

Certification

For the component testing of clamps for pipeline and pressure vessel parts.

On the basis of the report No. 1042B601490 is given to the applicant:

GRQ-Patents Ltd
Rinemackering, Carrigaholt, Co. Clare, Ireland
Now: *Flowsource Process Fittings Ltd, Thirsk, United Kingdom*

Certifies that the clamps mentioned in the table when used with the associated clamp connections comply with the requirements of the pressure equipment directive PED 97/23/EC, Appendix 1:AD2000 data sheet A4 and HP100R for the values specified in the table. Experimentally determined area of application as connecting elements for pipe and pressure vessel parts designed in accordance with PED 97/23/EC appendix 1, paragraph 2.2 can be used without restrictions.

Material: AISI 304 comparable to 1.43078 and AISI 316 comparable to 1.4408

Table:

Clamp Type GRQ 2.4 Size	Clamp Type GRQ 2.4 Size	Maximum Approved Operating Pressure @ Room Temperature	Maximum Approved Operating Pressure @ 150°C
DN	Inch	bar	bar
10/15/20		50	50
	$\frac{1}{2}'' - \frac{3}{4}''$	50	50
25-40	1" – 1 ½"	50	50
50	2"	50	50
	2 ½"	50	50
65	3"	40	40
80	3 ½"	30	30
100	4"	25	25
115	4 ½"	25	25
	5"	25	25
125	5 ½"	25	25
	6"	20	20
150	6 5/8"	20	20
	8"	15	15
200	8 5/8"	15	15
250	10"	12	12
	10 ¾"	12	12
300	12"	10	10
	12 ¾"	9	9

Hannover, 28th July 2009

Materials and Processing Hannover
The Expert
Signed by Expert
Walter Ing - Diploma