What is claimed is:

1. An auxiliary necking channel structure for an exhaust pipe, comprising:

a hollow casing; and

a plurality of atomizing elements, formed on an interior wall of the hollow casing;

wherein the hollow casing having a first end-rim and a second end rim opposing to the first end rim;

wherein, inside the hollow casing, along a central axial line extending from the first end rim to the second end rim, the interior wall is defined continuously to have a tapering first section, a neck section and an increasing second section; the neck section as a conjunction between the tapering first section and the increasing second section has the smallest inner diameter among the tapering first section, the neck section and the increasing second section; and, the plurality of atomizing elements are formed annularly on the neck section;

wherein, outside the hollow casing, along the central axial line, an exterior wall of the hollow casing connecting the first end rim and the second end rim is defined continuously to have a first outer-surface section and a second outer-surface section; an outer diameter of the first outer-surface section adjacent to the first end rim is larger than that of the second outer-surface section adjacent to the second end rim; the first outer-surface section further has an annular embossed portion located adjacent to the first end rim; except for the embossed portion, the rest of the first outer-surface section is not embossed, and outer diameters of the said rest of the first outer-surface section are gradually decreased along the central axial line; the second outer-surface section connects the first outer-surface section at a middle portion of the hollow casing; and, the second outer-surface section has almost the same outer diameter throughout the second outer-surface section.

2. The auxiliary necking channel structure for an exhaust pipe of claim

1, wherein the embossed portion has a same outer diameter.

3. The auxiliary necking channel structure for an exhaust pipe of claim 2, wherein a length of the first outer-surface section is larger than, equal to, or smaller than that of the second outer-surface section.

4. The auxiliary necking channel structure for an exhaust pipe of claim 3, wherein an inner diameter of the first end rim is larger than that of the second end rim.

5. The auxiliary necking channel structure for an exhaust pipe of claim 1, wherein each of the atomizing elements is formed as a tiny needle structure.