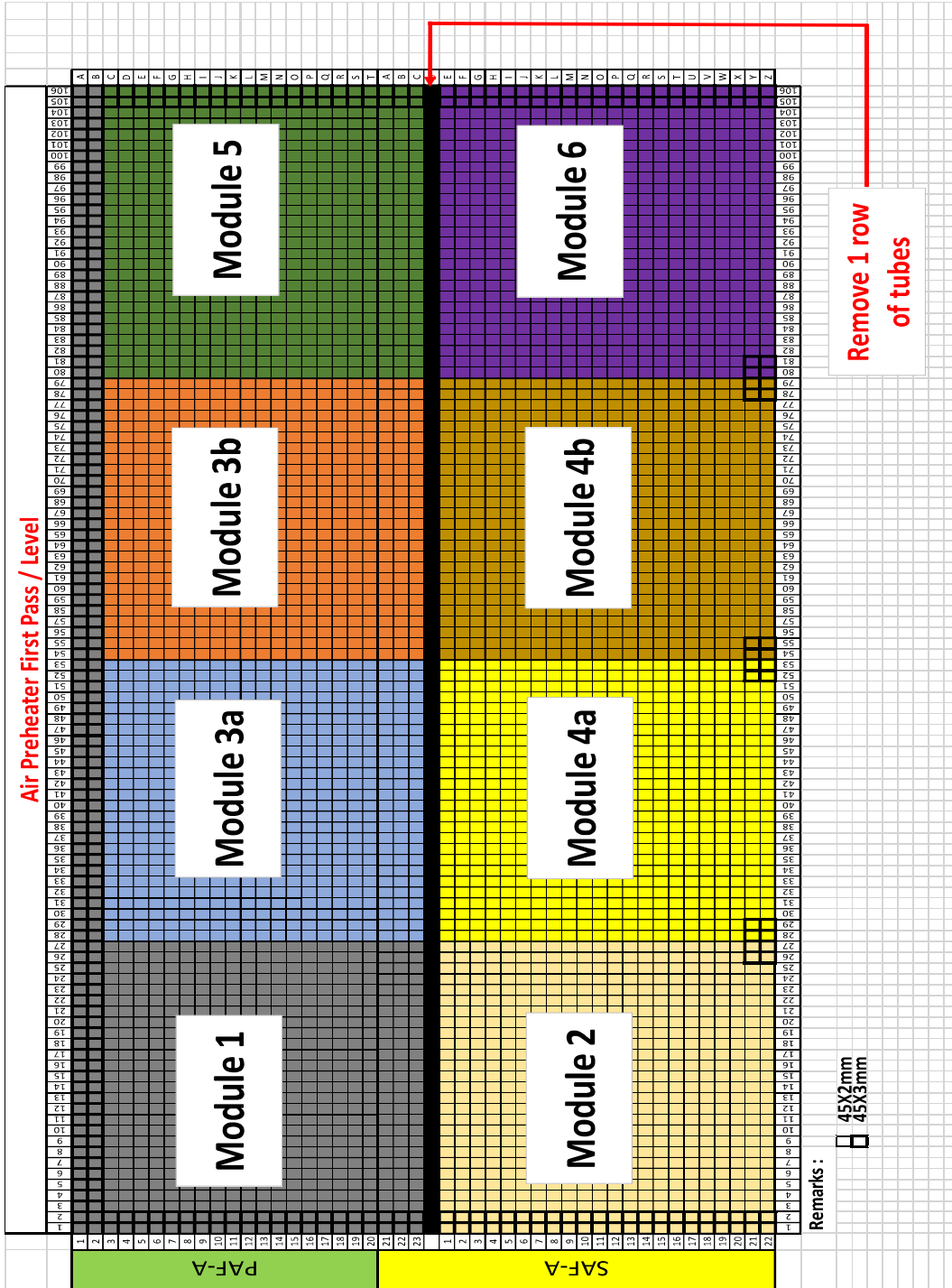
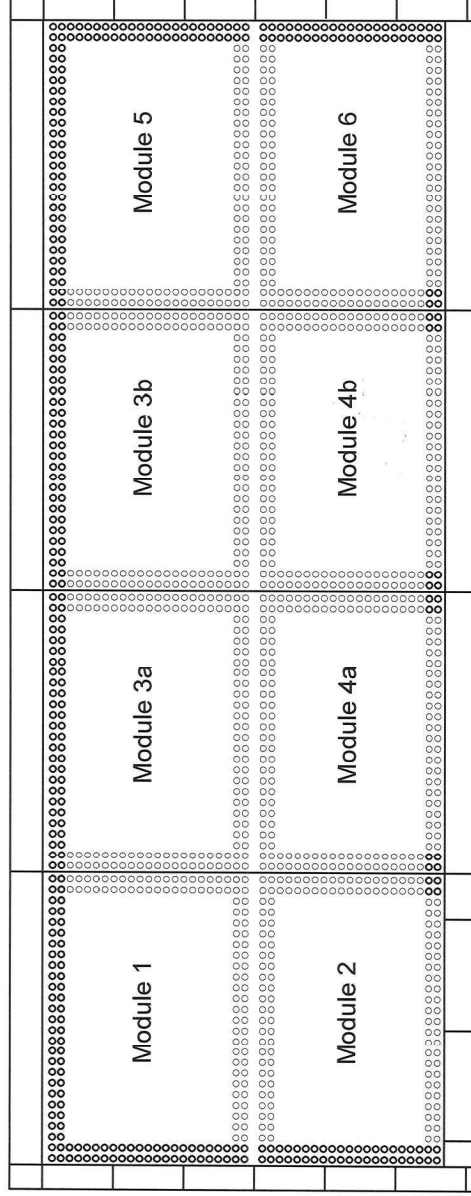


➤ ANNEX 2 MODULE DRAWING AND REPRESENTATION



# ANNEX 2

## Air Preheater First Pass/Level



AIR PREHEATER  
GENERAL ARRANGEMENT

TITLE:

APH-MECH-00-21

DRAWING NO.:

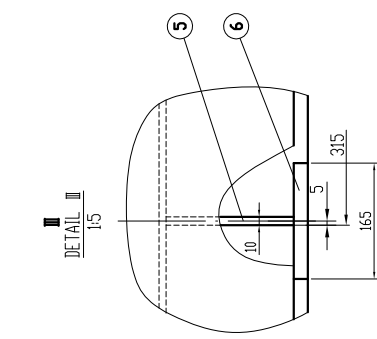
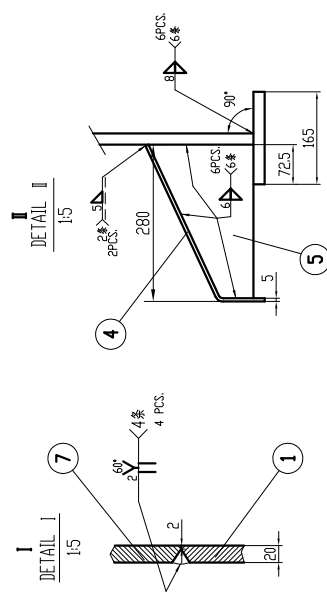
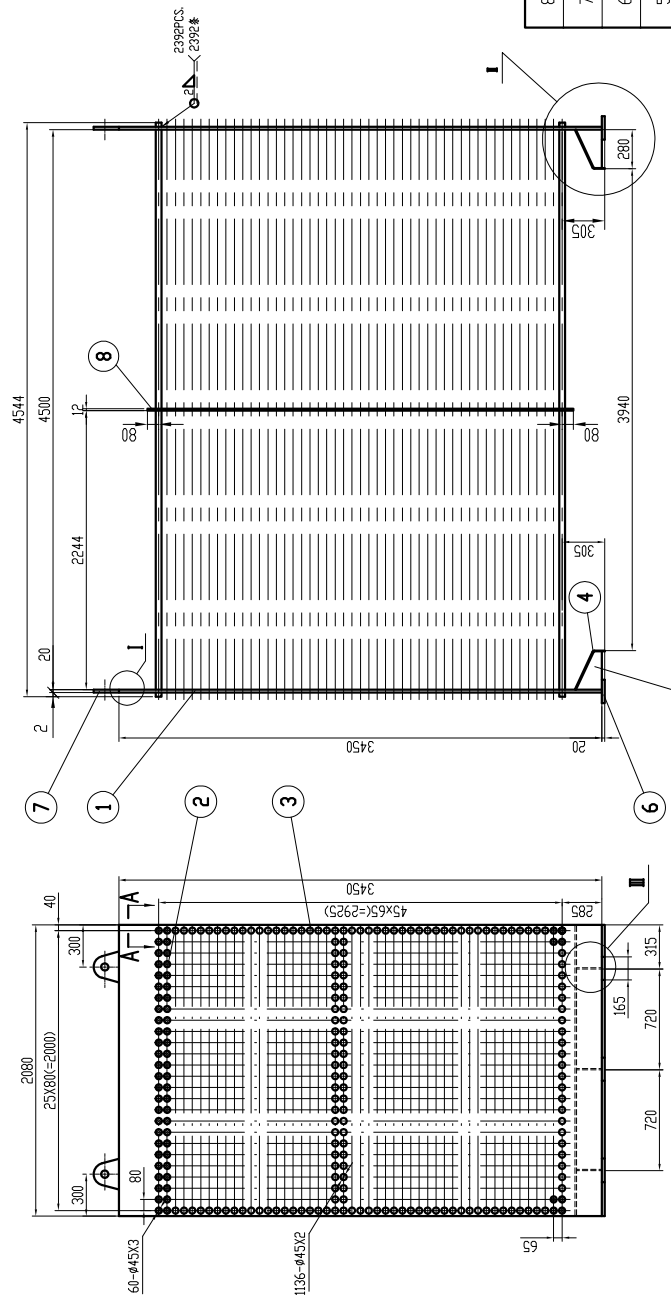




# ANNEX 3:

# APH ORIGINAL DRAWINGS

0-2-1#709



### SPECIFICATION

1. SPECIFICATION FOR MANUFACTURE OF TUBULAR BANK, ACCORDING TO DG106-2011;
2. THE UPSIDE OF TUBULAR BANK LAID TWO ROWS OF TUBES  $\phi 45 \times 3$ (No.2), THE BOTTOM RIGHT AND LEFT CORNER LAID FOUR TUBES THE SAME AS FORMER, THE REST ARE  $\phi 45 \times 2$  TUBES;
3. THE RIB SLABS CAN BE REPAIR AND MILLING WHEN SETTING.
4. WELDING BETWEEN LIFTING LUG(No.7) AND TUBULAR PLATE(No.1) PER THE DETAIL I, THE LIFTING LUG SHOULD BE CUT AFTER INSTALLATION AND POLISHED SMOOTH.

### DRAWING GLOZING

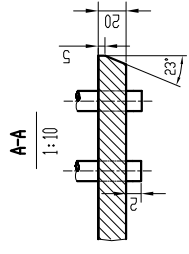
图例说明

用于 $\phi 45 \times 3$  明孔;

用于 $\phi 45 \times 2$  暗孔.

### 技术要求

- 1.管箱技术条件DG106-2011条款;
- 2.管箱上部布置管箱 $\phi 45 \times 3$ (序号2)管子,左、右下角各布置4根 $\phi 45 \times 3$ (序号2)管子,其余为 $\phi 45 \times 2$ 的管子;
- 3.装配时允许修磨;
- 4.序号7吊耳与序号1管板按详图焊接,吊耳在工地吊装完后应切割掉,并将管板打磨平整.



| 序号<br>NO. | 图号<br>DRAWING NO. | 名称<br>DESCRIPTION                    | 数量<br>QTY. | 材料<br>MATERIAL | 单重<br>SGL. | 总重<br>TOT. | 备注<br>REMARKS        |
|-----------|-------------------|--------------------------------------|------------|----------------|------------|------------|----------------------|
| 8         | 60J41-2-3         | 隔板<br>BAFFLE PLATE                   | 1          | Q245R          |            | 417        |                      |
| 7         | 60J41-1-4         | 吊耳<br>LUG                            | 4          | Q235A          | 3.7        | 14.8       | 见技术条件4<br>SEE SPEC.4 |
| 6         | 无图<br>NO. DRAWING | 管箱 $\phi 20165 \times 165$<br>PLATE  | 6          | Q235A          | 4.27       | 25.6       |                      |
| 5         | 60J41-1-3         | 肋板<br>RIB SLAB                       | 6          | Q235A          | 2.58       | 15.5       | 见技术条件3<br>SEE SPEC.3 |
| 4         | 60J41-2-2         | 弯板<br>BEND PLATE                     | 2          | Q235A          | 31         | 62         |                      |
| 3         | 无图<br>NO. DRAWING | 管子 $\phi 45 \times 2$ L=4544<br>TUBE | 1136       | Q355GNH        | 9.64       | 10951      |                      |
| 2         | 无图<br>NO. DRAWING | 管子 $\phi 45 \times 3$ L=4544<br>TUBE | 60         | Q355GNH        | 14.1       | 846        |                      |
| 1         | 60J41-2-1         | 管板<br>TUBULAR PLATE                  | 2          | Q245R          | 815        | 1630       |                      |

| 图号<br>DRAWING NO. | 比例<br>SCALE | 重量<br>WT. | 张数<br>SHEET | 共<br>OF | 图号<br>DRAWING NO. | 重量<br>WT. | 张数<br>SHEET | 共<br>OF |
|-------------------|-------------|-----------|-------------|---------|-------------------|-----------|-------------|---------|
| 60J41-2-0         | 1:25        | 13962     | A           | 1       | 60J41-2-0         | 13962     | A           | 1       |

| 图号<br>DRAWING NO. | 名称<br>CONTENT                    | 单位<br>UNITS | 数量<br>QTY. |
|-------------------|----------------------------------|-------------|------------|
| 60J41-2-0         | 管箱<br>TUBULAR BANK               | mm          | 4          |
|                   | 管箱<br>TUBULAR AIR PREHEATER BANK | mm          | 4          |

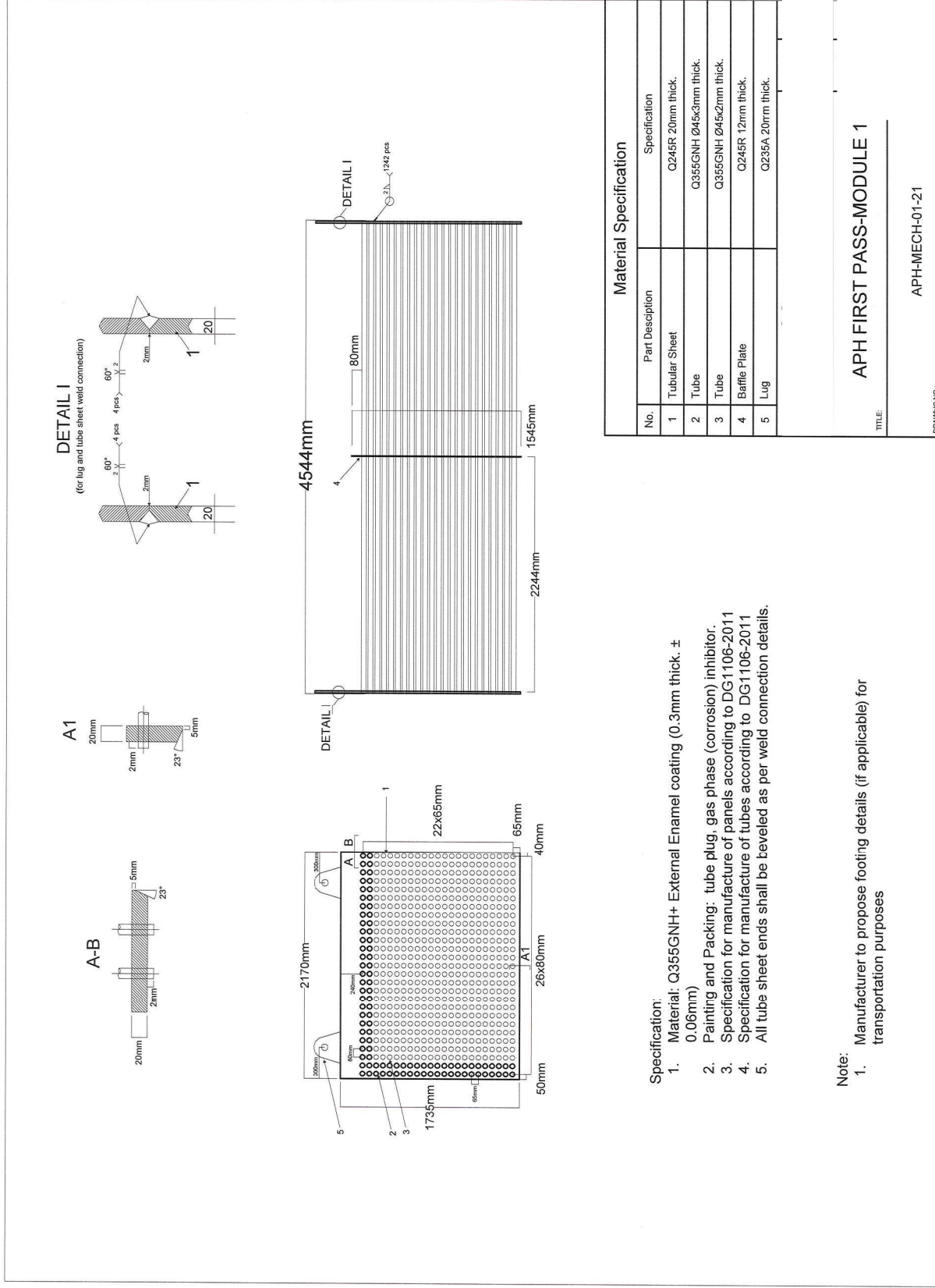
| 版本<br>REV. | 修改号<br>REVISION NO. | 更改内容<br>REVISION CONTENT |
|------------|---------------------|--------------------------|
|            |                     |                          |

| 设计<br>DESIGN | 校核<br>CHECK | 工艺<br>TECH | 审核<br>REVIEW | 日期<br>DATE |
|--------------|-------------|------------|--------------|------------|
|              |             |            |              |            |

# ANNEX 4:

# APH DRAWINGS



| Material Specification |                  |                        |
|------------------------|------------------|------------------------|
| No.                    | Part Description | Specification          |
| 1                      | Tubular Sheet    | Q245R 20mm thick.      |
| 2                      | Tube             | Q355GNH Ø45x3mm thick. |
| 3                      | Tube             | Q355GNH Ø45x2mm thick. |
| 4                      | Baffle Plate     | Q245R 12mm thick.      |
| 5                      | Lug              | Q235A 20mm thick.      |

- Specification:**
- Material: Q355GNH+ External Enamel coating (0.3mm thick. ± 0.06mm)
  - Painting and Packing: tube plug, gas phase (corrosion) inhibitor.
  - Specification for manufacture of panels according to DG1106-2011
  - Specification for manufacture of tubes according to DG1106-2011
  - All tube sheet ends shall be beveled as per weld connection details.

**Note:**

- Manufacturer to propose footing details (if applicable) for transportation purposes

TITLE: **APH FIRST PASS-MODULE 1**

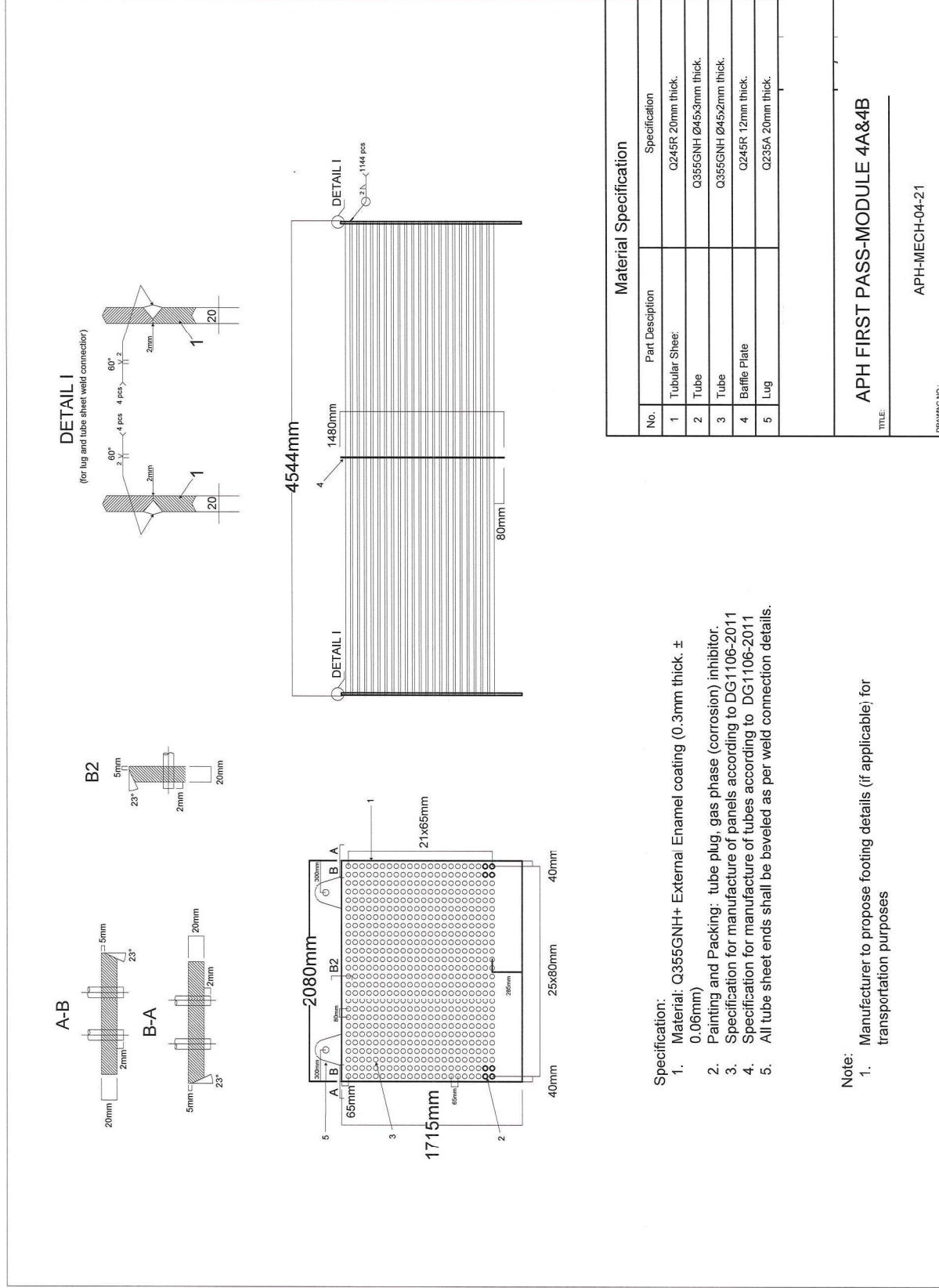
DRAWING NO.: **APH-MECH-01-21**





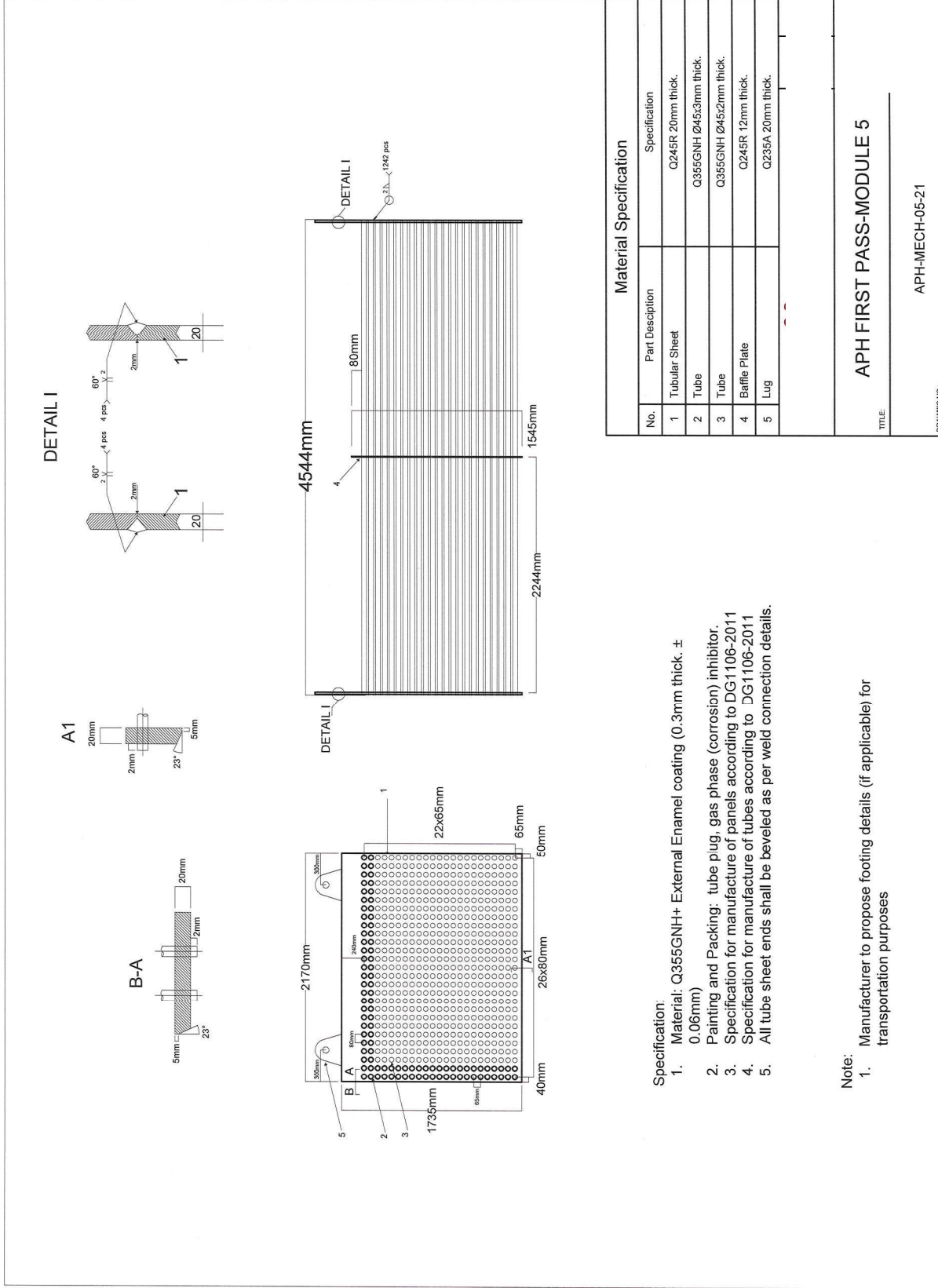
# ANNEX 4:

# APH DRAWINGS



# ANNEX 4:

# APH DRAWINGS



**Specification:**

1. Material: Q355GNH+ External Enamel coating (0.3mm thick. ± 0.06mm)
2. Painting and Packing: tube plug, gas phase (corrosion) inhibitor.
3. Specification for manufacture of panels according to DG1106-2011
4. Specification for manufacture of tubes according to DG1106-2011
5. All tube sheet ends shall be beveled as per weld connection details.

**Note:**

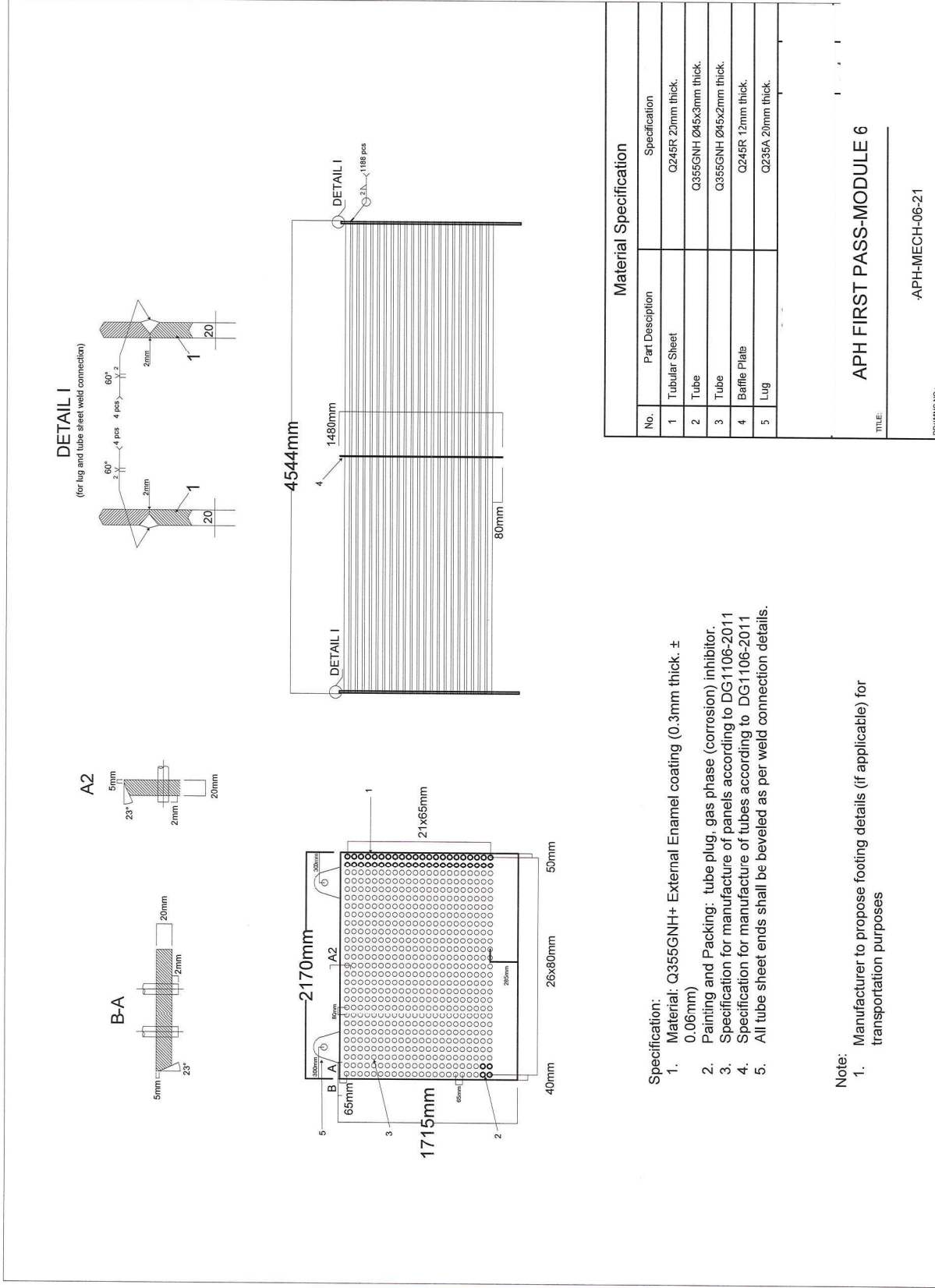
1. Manufacturer to propose footing details (if applicable) for transportation purposes

| Material Specification |                  |                        |
|------------------------|------------------|------------------------|
| No.                    | Part Description | Specification          |
| 1                      | Tubular Sheet    | Q245R 20mm thick.      |
| 2                      | Tube             | Q355GNH Ø45x3mm thick. |
| 3                      | Tube             | Q355GNH Ø45x2mm thick. |
| 4                      | Baffle Plate     | Q245R 12mm thick.      |
| 5                      | Lug              | Q235A 20mm thick.      |

|                             |  |
|-----------------------------|--|
| TITLE                       |  |
| APH FIRST PASS-MODULE 5     |  |
| DRAWING NO.: APH-MECH-05-21 |  |

# ANNEX 4:

# APH DRAWINGS



- Specification:**
1. Material: Q355GNH+ External Enamel coating (0.3mm thick. ± 0.06mm)
  2. Painting and Packing: tube plug, gas phase (corrosion) inhibitor.
  3. Specification for manufacture of panels according to DG1106-2011
  4. Specification for manufacture of tubes according to DG1106-2011
  5. All tube sheet ends shall be beveled as per weld connection details.

- Note:**
1. Manufacturer to propose footing details (if applicable) for transportation purposes

| Material Specification |                                    |
|------------------------|------------------------------------|
| No.                    | Part Description                   |
| 1                      | Tubular Sheet<br>Q245R 20mm thick. |
| 2                      | Tube<br>Q355GNH 245x3mm thick.     |
| 3                      | Tube<br>Q355GNH 245x2mm thick.     |
| 4                      | Baffle Plate<br>Q245R 12mm thick.  |
| 5                      | Lug<br>Q235A 20mm thick.           |

TITLE: APH FIRST PASS-MODULE 6

DRAWING NO.: -APH-MECH-06-21