

Tables for classification of pressure vessels

According to the Pressure Equipment Directive 2014/68/UE

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Type of pressure equipment	Fluid	Temperature	Table to consult
Tanks and plate heat exchangers	Water	≤110	4
Tanks and plate heat exchangers	Steam or superheated water	>110	2
Tube bundle exchangers	Water	≤110	4
Tube bundle exchangers	Steam or superheated water	>110	2
Steam generators	Steam or superheated water	>110	5
Tanks and plate heat exchangers	Water, ethylene and propylene glycol	≤120	4
Tanks and plate heat exchangers	Water, ethylene and propylene glycol	>120	2
Tanks and plate heat exchangers	Freon and dangerous gases		1
Autoclaves	Nitrogen or other non-dangerous gases		2
Autoclaves	Dangerous gases		1

Table 1 – Pressure vessels

V l	PS bar	PS x V bar	Category
$0,1 < V \leq 1$	$0,5 < PS < 200$		Article 4 paragraph 3
$0,1 < V < 1$	$200 < PS \leq 1000$		III
$0,1 < V < 1$	$PS > 1000$		IV
$1 < V \leq 50$	$PS > 0,5$	$PS \times V \leq 25$	Article 4 paragraph 3
$1 < V < 100$	$PS > 0,5$	$25 < PS \times V \leq 50$	I
$1 < V < 400$	$PS > 0,5$	$50 < PS \times V \leq 200$	II
$1 < V < 2000$	$0,5 < PS < 1000$	$200 < PS \times V \leq 1000$	III
$V > 1$	$PS > 0,5$	$PS \times V > 1000$	IV

Table 2 – Pressure vessels

V l	PS bar	PS x V bar	Category
$0,1 < V \leq 1$	$0,5 < PS < 1000$		Article 4 paragraph 3
$0,1 < V \leq 1$	$1000 < PS < 3000$		III
$0,1 < V \leq 1$	$PS > 3000$		IV
$1 < V \leq 100$	$PS > 0,5$	$PS \times V \leq 50$	Article 4 paragraph 3
$1 < V \leq 400$	$PS > 0,5$	$50 < PS \times V \leq 200$	I
$1 < V < 750$	$PS > 0,5$	$1000 < PS \times V \leq 3000$	III
$1 < V \leq 750$	$PS > 0,5$	$PS \times V > 3000$	IV
$V > 750$	$0,5 < PS < 4$		III
$V > 750$	$PS > 4$		IV
$1 < V \leq 2000$	$PS > 0,5$	$200 \leq PS \times V \leq 1000$	II

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Table 3 – Pressure vessels

V l	PS bar	PS x V bar	Category
$0,1 < V \leq 1$	$0,5 < PS < 500$		Article 4 paragraph 3
$0,1 < V \leq 1$	$PS > 500$		II
$V > 1$	$200 < PS \leq 500$		II
$V > 1$	$PS > 500$		III
$V > 20$	$0,5 < PS \leq 10$	$PS \times V > 200$	I
$1 < V \leq 400$	$PS > 0,5$	$PS \times V \leq 200$	Article 4 paragraph 3
$V > 1$	$10 < PS \leq 200$	$PS \times V > 200$	II

Table 4 – Pressure vessels

V l	PS bar	PS x V bar	Category
$0,1 < V \leq 10$	$10 < PS < 1000$		Article 4 paragraph 3
$0,1 < V < 10$	$PS > 1000$		I
$V > 0,1$	$0,5 < PS \leq 10$		Article 4 paragraph 3
$V \geq 10$	$PS > 1000$		II
$10 < V < 20$	$500 < PS \leq 1000$	$PS \times V > 10000$	II
$10 < V < 1000$	$PS > 10$	$PS \times V \leq 10000$	Article 4 paragraph 3
$V > 20$	$10 < PS \leq 500$	$PS \times V > 10000$	I

Table 5 – Steam or superheated water at temperatures above 110°C

V l	PS bar	PS x V bar	Category
$0,1 < V \leq 2$	$PS > 0,5$		Article 4 paragraph 3
$2 < V < 100$	$0,5 < PS < 25$	$PS \times V \leq 50$	I
$V > 2$	$25 < PS < 32$	$PS \times V \leq 200$	II
$V > 2$	$PS > 32$		IV
	$0,5 < PS < 25$	$50 < PS \times V \leq 200$	II
	$3 \leq PS \leq 32$	$PS \times V > 3000$	IV
$V < 1000$	$0,5 < PS < 32$	$200 < PS \times V \leq 3000$	III
$V > 1000$	$0,5 < PS < 3$		IV
$V > 750$	$PS > 4$		IV
$1 < V \leq 2000$	$PS > 0,5$	$200 \leq PS \times V \leq 1000$	II