物质							
锅炉型号 Model	YLW/YGW -8200MA(SCI)	YLW/YGW -9400MA(SCI)	YLW/YGW -12000MA(SCI)	YLW/YGW -14000MA(SCI)	YLW/YGW -16500MA(SCI)	YLW/YGW -17500MA(SCI)	YLW/YGW -19000MA(SCI)	YLW/YGW -23500MA(SCI)
供热量 $\times 10^4$ (kCal / h) Delivered heat $\times 10^4$ (kCal / h)	700	800	1000	1200	1400	1500	1600	2000
系统热效率 (%) System heating efficiency (%)	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$	$\geq 85$
设计压力 (MPa) Design pressure (MPa)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
最高工作温度 (°C) Max.working temperature (°C)	320	320	320	320	320	320	320	320
介质循环量 (m³/h) Medium circulation (m³/h)	400	520	600	680	800	1000	1000	1000
主管口径 (DN) Diameter of main pipe (DN)	250	300	300	350	350	400	400	400
装机容量 (kW) Installation capacity (kW)	215	270	315	380	460	540	600	620
适用燃料 Applicable fuel	II、III类烟煤 Soft coal,class II and III / 生物质							

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2、系列锅炉品种为工厂代产品, 如需其他型号参数锅炉可参阅有关图纸资料, Tabular boiler varieties for our representative products, if you need other model parameters boiler can refer to the drawings.  
3、燃生物质锅炉效率达 86%, The efficiency of biomass fire boiler is up to 86%.  
注: 生物质炉热效率 86%, The heat efficiency of biomass furnace is 86%.

## YYL/YYW 型立式 / 卧式 燃油气有机热载体锅炉

YYL ( W ) type vertical ( horizontal )  
type fuel oil ( gas ) organic heat carrier boiler



### »» 产品范围

供热量:  $(30 - 1800) \times 10^4$  kcal / h  
设计压力: 1.1 MPa

### »» 结构特点

- YYL /YYW 立式 / 卧式系列有机热载体炉为快装立式 ( 卧式 ) 强制循环燃油 ( 气 ) 锅炉。
- 锅炉受热面结构紧凑, 受热面由内、中、外 ( 或内、外 ) 密排的圆盘管构成, 内盘管为辐射受热面, 中、外盘管与内盘管的外表面构成对流受热面。
- 燃料在内盘管组成的燃烧室内燃烧放热, 经辐射受热面吸收大部分热量后, 高温烟气进入对流受热面并进行换热。
- 锅炉尾部加装尾部受热面, 降低锅炉的排烟温度, 低温烟气由锅炉烟气出口直接排至烟囱并排入大气。
- 锅炉适应市场需求, 可做 80mg、50mg、30mg 等低氮燃烧系统设计。
- 250 万大卡以下, 可做成撬装式结构。

### Scope of product

Heat output:  $(30 - 1800) \times 10^4$  kcal / h  
Design pressure: 1.1 MPa

### Structural features

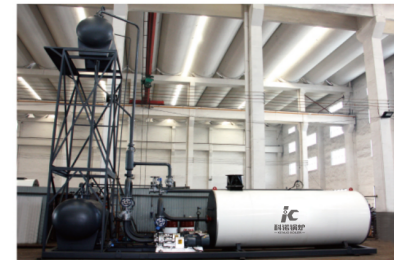
- YYL Vertical / YYW horizontal series organic heat carrier furnace forced circulation fuel ( gas ) boiler for quick vertical ( horizontal ) .
- Boiler heating surface compact structure, the heating surface from the inside, outside ( inside and outside ) close-packed circular tube constitutes the inner coil radiation heating surface, the outer surface of, the outer coil and the inner coil convection heating surface.
- The exothermic combustion chamber for burning fuel including coil composed, most of the heat is absorbed by the radiation heating surface, high temperature flue gas into the convection heating surface and the heat exchanger.
- Retrofitting boilers tail with the tail heating surface, reducing the exhaust gas temperature of the boiler, the low-temperature flue gas from the boiler flue gas outlet directly discharged to the chimney and into the atmosphere.
- Boiler to meet the market demand, to do 80 mg, 50 mg, 30 mg of low nitrogen combustion system design.
- Under 2.5 million calories, but make it device pricing type structure.

### »» 性能优势

- 1 高效节能
  - 受热面采用密排圆盘管, 受热面布置充足, 多回程换热。
  - 炉膛尺寸与燃烧火焰相匹配, 辐射换热效率高。
  - 采用正压燃烧, 使其燃烧效率大大提高。
  - 锅炉采用优质保温材料 and 特殊施工工艺, 散热损失少, 排烟温度低, 锅炉的热效率高。
  - 受热面布置充分合理, 锅炉升温启动快。
- 2 安全可靠
  - 受热面采用密排圆盘管, 受热面布置充足, 有效降低管子表热负荷, 使导热油使用更安全。
  - 锅炉运行采用远程和近地监控, 自动控制和监测仪表齐全, 安全可靠, 操作简便。
- 3 安装便捷
  - 锅炉采用全组装式, 结构紧凑, 占地面积小, 安装极其方便灵活, 只要将锅炉就位于其基础上即可。
- 4 燃料适用广
  - 适用燃料: 轻柴油、重油、渣油、天然气、液化气、城市煤气等。
- 5 应用行业广
  - 化工、纺织、印染、食品、造纸、塑料、橡胶、木材、医药、沥青等行业。

### Performance advantages

- 1 Energy-efficient
  - Close-packed disc tube heating surface, heating surface layout adequacy, multi-backhaul heat exchanger.
  - Furnace size match with burning flame, radiation heat transfer efficiency.
  - Positive pressure combustion, so that combustion efficiency is greatly improved.
  - Boiler quality insulation materials and special construction technology, less heat loss, the exhaust gas temperature is low, the high thermal efficiency of the boiler.
  - By fully rational surface layout, boiler warming fast start.
- 2 Safe and reliable
  - Close-packed disc tube heating surface heating surface arrangement sufficient to reduce the tube sheet heat load, conducting oil safer to use.
  - The boiler operation monitor remote and nearly complete automatic control and monitoring instrumentation, safe, reliable, easy to operate.
- 3 Easy to install
  - Boiler full assembled, compact structure, small footprint, is extremely easy to install and flexible, as long as the boiler is located based on.
- 4 Fuel applicable
  - Applicable Fuel: light diesel oil, heavy oil, residual oil, natural gas, liquefied petroleum gas, city gas.
- 5 Application industry
  - Chemical, textile, printing and dyeing, food, paper, plastics, rubber, wood, pharmaceuticals, asphalt and other industries.



»» 产品参数 Product parameters

锅炉型号 Model	YYL/ YYW 350Y(Q)	YYL/ YYW 460Y(Q)	YYL/ YYW 700Y(Q)	YYL/ YYW 960Y(Q)	YYL/ YYW 1200Y(Q)	YYL/ YYW 1400Y(Q)	YYL/ YYW 1900Y(Q)	YYL/ YYW 2300Y(Q)	YYL/ YYW 2900Y(Q)	YYL/ YYW 3500Y(Q)
额定功率 (kW) Rated power (kW)	350	460	700	960	1200	1400	1900	2300	2900	3500
供热量 × 10 <sup>4</sup> (kCal / h) Heat supply × 10 <sup>4</sup> (kCal / h)	30	40	60	80	100	120	160	200	250	300
热效率 (%) Thermal efficiency (%)	≥92	≥92	≥92	≥92	≥92	≥92	≥92	≥92	≥92	≥92
设计压力 (MPa) Design pressure (MPa)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1
最高工作温度 (°C) Maximum working temperature (°C)	320	320	320	320	320	320	320	320	320	320
介质循环量 (m <sup>3</sup> / h) Medium circulation rate (m <sup>3</sup> / h)	40	60	60	100	100	100	160	160	200	200
炉内介质容量 (m <sup>3</sup> ) The furnace medium capacity (m <sup>3</sup> )	0.4	0.5	0.6	0.8	1.1	1.2	2.1	2.6	3.5	7.8
主管口径 (DN) Competent diameter (DN)	80	100	100	125	125	125	150	150	200	200
装机容量 (kW) Capacity (kW)	14.5	18	18	26	37.5	49.5	57.5	61.5	75	75
适用燃料 Applicable fuel	油, 气 Oil, gas									

燃料耗量Kg / h (以油计) Fuel consumption Kg / h (oil)	30	40	60	80	100	120	160	200		
外形尺寸 (φ · H) m Dimensions (φ · H) m	立式油炉 Vertical oil furnace	1.3x2.5	1.8x3	2.0x3.5	2.1x3.8	2.2x4	2.2x4.5	2.4x4.6	2.7x5.1	
	卧式油炉 Horizontal oil furnace	1.3x2.4	1.8x3	1.9x3.2	2.0x3.3	2.2x3.6	2.2x4.2	2.4x4.6	2.5x5.3	
循环泵 Circulation pump	型号WRY Model WRY	WRY 80-50-180	WRY 100-65-190	WRY 100-65-200	WRY 100-65-230	WRY 100-65-240	WRY 100-65-257	WRY 125-80-250	WRY 125-80-250	
	流量 (m <sup>3</sup> / h) Flow (m <sup>3</sup> / h)	40	60	80	100	100	100	160	160	
	扬程 (m) Lift (m)	40	38	40	55	70	80	60	60	
	功率 (kW) Power (kW)	7.5	11	15	22	30	37	45	45	

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»» 产品参数 Product parameters

锅炉型号 Model	YYL (W) - 4700Y (Q)	YYL (W) - 5900Y (Q)	YYL (W) - 7000Y (Q)	YYL (W) - 8200Y (Q)	YYL (W) - 9400Y (Q)	YYL (W) - 10500Y (Q)	YYL (W) - 12000Y (Q)	YYL (W) - 14000Y (Q)	YYL (W) - 15000Y (Q)	YYL (W) - 16300Y (Q)	
额定功率 (kW) Rated power (kW)	4700	5900	7000	8200	9400	10500	12000	14000	15000	16300	
供热量 × 10 <sup>4</sup> (kCal / h) Heat supply × 10 <sup>4</sup> (kCal / h)	400	500	600	700	800	900	1000	1200	1400	1500	
热效率 (%) Thermal efficiency (%)	≥92	≥92	≥92	≥92	≥92	≥92	≥92	≥92	≥92	≥92	
设计压力 (MPa) Design pressure (MPa)	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	1.1	
最高工作温度 (°C) Maximum working temperature (°C)	320	320	320	320	320	320	320	320	320	320	
介质循环量 (m <sup>3</sup> / h) Medium circulation rate (m <sup>3</sup> / h)	260	300	340	400	520	600	600	680	800	900	
炉内介质容量 (m <sup>3</sup> ) The furnace medium capacity (m <sup>3</sup> )	8.4	8.8	10.5	11.2	11.5	13	15	18	21	23	
主管口径 (DN) Competent diameter (DN)	200	250	250	250	300	300	300	350	350	400	
装机容量 (kW) Capacity (kW)	98.5	121.5	148.5	155	195	235	235	295	341	341	
适用燃料 Applicable fuel	油, 气 Oil, gas										
燃料耗量Kg/h (以油计) Fuel consumption Kg / h (oil)	435	545	660	760	875	980	1140	1360	1620	1740	
外形尺寸 (φ · H) m Dimensions (φ · H) m	立式油炉 Vertical oil furnace	3.2×7	3.3×7.5	3.5×8.2	3.62×9.2	3.7×9.6	3.65×11	3.65×11	3.98×11.8	4×12.5	4.06×12.8
	卧式油炉 Horizontal oil furnace	3.23×6.7	3.26×7.45	3.26×7.9	3.62×9	3.6×9.48	3.65×10.4	3.65×10.6	3.98×11.5	4×12.2	4.06×12.5
循环泵 Circulation pump	型号WRY Model WRY	125- 100-257	125- 100-260	150- 125-270	125- 100-250	125- 100-257	125- 100-260	125- 100-260	150- 125-270A	150- 125-280A	150- 125-280
	流量 (m <sup>3</sup> / h) Flow m <sup>3</sup> / h	260	300	340	200×2	260×2	300×2	300×2	340×2	400×2	400×2
	扬程 (m) Lift (m)	70	70	76	60	70	70	70	76	78	78
	功率 (kW) Power (kW)	75	90	110	55×2	75×2	90×2	90×2	110×2	132×2	132×2