



**D6 INDUSTRIES**  
**STANDARD PRODUCT**  
**HT-TAP2000-1**  
**SIMULATION RESULTS**

1-3 gpm flow rates  
2000W Heat Load

# D6 STANDARD HT-TAP2000-1



## PARAMETERS

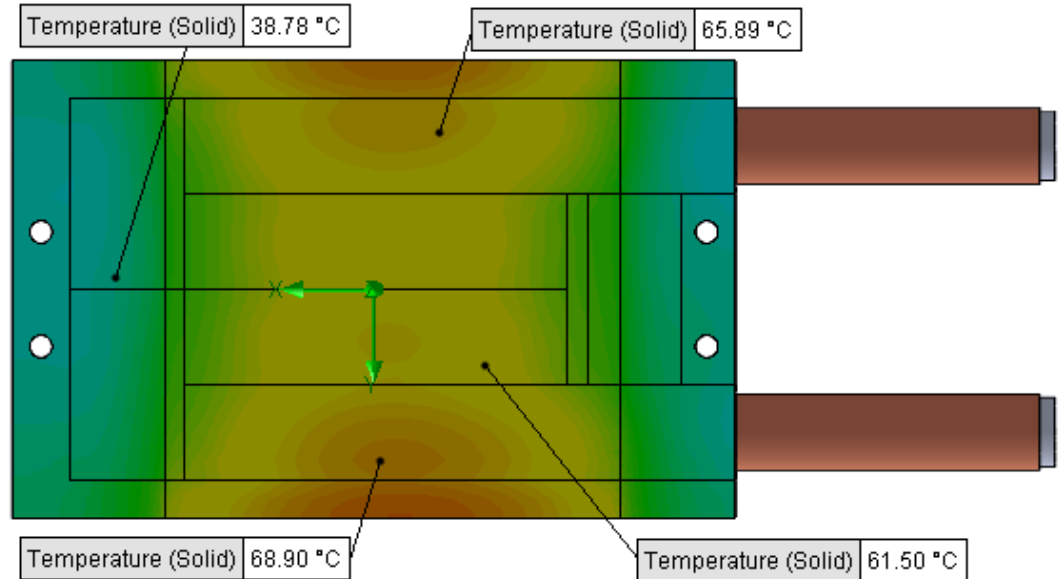
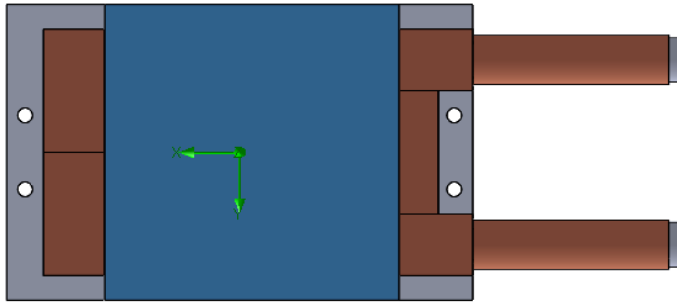
Fluid: Water

Inlet Flow: 1 gpm

Inlet Fluid Temp: 20°C

Heat Source: 1 blue square=2000W

Tube: ½ OD round copper inlet/outlet



## Simulation Data

| Goal Name                    | Unit                   | Value       |
|------------------------------|------------------------|-------------|
| SG Min Temperature (Solid) 1 | [°C]                   | 32.86618406 |
| SG Av Temperature (Solid) 1  | [°C]                   | 53.25500162 |
| SG Max Temperature (Solid) 1 | [°C]                   | 72.12172425 |
| FLUID OUT                    | [°C]                   | 27.57898508 |
| PRESSURE DROP                | [lbf/in <sup>2</sup> ] | 1.160092538 |

SG-Surface goal is a parameter on selected surface(s).  
In this case, it is the entire tube side surface area.

## RESULTS

Thermal Resistance: 0.0166°C/W

Pressure Drop: 1.16psi

Min Surface Temp: 32.86°C

Max Surface Temp: 72.12°C

Water Temp Out: 27.57°C

# D6 STANDARD HT-TAP2000-1



## PARAMETERS

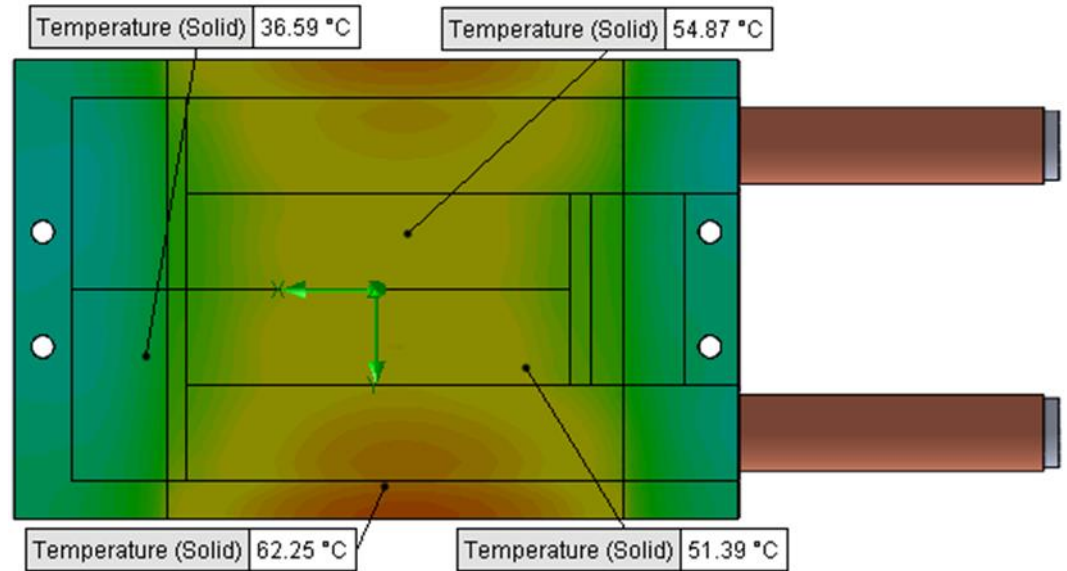
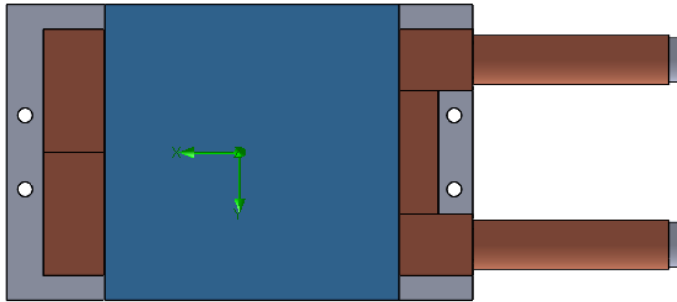
Fluid: Water

Inlet Flow: 1.5 gpm

Inlet Fluid Temp: 20°C

Heat Source: 1 blue square=2000W

Tube: ½ OD round copper inlet/outlet



## Simulation Data

| Goal Name                    | Unit       | Value       |
|------------------------------|------------|-------------|
| SG Min Temperature (Solid) 1 | [°C]       | 28.77300982 |
| SG Av Temperature (Solid) 1  | [°C]       | 46.20265249 |
| SG Max Temperature (Solid) 1 | [°C]       | 64.24402176 |
| FLUID OUT                    | [°C]       | 25.06272947 |
| PRESSURE DROP                | [lbf/in^2] | 2.594641161 |

SG-Surface goal is a parameter on selected surface(s).  
In this case, it is the entire tube side surface area.

## RESULTS

Thermal Resistance: 0.0131°C/W

Pressure Drop: 2.59psi

Min Surface Temp: 28.77°C

Max Surface Temp: 64.24°C

Water Temp Out: 25.06°C

# D6 STANDARD HT-TAP2000-1



## PARAMETERS

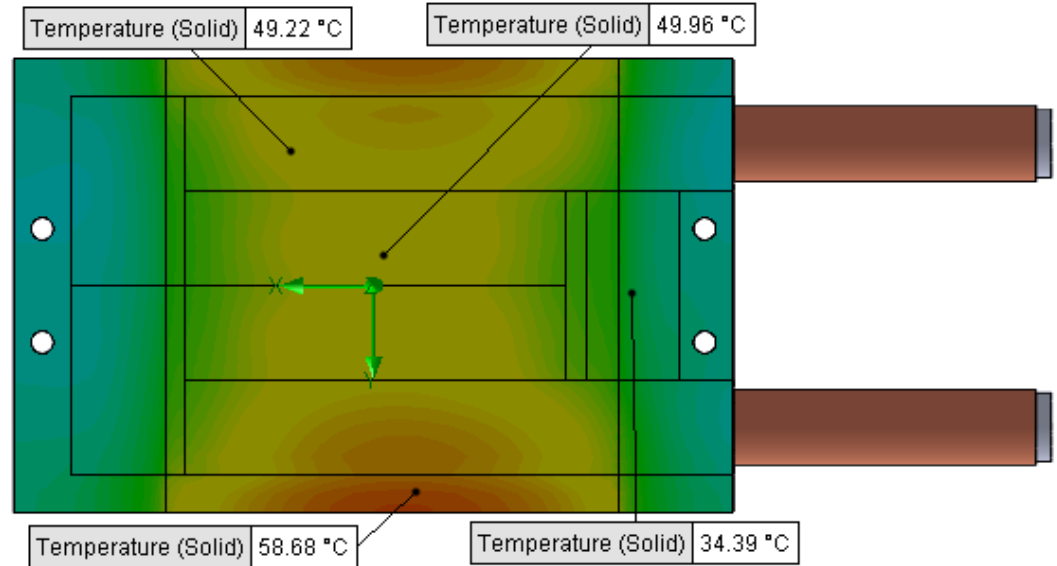
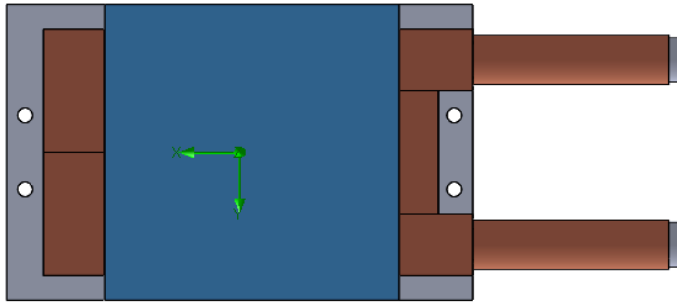
Fluid: Water

Inlet Flow: 2 gpm

Inlet Fluid Temp: 20°C

Heat Source: 1 blue square=2000W

Tube: 1/2 OD round copper inlet/outlet



## Simulation Data

| Goal Name                    | Unit       | Value       |
|------------------------------|------------|-------------|
| SG Min Temperature (Solid) 1 | [°C]       | 26.33502452 |
| SG Av Temperature (Solid) 1  | [°C]       | 42.18275813 |
| SG Max Temperature (Solid) 1 | [°C]       | 59.59749452 |
| FLUID OUT                    | [°C]       | 23.80445412 |
| PRESSURE DROP                | [lbf/in^2] | 4.620249356 |

SG-Surface goal is a parameter on selected surface(s).  
In this case, it is the entire tube side surface area.

## RESULTS

Thermal Resistance: 0.0110°C/W

Pressure Drop: 4.62psi

Min Surface Temp: 26.33°C

Max Surface Temp: 59.59°C

Water Temp Out: 23.80°C

# D6 STANDARD HT-TAP2000-1



## PARAMETERS

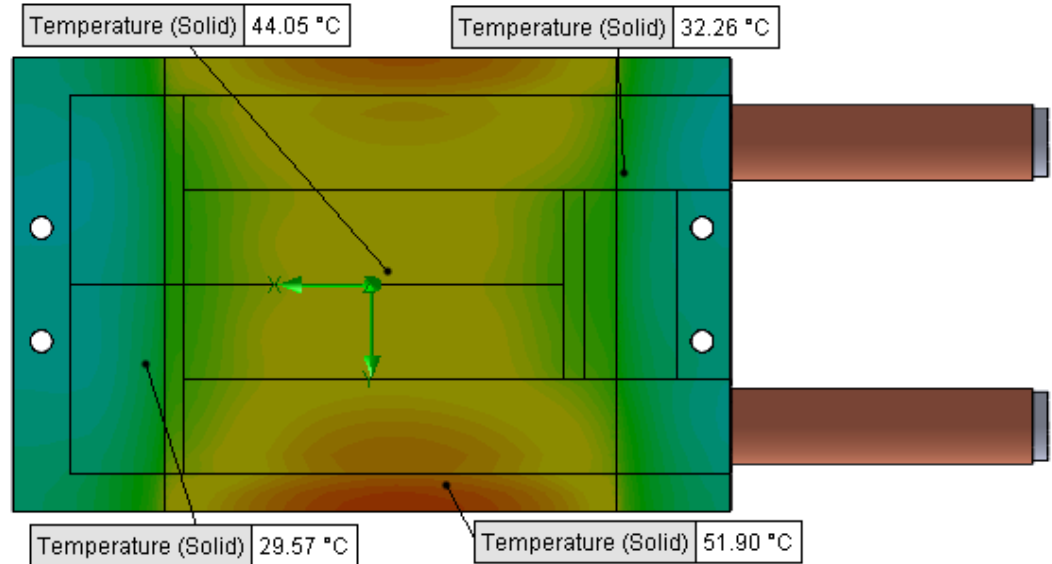
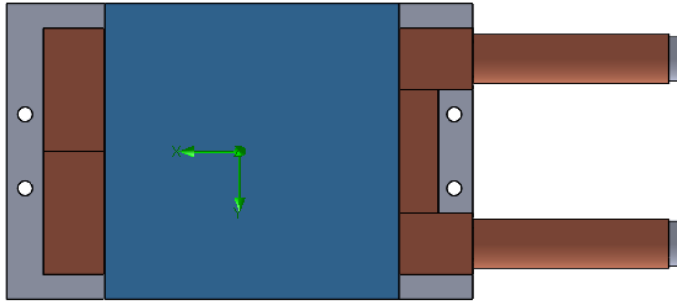
Fluid: Water

Inlet Flow: 3 gpm

Inlet Fluid Temp: 20°C

Heat Source: 1 blue square=2000W

Tube: 1/2 OD round copper inlet/outlet



## Simulation Data

| Goal Name                    | Unit       | Value       |
|------------------------------|------------|-------------|
| SG Min Temperature (Solid) 1 | [°C]       | 23.87240469 |
| SG Av Temperature (Solid) 1  | [°C]       | 37.7294342  |
| SG Max Temperature (Solid) 1 | [°C]       | 53.80282674 |
| FLUID OUT                    | [°C]       | 22.54727846 |
| PRESSURE DROP                | [lbf/in^2] | 10.37878987 |

SG-Surface goal is a parameter on selected surface(s).  
In this case, it is the entire tube side surface area.

## RESULTS

Thermal Resistance: 0.0088°C/W

Pressure Drop: 10.37psi

Min Surface Temp: 23.87°C

Max Surface Temp: 53.50°C

Water Temp Out: 22.54°C